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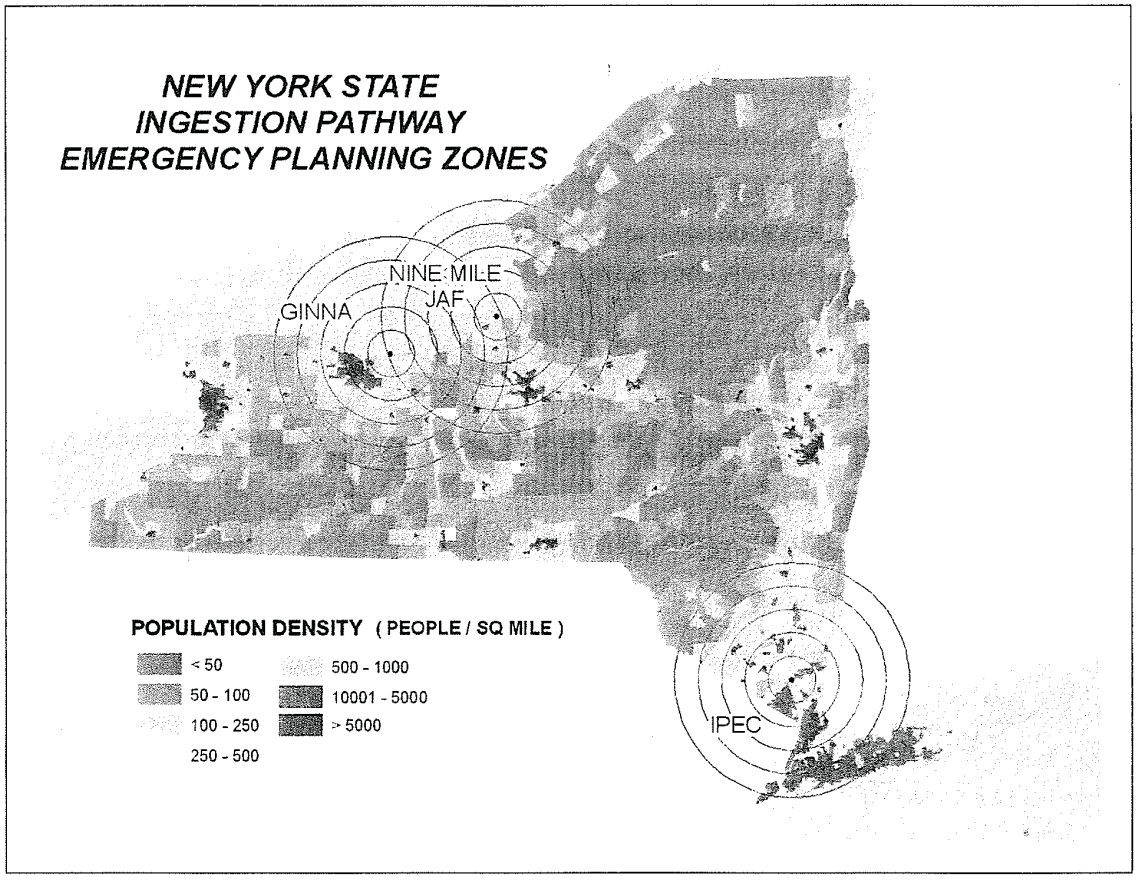
NEW YORK STATE

RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN

FOR COMMERCIAL NUCLEAR POWER PLANTS



NEW YORK STATE
EMERGENCY MANAGEMENT OFFICE

April 2009

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NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
SECTION I: INTRODUCTION AND BACKGROUND

1.0 PURPOSE

The purpose of the Radiological Emergency Preparedness Plan (REPP) is to minimize the risk to the health of the inhabitants of the State of New York in the event of a radiological emergency. This will be accomplished by identifying measures to prevent and mitigate such an emergency by developing mechanisms to coordinate Federal, State, local and private sectors resources, during and after such an emergency; and by providing for recovery following a radiological emergency. A radiological emergency is an accident at a nuclear power plant that may result in the loss of control of a radiation source, leading to a hazard or potential hazard to health or property.

2.0 BACKGROUND

New York State has continuously addressed the matter of the safety of its citizens in regard to ionizing radiation. The New York State Department of Health (DOH) is the State agency having primary responsibility in this particular area. The status of primary responsibility was designated by the former State Atomic Energy Council in 1971 and later formally affirmed by the Governor of New York in his letter of March 18, 1975, to the United States Nuclear Regulatory Commission.

The New York State Public Health Law (Section 206) gives the Commissioner of Health broad authority for protecting the health and life of the people of New York State. Section 201 of that law further assigns the Commissioner of Health the responsibility for the protection of the public health regarding the use of ionizing radiation. The State Sanitary Code, Part 16, which implements the Public Health Law, includes requirements relating to accidents, emergencies, or incidents. Radiation dose limits are prescribed therein. Upon the release of radioactive materials, which exceed these limits, from any radiological installation into an uncontrolled area, certain actions are required to correct the situation and to prevent exposure to the public.

To carry out these actions the State developed and implemented an emergency plan for radiation accidents in 1971. This plan provided for a coordinated effort among Federal, State, and local agencies, to prevent or minimize hazards to life and health in the event of a radiological emergency. The plan assigned the State Health Commissioner the responsibility for recommending protective actions. It also recognized that the primary responsibility for implementing actions to mitigate the effects of a radiological emergency rests with the local political subdivisions affected by the emergency.

Since that State emergency plan for radiation accidents was written, certain key events have occurred manifesting a need for extensive revision to that Plan. Article 2-B of the New York State Executive Law (State and Local Natural and Manmade Disaster Preparedness) was enacted in 1979 which, among its provisions, created a State Disaster Preparedness Commission (DPC). This Commission is charged with a wide variety of powers and responsibilities designed to provide a comprehensive emergency system to prevent or react to emergencies or disasters within the State.

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Among these responsibilities are: (1) to develop and maintain a State emergency plan and to assist local government in developing such plans; (2) to direct State disaster operations and coordinate State operations and resources with local disaster operations; (3) to coordinate recovery operations and recovery assistance; and (4) to provide training to assure that responsible personnel are familiar with plans and procedures. Article 2-B was amended in 1981 to deal with certain aspects of Radiological Emergency Preparedness specifically. The law provides that counties are the first line of defense in handling emergencies subject to an assumption of responsibility by the State pursuant to a State Declaration of Disaster Emergency (see Executive Law, Section 24, McKinney's Consolidated Laws of New York, Volume 18).

The State Emergency Management Office (SEMO), as the staff arm of the DPC and its Chair, is responsible for developing, implementing, and maintaining comprehensive emergency plans and procedures for prompt reactions to potential emergencies at nuclear power plants in New York or in bordering states.

3.0 PLANNING BASIS

The National Response Framework (NRF) enacted in March 2008, along with NIMS/ICS principles have been incorporated into emergency response plans in New York State. Where, by tradition, emergency plans have been primarily concerned with response activities, New York State has adopted an overall emergency preparedness system which includes four interrelated critical phases:

3.1 Comprehensive Emergency Management

Readiness: This is the initial phase of activities that is aimed at eliminating or reducing the probability of the occurrence of a radiological emergency, and at minimizing the impact of a radiological emergency on public health and property. These activities include the development of legislation and development of preparedness plans and training programs.

Mitigation: These activities form a basis for and enhance the quality of response operations.

Response: The Response phase follows the identification or notification of an emergency. Generally, response activities are planned to minimize the adverse impact on public health and to protect property, to the extent possible, through emergency assistance. These activities include accident assessment and evaluation, radiological exposure control, and protective action orders and recommendations. They also reduce the probability of secondary damage and speed recovery operations.

Recovery: The Recovery phase begins when the emergency situation has been brought under control, there is no further threat to the public, the initiation of response activities has ended, and the relaxation of protective response options taken is being considered. Recovery activities continue until the community life of the affected area returns to its previous level or better.

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These three phases are parts of an on-going cycle in which one phase leads into another. This Plan has been developed and patterned consistent with and supportive of the State Comprehensive Emergency Management Plan, which incorporates this comprehensive cyclical approach in planning and in dealing with all types of emergencies.

Under the provisions of Article 2-B, local governments have developed radiological emergency plans consistent with and as part of this State Plan. This State planning effort is designed to cope with a variety of potential radiological emergencies at a nuclear power plant that could have a public health impact.

In addition to the general State and local radiological plans, nuclear power plants licensees have developed and maintain site emergency preparedness plans.

The Nuclear Regulatory Commission (NRC), by law, can grant licenses for nuclear power plants only if the health and safety of the public is adequately protected. Although the law (The Atomic Energy Act) does not specifically require emergency plans and related preparedness measures, the NRC requires consideration of overall emergency preparedness as part of the licensing process. The NRC now requires adequate on and off-site emergency plans for the continuance of a license or the issuance of a new license.

The U. S. Federal Emergency Management Agency (FEMA) has the lead responsibility for review and recommendation or approval of all off-site nuclear emergency planning.

All personnel carrying out State emergency assistance activities, including the distribution of supplies, processing of applications, and other relief and assistance activities, shall perform their work in an equitable and impartial manner, without discrimination on the grounds of race, religion, sex, color, age, economic status, or national origin.

3.2 Emergency Planning Zones

New York State has adopted the Federal concept of Emergency Planning Zones for nuclear power plants. Emergency Planning Zones (EPZs) around each nuclear facility must be defined for both short term and long term periods of exposure to ionizing radiation. Such zones are defined as the areas for which planning is needed, to assure that prompt and effective actions can be taken, to protect the public in the event of an accident. They have been designed in size to accommodate the need for actions in regard to potential degree and radiological exposure.

There are two EPZs for each nuclear power plant site. The first zone is the Ingestion Exposure Pathway, which is the area within (approximately) a fifty-mile radius from the site. The principal exposure sources within this zone would be the ingestion of contaminated water or foods such as milk or fresh vegetables. The duration of potential exposures in this zone could range in time from hours to months. Therefore, protective actions for the Ingestion Exposure Pathway are planned for

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the extended time period. It is the intent of this planning effort to initiate protective actions at an early time period to prevent or minimize potential radiological contamination of milk or other agricultural products.

The second EPZ is the Plume Exposure Pathway, which is the area within (approximately) a ten-mile radius from the site. Although the radius for an EPZ implies a circular area, the actual shape would depend upon the physical and demographic features within that zone. The principal exposure sources within this zone are external whole body exposure to gamma radiation and exposure through the inhalation of radioactive materials.

The potential exposure within the Plume EPZ would depend on the duration of a release and meteorological conditions at that time and could range from one-half hour to any number of days.

The concept of these zones and their respective sizes represent a judgement on the kind and extent of planning which must be done and on the appropriate types of response activities needed for the effective protection of the public health. In a given emergency, protective actions might be restricted to a small part of either or both planning zones. Under other given circumstances, the emergency may extend outside these designated zones whereby discretion is permitted where natural and jurisdictional areas would receive little to no impact in an emergency.

3.3 Protective Action Guides

The concept of Protective Action Guides (PAGs) was introduced to radiological emergency response planning in order to assist public health and other governmental authorities in deciding how much of a radiation hazard in the environment constitutes a basis for initiating emergency protective actions. These guides (PAG's) are expressed in units of radiation dose (rem) and represent initiation (trigger) levels of preplanned protective actions should the projected future dose to be received by an individual exceed the designated level. These PAGs are used as the basis for initiating activities to minimize the potential exposure of individuals.

The PAG units represent such initiation levels as tools to be used as a decision aid to a response situation. They are not intended to represent "acceptable" radiation dose levels in other than emergency situations.

These guides are used in Section III of the Plan, entitled RESPONSE.

4.0 CONCEPT OF OPERATIONS

When considering radiological emergencies, Prevention/Mitigation, Response, and Recovery are responsibilities that are shared by all levels of government and the private sector. However, as stated in Executive Law, Sections 24 and 28, the affected counties have lead responsibility for carrying out emergency activities unless a "State Declaration of Disaster Emergency" is declared by the Governor.

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4.1 Readiness

4.1.1 Private Sector

The Nuclear Facility Operator (NFO) provides training programs for public information and education in conjunction with all levels of government, establishes operator training, and provides specialized technical information and material to maintain an updated facility and response emergency plan. The operators are responsible for all aspects of this phase within site boundaries.

4.1.2 Local Government

Among the responsibilities of local government are the preparation and coordination of local preparedness plans, the development of a public information and education program, the development and maintenance of communication systems, and training of staff necessary to implement the plan.

4.1.3 State Government

The State assists local government by providing information and available expertise to enhance preparedness activities. In those instances where a county does not have the capability to implement all or part of its Radiological Emergency Preparedness Plan, or the Chief Executive of a county does not elect to put such a plan into effect, the State also shall take the necessary actions to respond. The DOH is designated as the lead agency.

4.1.4 Federal Government

The Federal Government, through the NRC, has the principal responsibility for regulating matters regarding radiological health and safety. The FEMA provides assistance to New York State and its local governments in the preparation, review and testing of State and local radiological emergency plans.

4.2 Response

4.2.1 Private Sector

The first line of responsibility lies with the Nuclear Facility Operator, (NFO). The local and State response efforts begin if there is a potential hazard to the public. Responsibility for notification and initial assessment and evaluation lies with the nuclear facility operators.

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contaminants.

Environmental Conservation Title 6, Chapter IV, Subchapter C, Radiation Part 380:
Provides for the prevention and control of environmental pollution by radioactive materials.

New York State General Business Law Article 28D:
No person shall possess or use radioactive material without a valid license issued by the (Industrial) Commissioner except where the use or possession of radioactive material or radiation equipment are subject to the regulatory powers and jurisdiction of the State Department of Health or the Health Department of the City of New York.

Industrial Code Rule 38:
Every industrial installation and mobile source consisting of radiation equipment shall be registered with the Industrial Commissioner.

On State Civil Defense Emergency Act, Article 6, Section 9160 Closing or Restricting Use of Highways; Posting of Properties:
Provides the Commissioner of Transportation the authority to open or close highways, waterways, railroads, etc.

The New York State Comprehensive Emergency Management Plan:
This plan establishes the methods and procedures to cope with the effects of a disaster by comprehensive management of all private and public resources available in New York State.

NYS/NRC Letter of Agreement 10/62:
Sets up New York to assume some NRC responsibilities for licensing and inspection of some radiological by-products. (Signatories: Rockefeller and the Atomic Energy Commission)

Emergency Management Assistance Compact (EMAC)
EMAC is the Governor's interstate mutual aid compact that facilitates the sharing of resources, personnel and equipment across state lines during times of disaster and emergency. EMAC is formalized into law by member states. EMAC was adopted by NYS in September 2001.

6.2 Federal Government

Atomic Energy Act of 1954:
Requires that the NRC grant licenses only if the health and safety of the public is adequately protected.

Title 10 Code of Federal Regulations Part 50. Nuclear Regulatory Commission, Emergency Planning, Final Regulations NUREG-0654 - FEMA - REP-l Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants:

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Requirements for licensee emergency plans for onsite and offsite emergency preparedness measures for nuclear reactors, fuel cycle facilities and certain other fuel cycle and materials licensees.

NRC/FEMA Memorandum of Understanding September 1993 Appendix A of 44CFR Part 354
Establishes a framework of cooperation in radiological emergency response planning.

Presidential Executive Order 12148:
Charges the FEMA Director with establishing policy for and coordinating all civil emergency planning and assistance functions for Executive agencies (section 2-101). The Director shall represent the President in working with State and local governments and the private sector to stimulate vigorous participation in civil emergency preparedness, mitigation, response and recovery programs (section 2-104).

Title 44 Code of Federal Regulations Part 350:
Establishes policy and procedures for review and approval of State and local emergency plans and preparedness for coping with the offsite effects of radiological emergencies at commercial nuclear power reactors by the Federal Emergency Management Agency.

Presidential Executive Order 11795 7/11/74:

Delegates disaster relief functions under PL 93-288, to Federal Agencies, primarily HUD, Secretary of Agriculture, and the Secretary of Defense.

Title 24, Chapter XII, Part 2205 - Code of Federal Regulations:
Standards and procedures to be followed implementing PL 93-288.

Federal Civil Defense Act of 1950 (PL 81-890) as amended:
Established entire Civil Defense Program

Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended)

EPA 400-R-92-001 Manual of Protective Action Guides and Protective Actions for Nuclear Incidents

National Response Framework:
This document is a guide to how the Nation conducts all-hazards response. It is built upon scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities across the Nation.

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7.0 LISTING OF SUPPORTING PLANS

7.1 New York State Comprehensive Emergency Management Plan

7.2 Monroe County Radiological Emergency Preparedness Plan

7.3 Oswego County Radiological Emergency Preparedness Plan

7.4 Orange County Radiological Emergency Preparedness Plan

7.5 Putnam County Radiological Emergency Preparedness Plan

7.6 Rockland County Radiological Emergency Preparedness Plan

7.7 Wayne County Radiological Emergency Preparedness Plan

7.8 The Indian Point Radiological Emergency Preparedness Plan for Westchester County

7.9 Onondaga County Radiological Emergency Response Host Plan

7.10 Entergy Nuclear Northeast, Emergency Plan for Indian Point Units Nos. 1, 2 and 3

7.11 Constellation Energy Group for Nine Mile Point Nuclear Station Units 1 and 2 Emergency Plan

7.12 Constellation Energy Group, Ginna Station Radiation Emergency Plan

7.13 Entergy Nuclear Northeast, James A. Fitzpatrick Site Emergency Plan

7.14 Brookhaven Area Office, US Department of Energy
Radiological Assistance Program (RAP)

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1.0 INTRODUCTION

Readiness is the first phase of an emergency preparedness program. Its primary purpose is to eliminate, or reduce, the effects of radiological emergencies. Readiness activities include logistical assistance, technical assistance, and off-site monitoring of potential radiological emergencies. Also included in this phase are public education, training, drills, and vulnerability studies of potentially hazardous radiological sources. These and similar activities, which attempt to negate or minimize the effects of a radiological emergency are essential to the protection of public health and environment from radiological exposure.

Specific agencies on the Federal, State, and local levels with individual roles and responsibilities to perform, combine their resources with those of the private sector to produce an efficiently functioning Readiness program.

2.0 OPERATIONS

The private sector can provide resources, such as specialized technical information, specialized material and equipment, and personnel to reduce the probability and effects of a radiological emergency.

State government, in cooperation with other levels of government, as well as the public, determines what resources are needed to mitigate the effects of an emergency.

All radiological emergency preparedness plans must be mutually supportive, to allow for all levels of government to recognize each others capabilities, responsibilities, and obligations.

2.1 State/Federal Role

The Federal Government's primary role in Readiness is to enact laws or rules that will ensure the safest possible operation of a nuclear power plant. Within the Federal government, the FEMA and the NRC are the primary agencies responsible for readiness for a radiological emergency. FEMA is responsible for assisting in and overseeing off-site emergency planning in accordance with Federal regulations. The NRC is responsible for the granting of nuclear power plant licenses and on-site emergency plans.

Federal agencies provide radiological emergency planning, guidance and related training to State and local governments. These agencies work with nuclear facility operators in developing emergency plans for the public protection and assist in developing agreements with government agencies, to provide early public warning and implementation of protective actions.

The State will continue to work closely with the Federal government in all aspects of emergency management and will continue its role of intermediary among the Federal government, local governments, and private citizens.

The Radiological Assistance Program (RAP) provides for preplanned emergency operations to assist State and local governments in assessing potential consequences of radiological emergencies of any kind. The National Response Framework (NRF) provides for the use of all available Federal capabilities for radiological monitoring and assessment.

2.2 State/Local Role

All levels of government have a role in the Readiness for a radiological emergency.

The State supports activities which will be carried out exclusively by the private sector or local government, such as vulnerability analysis, educational programs, and similar programs.

2.3 State/Lead Agency Role

State readiness activities are carried out before the emergency and are directed by the DPC to minimize any adverse impact on the public health. The SEMO is responsible for the development and implementation of these activities and programs. Examples of some of these readiness actions are the preparation of State plans and the statewide public education programs.

3.0 READINESS ACTIVITIES AND ASSIGNMENTS

In addition to the technical personnel in the DOH, personnel from other State agencies will be made available to provide technical assistance. These resource personnel will be required to possess various qualifications in such areas of expertise as health physics, laboratory analysis, environmental surveillance and monitoring, power plant systems and operations, and reactor hazards analysis.

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Table 1, summarizes readiness activities carried out by the identified agencies. An "X" in an agency column indicates that the associated agency has responsibility for a program activity. The paragraphs following this chart will describe briefly the activities that support the "X" in an agency column.

TABLE I – READINESS

AGENCIES

ACTIVITIES	DOH	SEMO	Ag & Mrkts	NYS ERDA	DEC	PSC	OFPC	DSP	DOT	T-WAY
Administration		X								X
Logistics	X		X						X	
Monitoring Radiation Emergencies	X	X			X		X	X	X	
Plans, Policies, Program	X	X	X		X	X	X	X	X	X
Public Education	X	X	X	X						
Technical Assistance	X	X	X		X	X			X	
Training, Drills, Exercises	X	X	X	X	X	X	X	X	X	X

DOH = Department of Health
A&M = Agriculture and Markets
NYSERDA = State Energy Research and Development Authority
OFPC= Office of Fire Prevention and Control
DSP = Division of State Police
DOT = Department of Transportation

SEMO= State Emergency Management Office
SED = State Education Department
DEC = Department of Environmental Conservation
PSC = Public Service Commission
T-Way = Thruway Authority

3.1 Administration

The responsibility for the administration of this Plan includes:

- providing for and controlling the Plan distribution, amendments, and updates;
- reviewing the status of New York State emergency response agencies capabilities and their procedures for implementing this Plan; and
- providing the mechanisms for and conducting an annual review and updating of this Plan through up-to-date information and the results of periodic drills and annual exercises, to certify that the Plan is current.

3.1.1 State Agencies

The Director of the SEMO is responsible for the development, publication, and distribution of the Plan and for the prompt distribution of amendments and plan updates to all concerned agencies; maintains the compatibility of this Plan with other relevant emergency plans; oversees the implementation procedures of State agencies having radiological emergency responsibility in this Plan; provides up-to-date radiological emergency planning information, relevant to the appropriate State agencies; and conducts an annual review, update, and certification of this Plan for the Commissioner of Health, the Disaster Preparedness Commission and the Governor.

3.1.2 County

Each county emergency management office is responsible for the administration of their respective county radiological emergency preparedness plan as outlined in that plan.

3.2 Logistical Assistance

The timely mobilization and efficient management of resources available for response operations is of the utmost importance in determining the effectiveness of dealing with radiological emergency. Three key Readiness activities are the identification, acquisition, and the maintenance of an up-to-date inventory of potentially useful emergency response resources that can be marshaled in the event of an emergency.

3.2.1 State Agencies

The SEMO provides guidance in the development of program needs.

SEMO is also the contact point for resource management and maintains a stockpile of water and power equipment available for loan to State and local agencies during emergencies, coordinates

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emergency communications systems, and maintains a cache of radiological instruments and supplies for plume and ingestion activities.

The Department of Environmental Conservation provides equipment and manpower to assist in communications and monitoring the environment.

The Department of Health assists local health agencies, provides laboratory services, and maintains monitoring equipment.

3.2.2 County

Each county emergency management office is responsible for logistical assistance as outlined in their respective radiological emergency preparedness plan.

3.3 Monitoring Potential Radiological Emergencies

The off-site radiological monitoring capabilities of State agencies in areas around nuclear facilities are primary to an adequate readiness program. Examples of fixed environmental monitoring equipment include air particulate monitors, I-131 monitors and radiation badges.

3.3.1 State Agencies

The SEMO has limited radiological capabilities and receives meteorological information which may be used to assist the Department of Health in the assessment and evaluation of a radiological emergency.

The Department of Health provides radiological capabilities and operates a Statewide Radiation Surveillance Network, which collects environmental samples to establish and monitor long-term environmental trends of radioactive pollutants.

The Department of Public Service and the Energy Research & Development Authority provide nuclear emergency support in the assessment & evaluation of a radiological emergency.

The Division of State Police relays reports regarding radiological emergencies received from the public to the SEMO staff.

The Department of Environmental Conservation staff can provide assistance in radiological monitoring.

3.4 Plans, Policies And Programs

Preparing plans is a Readiness activity. Many State agency planning programs influence local government activities.

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3.4.1 State Agencies

The SEMO is responsible for the overall development of the REP plans, policies and programs.

The Department of Agriculture and Markets, through scheduled inspections, will monitor relevant farm activities and the food chain system.

The State Energy Research and Development Authority is the liaison with the NRC.

The Department of Environmental Conservation provides expert testimony/professional expertise in the siting of energy facilities.

The Department of Health assists local communities in radiological emergency planning, provides technical advice, laboratory assistance, and health advisory information, and conducts an environmental surveillance program near nuclear facilities.

The Public Service Commission has regulatory responsibilities over the rates and services of electric corporations. The Department of Public Service is the staff arm of the Public Service Commission.

In addition, under Article VIII of the Public Service Law, the Chairman of the Public Service Commission is also Chairman of the State Board on Electric Generation Siting and the Environment, which is responsible for licensing of major steam electric power plants in New York State. The support staff for the Siting Board is provided by the Department of Public Service.

3.4.2 County

Each county plan is a part of this State plan and the preparation of each is done at the county level with SEMO assistance.

3.5 Public Education

A key activity is the implementation of the statewide public education program, in conjunction with Federal and local agencies and the private sector, to provide information about radiological emergency planning. Included in this program is the preparation and distribution of pamphlets, discussion of such topics as potential problems associated with nuclear power plants, radiation and emergency response information.

Public understanding of potential hazards and the Readiness activities available to minimize the potential of an emergency is basic to the whole process of Public Education.

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Public Education is a mitigative activity of all levels of government. An annual news media education program is conducted at each site to acquaint the news media with relevant radiological emergency plans, radiation information and public protective measures.

3.5.1 State Agencies

The SEMO coordinates and supervises public education efforts at the State level. SEMO will also assist local government and nuclear facility operators in the design and implementation of their public education programs and work cooperatively to ensure program continuity to the extent possible. SEMO will make radiological emergency information available to the general public.

The Department of Agriculture and Markets assists in education plans and the education of farmers and food processors regarding the control and inspection of milk and other food products to guard against radiological contamination and assists the SEMO in overall public education programs.

The Department of Education ensures that the education curricula for elementary and secondary schools includes an educational program that pertains to potential hazards during an emergency.

The Department of Health provides health advisory information about potential radiological emergencies and what steps must be taken to mitigate such emergencies.

3.5.2 County

Each county conducts public education and information activities, which are outlined in the respective radiological emergency preparedness plans.

3.5.3 Nuclear Facility Operator

Each nuclear facility operator conducts various public education and information activities.

3.6 Technical Assistance

State agency technical assistance to communities will be provided. Many State agencies have specialized capabilities (i.e., engineering and scientific expertise) and personnel to support local communities faced with potential radiological emergencies. Due to the cost of such services, local governments cannot always provide them independently. This assistance includes providing for the testing of radiological instruments, equipment, warning systems, and communication systems.

3.6.1 State Agencies

The SEMO will provide guidance and technical and planning assistance.

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The Department of Health provides technical advice, laboratory assistance and health advisory information on potentially hazardous materials.

The Department of Agriculture and Markets provides technical assistance to farmers and food industries concerning the effects of radiation and what measures may be taken to mitigate the effects of a radiological emergency.

The State Energy Research and Development Authority and the Public Service Commission reviews and evaluates safety related materials, components, systems, programs, and procedures at nuclear facilities, to insure that the potential for accidents affecting the public health and safety is minimized, and provides technical support in the development of emergency plans for nuclear facilities.

The Department of Environmental Conservation provides technical guidance for cleanup and decontamination.

The Department of Transportation provides technical assistance on traffic and highway maintenance related matters.

3.7 Training, Drills, and Exercises

Radiological emergency preparedness plans require trained personnel to implement them. The SEMO will coordinate this training for emergency personnel and public officials. Training and retraining of State and local officials is provided through a variety of programs, such as formal courses, seminars, conferences, drills, exercises and experience gained in response to actual emergencies. An annual exercise will be conducted which will include emergency response agencies from the State and local level in conjunction with the Nuclear Facility Operators.
Provisions are made for a critique of training drills and each exercise by qualified observers. The results of the critiques will be the basis for improving the New York State Radiological Emergency Preparedness Plan.

3.7.1 State Agencies

The SEMO is responsible for the coordination of training including the development of curricula, training materials and handouts, and the delivery of training. SEMO is responsible for the development, organization and conduct of drills and exercises, and provides training support for REP courses as necessary including emergency operations and local and State radiological monitoring.

SEMO sponsors a continuing training program for State and local officials having disaster responsibilities which consists of conferences for public officials, and other related training activities. In drills/exercises emergency response requirements, actions, and methods are discussed and explained and tested under simulated emergency conditions. These activities are the

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same as may be required in a radiological emergency, with the exception of the technical response involved in evaluating radiation hazards. Courses dealing with the evaluation of and response to radiological emergencies are sponsored by the Federal government and Disaster Preparedness Commission (DPC).

The Department of Health assists SEMO in conducting radiological training for local public health officials and assists with the preparation and conduct of drills and exercises.

The Office of Fire Prevention and Control (Department of State) conducts specific courses in handling hazardous materials emergencies and in radiation safety for firefighters.

The Division of State Police, Department of Transportation, along with the Office of Fire Prevention and Control participate in training programs for radiological monitors, and assists SEMO in specialized training and drills.

3.7.2 County

The specific training courses and audience are specified in the Training Procedure in each respective County Radiological Emergency Preparedness Plan.

3.7.3 Nuclear Facility Operator

Provides periodic training and retraining for local emergency services located in the vicinity of the facility. Training and/or drills are typically provided on an annual basis for fire, hospital and ambulance personnel. The nuclear facilities provide instructors at various training sessions and provide staff to assist in preparation of scenarios used in drills and exercises.

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SECTION III

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1. Alignment of Public Protective Actions for Nuclear Power Plant Incidents with Updated Guidance

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1.0 INTRODUCTION

The Response phase of a radiological emergency deals with the reaction to an emergency which encompasses the Federal, State, local and private sector response roles and how the activities of these organizations will be coordinated. This effort minimizes the impact of the emergency on the health and safety of those in the affected areas.

A nuclear power plant emergency is defined as a series of events at a nuclear power plant which leads to an actual or potential release of radioactive materials into the environment to warrant consideration of protective actions. Protective actions are those actions taken which are intended to minimize the radiation exposure of the general public.

1.1 Private Sector

The Response phase to a radiological emergency within a nuclear facility begins with the NFO. The NFO has the first line responsibility for assessing the magnitude of a radiological emergency and its potential consequences and for taking immediate actions to mitigate or terminate the emergency. This responsibility includes classifying the event and notifying State and local governments, as well as the NRC, on-site and off-site monitoring, sample collection and analysis. After the initial notification, technical personnel from the nuclear facility will remain in contact with the representatives of the State Commissioner of Health and local officials for consultation and ongoing assessment of the emergency.

1.2 Local Government

Each county has the primary responsibility for responding to a radiological emergency with their resources and, when necessary, for requesting additional assistance from other jurisdictions. These resources are contained in each county plan.

Local government response efforts will be based on information from the NFO and guidance from the DPC. Local resources will be made available for the effective implementation of the appropriate protective action response options.

1.3 State Government

Each respective local government has the primary responsibility for responding to a radiological emergency. State agencies are expected to provide necessary support to local government. However, upon a State Declaration of Disaster Emergency by the Governor, the DPC assumes direction and control of emergency response activities through the local Chief Elected Official. County agency duties and responsibilities are not changed. The State Declaration simply allows the State to mobilize additional resources and assume responsibility for action decisions, and coordination with the local Chief Elected Official.

The Department of Health, as the State lead agency in radiological emergencies, and by order of the

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Commissioner of Health, under the auspices of the DPC, shall request necessary monitoring and activate assessment and evaluation personnel, equipment, and other resources. Upon evaluation and after consultation with the local Chief Elected Official, the Commissioner will recommend appropriate protective action response options. In those instances where more than one county is impacted, protective action decisions are coordinated between the State and affected counties via the Executive Hotline. The DPC will deploy to the respective nuclear power plant EOF, county(s) Emergency Operations Center(s), Joint Information Center (JIC) and other States or local EOCs as required. After a State Declaration of Disaster Emergency pursuant to Executive Law, Article 2B, section 28, the Commissioner may order appropriate protective actions. State agencies are responsible for support. The SEMO, as staff to the DPC, is the State coordinating agency of State and local operational resources and will perform this function from the State Emergency Operations Center (SEOC).

There will also be an ongoing exchange of information between local and State agencies.

After the initial notification of an emergency, disaster preparedness response activities will be coordinated through the SEMO. County Health Departments or Public Health offices will continue ongoing communication with the State DOH. County agencies will communicate through their State contacts and/or the SEMO liaison.

As previously stated, the DPC will have a representative in each county emergency management office, in the EOF, in the JIC and, with the DPC Chair at the State EOC to facilitate the proper implementation of the plan.

1.4 Federal Government

Management of the Federal response requires the coordination of a number of Federal agencies with each other and with the appropriate State and local authorities. The responsibility for the overall management of the Federal response is identified in the National Response Framework (NRF).

The NRC will be responsible for the on-site technical direction of the Federal response. "Technical" refers to all aspects of radiological monitoring, evaluation, assessment and reporting, the application of sophisticated technology to control or predict the impact of radiological contamination and the use of all available instrumentation to develop recommendations for protective action measures.

In accordance with the NRF, FEMA will serve as the primary point of contact for State officials and will coordinate and manage all non-technical aspects of the Federal response. "Non-technical" refers to all types of assistance to Federal and State/local organizations, such as transportation, communication, housing and assistance to State/local response activities. For Federal notification contacts refer to Procedure B, Attachment 11.

At the direction of the State Commissioner of Health or designee, the Department of Energy (DOE), through the Federal Radiological Monitoring and Assessment Center (FRMAC), will coordinate all off-site monitoring, evaluation, assessment and report the activities of participating Federal agencies.

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The NRC and DOE will coordinate their on-site and off-site data and will jointly advise the State Assessment and Evaluation staff on the Federal assessment and evaluation of the emergency and the availability of support.

The State Coordinating Officer at the State EOC is the designated State liaison to Federal agencies that have been requested to provide response support to the State. The U.S. Department of Agriculture has established an USDA Emergency Board in every State and county to coordinate USDA State or county disaster assistance efforts. All of the USDA agencies having major emergency responsibilities are represented on these boards. USDA emergency personnel are to establish continuing liaison with State and/or county agricultural agencies to insure coordination of assistance activities and damage assessments. For USDA contact, refer to Procedure B, Attachment 11.

2.0 GENERAL OPERATIONS

2.1 Response Activities and Assignments

Table 1 is a list of response activities assigned to State agencies, local governments, the private sector, and the Federal Government. This list is composed of those activities directly related to response to a radiological emergency. Those activities that are related to other types of emergencies that might occur in conjunction with a radiological emergency, such as flood, earthquake, snowstorm, etc., are found in Part III of the New York State Comprehensive Emergency Management Plan (CEMP).

2.1.1 Direction and Control

The activities within direction and control are to assign missions; make assessments and evaluations; direct and coordinate operations; supply special resources; and implement applicable laws and regulations. These activities will be directed by assigned agency representatives at the State EOC, 1220 Washington Avenue, Building #22, Suite 101, State Campus, Albany, using the SEMO communications system, which will be supported by the existing operational capability of other assigned agencies.

Local Government

At the county level, this direction and control activity will be implemented by local government agencies, with the county Chief Elected Official in charge. Operations will be directed from the county EOC's, using county communications (refer to Communication procedures in each appropriate county radiological emergency preparedness plan). In those instances where a county does not have the capability to implement all or part of its Radiological Emergency Response Plan, or the Chief Elected Official of a county does not elect to put such a plan into effect, the Governor shall declare a State of Disaster Emergency for that county and direct State agencies to implement those measures of the county's plan that may be appropriate and necessary under the direction of the DPC. State and local resources and personnel shall be utilized in carrying out these measures.

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State Agencies

The Department of Health is designated the lead State agency for a radiological emergency. The Commissioner of Health or designee will provide guidance to local government agencies and will direct State agencies as to appropriate protective actions.

The DPC will position liaisons at the EOF, County EOC(s), JIC and other States and local EOCs as required. SEMO will coordinate the assistance furnished by various Federal and State agencies, emergency forces from political subdivisions and quasi-public and private organizations.

The Department of Agriculture and Markets controls the safety of food and livestock subjected to radiological contamination including such measures as seizure, embargo and salvage. It will also give advice to farmers on emergency problems including livestock and crop contamination. In cooperation with the DOH it will implement response programs for sampling milk and other agriculture products.

2.1.2 Communication

Communication activities include: notification of Federal, State, and county emergency organizations, and the news media; notification of the general population and special facilities within the plume exposure EPZ and reporting of radiological and meteorological information.

Local Government

Local communications will be activated at the local level using existing county emergency communications. (The specifics of these systems are set forth in the county Communication procedures.)

State Agencies

The SEMO has communications systems with both plume and ingestion exposure EPZ counties, SEMO field offices and the NFO to provide initial notification and ongoing communication during the emergency. These systems include dedicated telephone lines Radiological Emergency Communication System (RECS) and the Executive Hotline, commercial telephone and radio communications including the SEMO Notification System (Dialogistics). The Supervisor (Communications Technician 2) of the State Emergency Communications Center (SECC) is responsible for the on-going 24-hour operation of the Center. The supervisor is responsible for scheduling adequate SEMO SECC staff and also maintains a quarterly updated notification list of SEMO response personnel and of State Agency emergency contacts to ensure a 24-hour capability.

SEMO has the National Warning System (NAWAS). The SEMO SECC participates in twice daily communications tests with NAWAS at the Federal level and at the local level to selected counties and cities. SEMO also conducts twice daily communications tests with the National Weather Service (NWS). SEMO field offices have radio systems on State agency networks of the

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Department of Transportation, Department of Environmental Conservation, Department of State (Fire Prevention and Control), and the Division of State Police. SEMO is the lead agency for this response activity.

SEMO also manages NY-Alert, New York State's All-Hazards Alert and Notification . This web based portal offers one-stop shopping through which State agencies, county and local governments, emergency service agencies and institutions of higher learning can provide emergency information to a defined audience be it local, county, regional or statewide. Information provided can include information on protective actions ordered, road closures, etc. The portal will disseminate emergency information through EAS, blast faxing, cell bursting, emails to media, businesses and individuals, text messaging, press releases and postings on the NY-Alert website. NY-Alert can be accessed through www.nyalert.gov

The Division of State Police has a New York Statewide Police Information Network (NYSPIN) that allows intercommunication among local government emergency managers, the DPC/SEMO, law enforcement agencies and the National Weather Service. It routinely is used to transmit emergency traffic between these agencies. DSP also has a radio communications system consisting of fixed and mobile units that allows communications virtually anywhere in the state.

Radio cars and helicopters are equipped with public address systems. State of the art mobile communications vehicles with satellite communications capability have been developed and are operated for the DPC.

The Thruway Authority has a radio communication network, along the entire length of the Thruway, which allows Thruway personnel to coordinate movement of emergency vehicles and supplies. The Thruway radio system is available to assist in emergency situations within the parameters of its operating capabilities, which are approximately ten miles each side of the Thruway.

The Department of Environmental Conservation has a statewide radio system which connects regional headquarters to mobile units.

The Department of Health has mobile radio communications equipment which enables the Emergency Medical Services program to be in contact with local EMS personnel (ambulance, fire, rescue squads). The Bureau of Environmental Radiation Protection, Department of Health has an extension of the RECS.

The Division of Military and Naval Affairs can activate radio communications between armories. It has bullhorns and aircraft loudspeakers, and special communication units.

The Office of Parks, Recreation and Historical Preservation has bullhorn and loudspeaker communication capabilities within State parks and recreational facilities.

The Department of Transportation has a statewide system which connects regional headquarters to residencies and mobile units.

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The Office of Fire Prevention and Control has radio equipment which can contact the Office's field representatives and County Fire Coordinator offices. Information can be relayed on the assigned State fire radio frequency from the county offices to all counties in the State. This is a back-up system to get information to the fire service in New York State if other systems are not functioning.

The Civil Air Patrol has a radio network for emergency backup to SEMO.

The American Red Cross provides communications from congregate care centers.

Radio Amateur Civil Emergency Services (RACES) operates a sophisticated radio system in the state on the HF and VHF bands. These volunteers routinely provide primary and back-up radio communications during emergencies.

The Nuclear Facility Operator is responsible for initiating the primary notification system via the RECS or backup utilizing backup radio or telephone.

2.1.3 Public Notification

The capability exists to provide a prompt notification signal to the public, followed by provisions for disseminating instructions to the public on the appropriate protective actions to be taken. Equipment and procedures are in place to ensure notification to the public in a timely fashion of the decision to issue a protective action recommendation (PAR). NY-Alert is also a component of the public notification system as described above.

Local Government

The activation and control of this public notification system will be implemented at the local level in coordination with the State DPC.

Initial Notification Requiring a Protective Action:

In the event an emergency requiring an initial notification to the State and affected county(ies) that a General Emergency has been declared (i.e. a fast breaking incident), the county (ies) will activate their public notification system and release a prearranged EAS message to the public prior to coordination with the State. NY-Alert may be utilized for initial notification purposes. In the case of multiple county involvement, a lead county has been selected to activate the EAS system and authorization and procedures to activate the siren system immediately. Procedures are contained in each county plan.

State Agencies

The SEMO will verify that public notification systems are activated, including the coordinated use of the EAS to include dissemination of information through NY-Alert. SEMO is the lead agency for this response activity.

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The Division of State Police will assist, as directed, in the local program to alert the public.

The Department of Health will advise the public on the emergency impact and on what protective actions are necessary.

The Office of Parks, Recreation and Historical Preservation will notify populations in State parks and recreation facilities about the emergency and will issue instructions for appropriate protective actions to be taken.

2.1.4 Accident Assessment

Radiological and meteorological capabilities exist to provide information for assessing the public health impact of radiological emergencies. Accident assessment includes obtaining radiological and meteorological data and the use of such data in determining the actual or potential impact on public health in order to determine the appropriate protective action.

Local Government

Will make an assessment based on information from the NFO, the State Commissioner of Health, and their own resources.

State Agencies

The Department of Health assesses the magnitude and impact of an emergency on the public health and where appropriate provides calibrated portable survey instruments and manpower. DOH conducts epidemiological surveillance; provides laboratory analysis of air, water, and agricultural products samples; collects potable water samples; provides information on hospitals with radiological medical personnel and thyroid uptake scanners for screening potentially exposed populations; and provides meteorological evaluation for transport of airborne radioactive materials, using the United States Department of Energy National Atmospheric Release Advisory Capability system (NARAC) and the NFO's assessment system. DOH is the lead agency for this response activity.

The Department of Agriculture and Markets, in cooperation with the Departments of Health and Environmental Conservation, implements programs in sampling milk and other agricultural products for radiological contamination.

The Department of Environmental Conservation implements environmental monitoring programs, providing meteorological data from both the New York State Continuous Monitoring Network and the National Weather Service locations and interpreting this information concerning the transport of airborne radioactive materials.

The State Emergency Management Office provides technical support at the request of DOH with both radiological personnel and equipment and meteorological data.

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Federal Agencies

Upon the request of the Commissioner of Health, through the Bureau of Environmental Radiation Protection, technical assistance will be provided through the Department of Energy, Brookhaven Area Office RAP Team and the NRF/Nuclear Radiological Annex and the FRMAC for radiological assessment to support State and local agencies. This support includes the use of the United States Department of Energy National Atmospheric Release Advisory Capability (NARAC) system.

Nuclear Facility Operator (NFO)

The NFO provides the initial radiological and meteorological assessment and continues to provide this data throughout the emergency situation. The NFO also provides assessment and recommendations throughout the emergency to the DOH and local officials.

2.1.5 Protective Response Evaluation

Protective response options are determined following evaluation of all pertinent data so the most appropriate decisions in recommending protective action are made. (Refer to Attachment 1 for protective action decision rationale).

Local Government

Local governments evaluate information from the NFO, DOH, and their own resources before determining the appropriate protective action.

State Agencies

The Department of Health evaluates all pertinent data to provide guidance to local government and State agencies as to appropriate protective actions. DOH is the lead agency for this response activity.

The State Emergency Management Office coordinates the collection and transfer of information needed for the evaluation process from appropriate State agencies and local governments.

The Department of Agriculture and Markets evaluates pertinent data regarding protection of food and livestock.

Federal Agencies

Evaluative input will be provided through Federal radiological and meteorological programs.

Nuclear Facility Operator

Initial and ongoing recommendations on appropriate protective actions to be taken will be provided by the NFO.

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2.1.6 Radiological Exposure Control

Procedures will be established for controlling exposures of the public and emergency workers to radioactive materials.

Control of radiological exposure of local emergency workers and the public will be accomplished at the local level based on the existing situation and on the protective response actions recommended by the State Commissioner of Health.

State Agencies

The Department of Health recommends appropriate protective actions for controlling the exposure of the public to radiation. DOH has lead agency role for this response activity.

The State Emergency Management Office provides radiological monitoring equipment to support the operation of State Emergency Worker Personnel Monitoring Centers (PMC). The Division of State Police, the Department of Transportation, the Department of Health and the Office of Fire Prevention and Control provide primary staffing for these State emergency worker PMCs.

2.1.7 Public Information

Public information includes a coordinated program to keep the public informed on the up-to-date status of a radiological emergency situation and to insure that there exist methods to advise the public of all recommended public protective measures. Also, a system shall exist to monitor all media coverage to insure that misinformation is not released. The public information program is under the supervision of the State Public Information Officer (PIO), typically a representative form SEMO. The State PIO will be the single source of information on State response activities and recommended public protective measures. The State PIO will ensure the establishment of a public inquiry center to receive questions from all sources. Once improper information is received it will be logged, evaluated and necessary corrective actions will be taken.

Local Government

The Governor, or designee and the local Chief Elected Official are responsible for issuing announcements on public health and safety relating to a radiological emergency. Public information officials from the local jurisdiction and the State PIO will consult with one another to ensure that factual information will be available for reporting to the public in a timely manner at both State and local levels.

Nuclear Facility Operator

The NFO's information officer will consult with the State PIO and appropriate local information officials prior to the release of any information which may affect the general public.

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State Spokesperson & Public Information Officer

The Chair, State Disaster Preparedness Commission will designate the lead spokesperson for radiological emergencies. This spokesperson, (typically identified as a representative from the Department of Health) will be the single, State agency source for official information during a radiological emergency. Various state agency public information personnel work in support of this function.

The State PIO coordinates news releases with appropriate local government PIO(s), the licensee information officer, and the Federal PIO(s).

2.1.8 Evacuation

Evacuation encompasses the movement of people out of a threatened area and the resources necessary to support this movement. Included are the movement of people from designated areas over designated routes; keeping these routes clear for travel; the identification of needs of special populations (e.g. mobility impaired, hearing impaired, school children, transportation dependent); and the care and support of evacuees (refer to each respective County Radiological Emergency Preparedness Plan).

Local Government

The evacuation plan will be implemented at the local level, using all available local resources, supplemented by available State resources.

State Agencies

The State Emergency Management Office coordinates and provides technical assistance to the local governments.

The Division of State Police assists in notification and providing control with local law enforcement agencies, enforces emergency highway traffic regulations, and assists in ensuring the security of evacuated areas.

The Department of Transportation assists in keeping evacuation routes clear and in traffic control; supplies route designations for expedient movement and control mechanisms (signs, road blocks, signals, etc.); as required, can waive restrictions on transportation systems and assists in locating buses for mass transit.

The Division of Military and Naval Affairs (DMNA) on order of the Governor, aids civil authorities with ground and air evacuation capabilities.

The Department of Corrections makes decisions on the movement of prisoners based upon their internal plans and procedures. State facilities may shift prisoners within the State system. There is no county authority to shift county prisoners into the State system. Upon the request of county

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officials, the State Commission on Corrections will advise the county and the Department of Corrections as to the protective action that is to be taken relative to incarcerated individuals.

2.1.9 Reception/Congregate Care Centers

The special needs of the evacuated population will be assessed and addressed. These needs include: monitoring, decontamination, reception/registration, lodging, feeding and clothing.

Local Government

Activities to register and monitor evacuees at Reception Centers and to house, feed and clothe them at Congregate Care Centers will be implemented by local agencies and the American Red Cross. These agencies share the primary responsibility for this response activity.

State Agencies

SEMO will, at the request of local government, coordinate State assistance for the monitoring of evacuating personnel.

The Office of Temporary and Disability Assistance (OTDA) will, at the request of local government, assist in the registration of evacuees at the reception centers. The department will also coordinate the activities of the Red Cross, Salvation Army, and other recognized organizations at the congregate care centers, as needed.

The State Human Services Branch coordinates State agency activities in this area.

Federal Agencies

In the event of a presidential disaster declaration the Federal government may provide mass shelters, emergency supplies and potable water, sell government-owned feed grains to livestock owners at reduced prices, assign personnel to screen contaminated food, and provide emergency clothing.

Voluntary/Private Agencies

Various voluntary organizations will assist local agencies in the operation of reception and congregate care centers. The Voluntary Organization Active in Disaster (VOAD) will coordinate private activities with the State Human Services Branch.

2.1.10 Human Services

Provision will be made for the needs of those affected by the emergency, including special populations.

Other services which will be available are crisis counseling, psychiatric counseling, information, legal, and referral service casework services, and other welfare services.

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Local Government

Human Services activities will be implemented at the local level, with support from the State.

State Agencies

The Office of Temporary and Disability Assistance (OTDA) will support activities of the Red Cross, Salvation Army, and other recognized volunteer organizations, and is the lead agency for this response activity.

The Department of Health provides information and referral services, in coordination with local health jurisdictions. Twenty-five counties are served by State district health offices, which provide direct health services to communities without established health departments. The appropriate district office will advise the affected population.

SEMO coordinates efforts of various public and private human needs agencies.

American Red Cross will operate Congregate Care Centers to shelter and feed evacuees and assist government and other agencies responsible in the operation of reception centers.

The Human Services Branch coordinates volunteer agencies which carry out their traditional role in assisting disaster victims.

2.1.11 Public Health, Medical and Sanitation Services

Provision will be made for the continuation of basic public health services during radiological emergencies. Primary and emergency care and treatment for the ill and injured will also be provided, including radiation contaminated/injured patients. The movement or consolidation of patients, equipment, and personnel of hospitals, nursing homes, and other special facilities will be coordinated, as will the allocation of medical resources. Primary and backup hospitals for the treatment of contaminated injured individuals have been identified and are listed in Appendix F. An additional listing of public and private hospitals within New York State capable of providing medical support for radiologically contaminated injured individuals is also included in Appendix F. Annual training is provided to selected medical transportation providers in the vicinity of each nuclear power plant site for the safe and expeditious pre-hospital care and transportation of contaminated/injured individuals.

Local Government

Most of the activities dealing with health problems and protective actions will be implemented at the local level, with support supplied by the State.

State Agencies

The Department of Health provides laboratory testing of samples to assure safe food and water

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supplies and orders any protective actions; monitors potable water supplies; provides technical assistance and risk assessment; issues orders related to affected public water supply; and recommends alternatives regarding the above in concert with the Departments of Agriculture and Markets and Environmental Conservation. DOH is the lead agency for this response activity.

All other State Agencies activities will be implemented consistent with New York State CEMP through the SEMO.

Federal Agencies

Advice and technical assistance will be provided in accordance with the National Response Framework.

2.1.12 Public Security

The measures necessary to protect the public by the enforcement of normal and emergency laws will be provided.

Local Government

Public security measures will be implemented at the local level and will be supplemented by the State (refer to each Police/Law Enforcement procedure in the County Radiological Emergency Response Plans).

State Agencies

The Division of State Police provides staff and equipment to protect life and property; establishes ingress and egress control; maintains traffic and crowd control; closes highways; suppresses riots and disorders; investigates accidents; enforces laws, emergency orders, and curfews; arrests violators; secures evacuated areas; and coordinates these support activities with the Federal, other State agencies, and the local government efforts. DSP has lead agency role for this response activity.

The Division of Military and Naval Affairs, on orders from the Governor, will select military forces to assist civil authorities and law enforcement agencies in the prevention of looting, surveillance and in perimeter control, to maintain or restore law and order and to support traffic control operations.

The State Office of Homeland Security is responsible for coordinating and enhancing anti-terrorist efforts in the State, specifically with developing a comprehensive statewide strategy to detect, protect against, respond to, and prevent cowardly and murderous acts of terrorism.

2.1.13 Fire and Rescue Service

Manpower and equipment for fire protection, surveillance, and suppression will be provided for the affected emergency areas, including on-site assistance. Decontamination activities, and search and rescue operations including air, land, and water operations will also be provided.

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Local Government

Local fire and rescue services will be utilized at the local level, with available support from the State.
State Agencies

The Office of Fire Prevention and Control activates the New York State Fire Mobilization and Mutual Aid Plan upon request. This involves coordination of independent local fire protection resources. They shall also provide available staff, communication vehicles and technical assistance to local fire departments and State agencies.

The OFP&C will provide to the SEMO:

- the OFP&C operational procedures manual for implementing the State Fire Mobilization and Mutual Aid Plan, including the assignment of OFP&C personnel;
- the Directory of Fire Service Communications in the State of New York, which includes essential radio information for all county fire coordinators and the approximately 1,850 local fire jurisdictions; and
- a basic inventory of the local fire service equipment and personnel resources available throughout the State.

The Division of State Police provides search and rescue capabilities, using boats, land vehicles, and helicopters, to locate missing persons and rescue stranded people.

The Department of Environmental Conservation provides search and rescue capabilities, using boats, land vehicles, and helicopters, to locate missing persons and rescue stranded people.

The Civil Air Patrol provides aircraft and personnel to conduct air search missions.

2.1.14 Engineering Services

The repairing of damaged roads, the clearing of obstructions on roadways, and the removal of impediments on designated evacuation routes will be provided.

Local Government

The engineering effort, providing personnel, expertise, and equipment in the affected area, will be a primary responsibility of the local jurisdiction(s) for their roads. State and Federal agencies will provide heavy equipment and manpower to operate equipment and will coordinate their activities with the local effort.

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State Agencies

The Department of Transportation and the Thruway Authority provides available resources (equipment and manpower) and coordinates assistance from other agencies in the use of evacuation routes.

The Division of Military and Naval Affairs, on orders from the Governor, will provide aid in the evacuation process in the form of staff and equipment.

The Office of Parks, Recreation and Historical Preservation provides equipment and personnel to assist in keeping evacuation routes open.

2.1.15 Transportation

The transportation of the injured and of critical equipment, supplies, food, and emergency personnel will be provided.

Local Government

Vehicles to move emergency supplies and equipment to the affected areas will be provided, supplemented with available support from the State.

State Agencies

The Department of Transportation provides limited resources for the movement of equipment and supplies and supports the ingestion sampling teams.

The Division of Military and Naval Affairs on orders from the Governor, can provide helicopters and vehicles to support the State effort.

The Department of Environmental Conservation provides aircraft, boats, snowmobiles, and other vehicles to support the State effort.

The State Emergency Management Office coordinates emergency transportation resources where local, State, and Federal governments are involved in a common overall effort.

The Division of State Police provides helicopters, boats, and vehicles to transport personnel, and radiological samples.

The Civil Air Patrol will provide transportation courier services.

Voluntary/Private Agencies

The Human Services Branch will provide limited transportation for emergency victims.

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TABLE 1

AGENCY RESPONSE ACTIVITY ASSIGNMENT CHART

RESPONSE ACTIVITIES

AGENCIES	Direction and Control	Communication	Public Notification	Accident Assessment	Protective Response	Exposure Control	Public Information	Evacuation	Reception/Mass Care	Social Services	Public Health	Public Security	Fire and Rescue	Engineering Services	Transportation
Health (DOH)	P	X	X	P	P	P	P		X	X	P				X
SEMO	X	P	P	X	X	X	X	P	X	X					P
Ag and Markets	X			X	X										
Corrections								X							
Education	X	X			X		X	X	X						X
NYSERDA				X											
DEC		X		X											X
OGS															X
Mental Health										X					X
DMNA		X						X				X		X	X
Parks and Recreation		X	X											X	
OTDA								X	P	P					
Fire Prevention and Control		X											P		
NYS Police		X	X			X		X				P	X		X
Thruway Authority		X													X
Transportation (DOT)		X				X	X	X						P	X
Civil Air Patrol		X											X		X
County Government	X	X	X	PR	X	X	X	X	PR	X	X	X	X	X	X
Federal Government				X	X						X			X	
American Red Cross		X							PR	X			X		X
Salvation Army									X	X					
Human Services Group									X	X					
Nuclear Facility Operator		X		PR			X								

This chart reflects the previous descriptions of State, local and other agency responsibilities during an emergency.

Each "P" represents the State agency that has primary responsibility to assist local governments upon request and to have lead responsibility after a Gubernational Declaration.

Each "PR" represents organizations other than State agencies that share a primary role in that activity.

Each "X" represents involvement in an activity regardless of the level of involvement.

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2.1.16 State Implementation of a County's Plan in Those Instances Where a County Does Not Implement the Plan Itself

The DPC assigns a representative to the County EOC to act at its direction in assigning missions and tasks, directing courses of action to control the situation, informing the public and acting in conjunction with other affected counties' Radiological Emergency Preparedness Plans and Procedures, the New York State Radiological Emergency Preparedness Plan and Procedures, and the NFO Site Emergency Plan and Procedures. These activities shall be carried out in accordance with the county's Radiological Emergency Preparedness Plan.

State Agencies

The State Emergency Management Office assigns a REP liaison to the County EOC to provide advice and technical interpretation of information to the county Chief Elected Official and Emergency Manager. The liaison also provides direct reports to DPC command so as to provide "heads up" information on activities at the county level. SEMO will also send a representative to the County EOC to support, assist and coordinate as necessary with representatives of the DPC and of other State agencies assigned to the County EOC.

The Department of Health assigns a representative to the County EOC to act on behalf of the State Commissioner of Health and the DPC in directing the performance of protective actions to assure public health and safety, during a radiological emergency in accordance with the county's Radiological Emergency Preparedness Plan.

The Division of State Police assigns a representative to the County EOC to act on behalf of the DPC to direct activities to maintain law and order, insure citizen safety, protect public and private property, provide traffic direction and control, control access to radiologically affected areas and assist in the dissemination of emergency information and announcements in accordance with the county's Radiological Emergency Preparedness Plan.

The Office of Fire Prevention and Control assigns a representative to the County EOC to act on behalf of the DPC to coordinate fire service activities, including search and rescue efforts and the provision of assistance in emergency first aid and medical transport services, relating to the radiological emergency operations as discussed in the county's Radiological Emergency Preparedness Plan.

The Office of Temporary and Disability Assistance assigns a representative to the County EOC to act on behalf of the DPC to direct activities to provide aid to those people who have been affected by a radiological emergency, and organize and maintain reception centers, in accordance with the county's Radiological Emergency Preparedness Plan.

The Department of Transportation can assign upon request a representative to the County EOC to act on behalf of the DPC to direct public works, highway and engineering activities for the construction, rehabilitation and repair of essential highways and facilities during a radiological emergency. The

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Department of Transportation can also assign a representative upon request to the County EOC to act on behalf of the DPC to direct the utilization of public and private transportation resources for the provision of transportation services during a radiological emergency for people without transportation. The DOT representative will also interface with the Regional Transportation Management Center (TMC) to provide the latest information on traffic conditions in the impacted area. These activities shall be carried out in accordance with the County's Radiological Emergency Preparedness Plan.

The State Education Department assigns a representative to the County EOC to act on behalf of the DPC to coordinate and oversee and support the initiation and completion of each schools "disaster emergency" plans for early dismissal and the use of school buildings during the emergency.

2.2 Direction and Control

2.2.1 Emergency Operations Center

The State Emergency Operations Center (EOC), located at 1220 Washington Avenue, Bldg. #22, Ste 101, State Campus, Albany, NY will have representation from all assigned State agencies. From this location, State direction and control of emergency operations will be conducted. The SEMO also maintains an alternate State Emergency Operations Center (ASEOC) at the New York State Traffic Management Center (TMC) in Hawthorne, Westchester County.

2.2.2 New York State Emergency Communications Network

New York State Radiological Emergency Communications System (RECS): The New York State Radiological Emergency Communications System for Fixed Nuclear Facility notification is a dedicated telephone line between: (1) Indian Point Unit 2 and Unit 3 and State Emergency Communications Center (SECC), Albany; Westchester, Orange, Rockland and Putnam Counties; City of Peekskill; West Point; Region II SEMO, Poughkeepsie; State Department of Health, Troy. (2) Nine Mile Point Nuclear Station Units 1 & 2 and James A. Fitzpatrick Nuclear Power Plant and State Emergency Communications Center (SECC), Albany; Oswego County, Fulton; State Department of Health, Troy. (3) Ginna Nuclear Station and State Emergency Communications Center (SECC), Albany; Wayne County, Lyons; Monroe County, Rochester.

The Radiological Staff of the DOH will receive notification and follow-up and verify information with the NFO and obtain additional details of the potential or actual emergency.

The Executive Hotline Emergency Communications System is a dedicated telephone line between: (1) The DPC command room in Albany, and the command rooms in Westchester, Rockland, Orange and Putnam counties for the Indian Point Site; (2) The DPC command room in Albany and the command rooms in Monroe and Wayne counties for the Ginna Site.

The DPC command room in Albany and the command room in Oswego County use commercial telephone conference calling for the Nine Mile Point site. Radio, NYSPIN and NAWAS will be used as backup to telephone systems. Communications/Warning operating procedures are contained

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in Procedure B.

2.2.3 Joint Information Centers

The DPC PIO will be located at the JIC which has been established to serve the affected nuclear reactor site. (refer to Procedure C)

JICs will be accessible to all media sources. These centers will be manned by pre-designated personnel from the licensee, local, State and Federal governments.

The purpose of this center is to provide a central facility for the accurate release of all information to the news media and the public. Joint news conferences and briefings will be held. Details of each center are found in the respective JIC Procedures and Workplan for each site.

2.3 Initiation of Response Activities

The emergency response phase is initiated upon the identification by the NFO of a radiological emergency which falls into any one of the four emergency classes as defined by the NRC. The identification of an emergency is promptly followed by notification of State and local authorities, confirmation of the occurrence, activation of emergency personnel and equipment, and verification of the readiness of these State and local personnel.

2.3.1 Emergency Classification

The NRC has established, and this Plan adopts, four emergency classification levels (ECLs) for nuclear power plants. The NRC requires that, when an initiating condition for any of the four emergency classification levels exists, the NFO shall provide early and prompt notification to both State and local officials. The four emergency classification levels are:

Notification of Unusual Event (NUE)

Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

Alert

Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

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Site Area Emergency (SAE)

Events are in process or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near site boundary.

General Emergency

Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

The rationale for the Notification of Unusual Event and Alert classifications is to provide early and prompt notification of minor events, which could lead to more serious consequences, given operator error or equipment failure, or which might be indicative of more serious conditions, which are not yet fully realized. A gradation is provided to assure complete response preparations for more serious indicators.

The Site Area Emergency classification reflects conditions where radiological releases are possible but where a core-melt situation is not indicated, based on current information. The General Emergency classification involves actual or imminent substantial core degradation or melting with the potential for loss of containment resulting in a radiological release to the environment. For both Site Area Emergency and General Emergency, full mobilization of emergency personnel in the near-site environs is indicated. For a General Emergency immediate public protective actions may be necessary.

The State Commissioner of Health, based on information obtained from the NFO and other sources and the Commissioner's own understanding of events and circumstances, may recommend to State and local agencies protective actions different from that recommended by the NFO.

If the initial EAL communicated from the nuclear station includes a reference to a security based event, additional response actions/precautions may be undertaken by State agencies beyond those of a typical EAL response. The Division of State Police will assume the lead role for the State in responding to this type of event. DSP will coordinate all activities with the respective local law enforcement agency. A State Police Public Information Officer will also be assigned to the Joint Information Center to act as lead spokesperson for security related matters.

2.3.2 Notification

Plume Exposure Emergency Planning Zone

Upon detection of an initiating condition for any of the four ECLs, the NFO will immediately notify

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the State and counties within the plume exposure EPZ. The notification from the NFO shall be by communications network described in Procedure B, and the County Radiological Emergency Response Procedures. The State and County Warning Points are manned on a 24-hour per day basis (detailed procedures are set forth in Communication/Warning Procedures, Procedure B)

The initial notification message from the NFO will contain:

- Date/time of incident
- Name and location of the facility, or location of incident
- Class of emergency
- Whether a release is taking place or not;
- Potentially affected population;
- Protective action recommendation
- Brief event description
- Weather conditions, wind speed and direction

The SECC will ensure that the notification message is received by the State DOH and the SEMO, according to the State Communication/Warning Procedures.

The State DOH will contact the NFO via commercial telephone to confirm initial notification and obtain additional emergency information.

Subsequent information available from the NFO includes:

- Estimate of quantity of radioactive material released or being released and the points and height of releases;
- Chemical and physical form of released material, including estimates of the relative quantities and concentration of noble gases, iodines and particulates;
- Meteorological conditions at appropriate levels (wind speed, direction (from), indicator of stability and precipitation, if any);
- Actual or projected dose rates at site boundary; projected integrated dose at site boundary;
- Projected dose rates and integrated dose at the projected peak and at 2, 5, and 10 miles, including ERPAs (Emergency Response Planning Areas/Protective Action Areas) affected.

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- Estimate of any surface radioactive contamination onsite or offsite;
- Recommended emergency actions, including protective measures;
- Prognosis for worsening or termination of event based on plant information.

Upon the direction of the Commissioner of Health, the State Emergency Communications Center (SECC) will advise appropriate State and local agencies. If warranted, the SEMO will activate the State EOC and notify the appropriate State agency personnel and the SEMO field staff. County warning points will notify the appropriate county officials according to their procedures. For emergencies classified as Alert, Site Area Emergency or General Emergency, FEMA Region II will be notified for information by the SECC. If Federal radiological monitoring and assessment assistance is needed, it will be requested by the Commissioner of Health or designee in accordance with the radiological assistance procedure of the Brookhaven Area Office, USDOE. If specific assistance from EPA is required, the assistance will be requested either directly by the Bureau of Environmental Radiation Protection or through USDOE and in accordance with the National Response Framework (NRF), Nuclear Radiological Annex.

Ingestion Pathway Emergency Planning Zone

The SEMO SECC will notify potentially affected counties within the Ingestion Pathway EPZ and FEMA at the Alert ECL for information purposes only. This notification will be made to County warning points by means of commercial telephone and/or the SEMO Communicator. In critical situations, the National Warning System (NAWAS) in the SEMO will be available for notification to affected counties' warning points. The county warning points will notify the appropriate county officials. SEMO and FEMA will notify any affected States and Canadian Provinces within the ingestion pathway EPZ.

2.3.3 Activation

State

For a Notification of Unusual Event classification, all involved State agencies will utilize their normal working quarters for response activities.

For an Alert, Site Area Emergency, and General Emergency classification, the SEMO will, according to its alerting procedures, notify specific pre-designated State agency personnel to report to the State EOC in Albany for response activities (refer to Procedure D).

For an Alert, Site Area Emergency and General Emergency classification, predesignated State personnel from the DPC may report to the NFO's Emergency Operations Facility (EOF), the affected States, Counties, local EOCs and the JIC.

County

Counties may choose to activate limited staff at the NUE if circumstances so require. For

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emergencies classified as alert or higher there maybe full activation of County EOCs within the plume exposure EPZ. Host counties may also activate at this ECL.

For an Alert, Site Area Emergency and General Emergency classification, plume exposure EPZ County predesignated personnel may report to the NFO's EOF.

2.3.4 Verification

Upon activation of the State EOC, appropriate County EOC's, and the NFO's EOF will communicate with each other and confirm that each emergency response facility has been activated and is operational.

2.3.5 Initial Release of Public Information

Upon direction of the State Commissioner of Health, the State PIO will issue a press release containing specific information on the emergency and a description of State emergency response actions to date. This press release will shared with the affected County (ies) PIO(s) and the NFO information officer (refer to Procedure C). Press releases specifically pertaining to the ingestion pathway EPZ will be issued jointly by the DPC.

2.4 Assessment and Evaluation

The NFO has the primary responsibility for the initial assessment of the magnitude and consequences of radiological accidents at fixed nuclear facilities. This responsibility includes requirements for on-site and off-site monitoring, sample collection and analysis, classification of the emergency based upon predetermined emergency action level criteria, and notification of appropriate Federal, State, and local officials. The Planning Section, Assessment and Evaluation (A&E) Branch also obtains real-time data from each NFO which permits independent, parallel, evaluation of potential problems.

After the initial notification, technical personnel from the NFO will remain in continual contact with technical personnel from the State A&E staff for consultation and continued assessment and evaluations of the accident consequences. The Commissioner of Health is responsible for determining appropriate protective actions to accomplish the objectives of this plan and will recommend the implementation of such actions to the DPC.

In an emergency, when the nuclear facility's EOF is activated, technical personnel from the DPC will be dispatched to the NFO's appropriate EOF. This will provide the State with on-the-scene staff for liaison and coordination of the assessment and evaluation activities.

Radiological releases have direct effects on the population. Inhalation of radioactive material by individuals causes internal radiation exposure to various organs of the body. Contamination of milk, potable water, or agriculture products that may enter the food chain and are ingested also causes internal radiation exposure. If no remedial actions are taken, the relative dose to an individual from ingestion of contaminated food products (primarily milk) may be of much greater significance from the passing plume than exposure due to inhalation and whole body exposure.

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Radiological emergencies at nuclear power reactors in other States, may require significant assessment and evaluation activities as well as response actions to protect the public from exposure from the ingestion pathways.

Planning must take into consideration all possible accident scenarios. The procedures in this plan provide flexibility for responding to a continuum of situations, from those requiring only notification; to those requiring increased environmental surveillance; to those requiring milk, food and water control, to those radiological emergencies that may require extensive evacuation or sheltering.

2.4.1 Assessment

The State Assessment and Evaluation (A&E) Branch has four primary resources to use during the assessment phase:

- previously developed accident analysis data and information
- relayed data on the prevailing radiological release rates and on-site meteorological conditions and real-time plant parameters
- radiological laboratory analysis
- on-going assessments from nuclear safety specialists from the NFO, NRC, and State agencies.

(Additional information on assessment procedures is contained in Procedure H).

Previously Developed Data (See Procedure H)

Included in the previously developed data, available for use by the State A&E Branch, are the following:

- Dose-distance procedures have been developed by the NFO for different radiological release and meteorological conditions, which will correlate the expected doses at various down-range distances to the duration of the incident.

- In addition to the accident analysis data, assessment of the potential impact on livestock distribution, water supply data, land use tables, and marketing practices is available for review at the State EOC.

- Marketing practices will include discussion of critical time periods; for raw milk to processor to retail market; for harvest to processor to retail market; for storage capacity; and for product distribution.

- Population distribution by sector and distance as well as by Emergency Response Planning Area (ERPA) or Protective Action Area (PAA) around commercial nuclear power reactors is shown in the appropriate sections of each County REPP.

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- Evacuation timetables including consideration of various contingencies, such as adverse weather conditions or time of day, will be used by the assessment teams. Evacuation time estimates for a variety of scenarios have been made for the general population and for special facilities. These are given in appendices to each County REPP.

Relayed Real-Time Radiological and Meteorological Data

Relayed data from meteorological monitors at the reactor sites will be available to the State A & E branch. This information, when integrated with data from the National Weather Service, can be used to determine the actual and projected meteorological conditions for the area of concern.

The State will receive relayed data from numerous fixed radiation monitors wherever available. The State may also receive relayed real-time data derived from NFO plant data so as to enable the State to make an independent, but parallel, evaluation.

Mobile radiation monitoring teams will be deployed by the NFO and by Federal resources primarily through Radiological Assistance Program (RAP) administered by the Brookhaven Area Office of the U.S. Department of Energy. Initial monitoring during the plume phase will be conducted by the risk county and the NFO. Additional radiation surveillance resources of the State and local agencies will work cooperatively with the NFO and Federal field assessment teams and will be made available for assistance in determining and verifying off-site consequences. All data will be transmitted to the State EOC in Albany. NFOs have mutual agreements where monitoring assistance will be afforded each other in the event of an emergency.

Weather conditions permitting, sophisticated aerial monitoring and surveillance aircraft of the Aerial Measuring System (AMS) from the U.S. Department of Energy will delineate potential areas of deposition of radioactive material as well as provide an isotopic analysis of the deposited and airborne radionuclides. Aerial surveillance provides the means for fairly rapid survey of large areas at large downwind distances from the nuclear facility.

Data from environmental monitoring systems operated by the State DOH, and the air samples provided by the State Department of Environmental Conservation will be available to the State A&E branch. The NFO will also provide data from their monitoring systems. The primary functions of the environmental radiological monitoring system are to establish the preoperational background levels, detect any gradual buildup of long-lived radionuclides, and verify that operation of the plant has no detrimental effect on the health and safety of the public or the environment. Sampling media from the environmental monitoring locations will be used to obtain valuable assessment data in the event of an accident involving the release of radioactive material.

Radiological Laboratory Analysis

The Wadsworth Center Laboratory of Inorganic and Nuclear Chemistry, State DOH, located at the Empire State Plaza in Albany, provides extensive radiological laboratory analysis and support

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services. All samples collected by State and local personnel will be delivered to the Wadsworth Center for analysis (analytical equipment and staff are listed in Appendix G). In the event of a major emergency at the nuclear facility, additional laboratory analysis will be available from the Environmental Protection Agency, Food and Drug Administration, Department of Energy, NRC and the NFO. The Director of the Wadsworth Center will coordinate the laboratory analysis activities of the various agencies.

Ongoing Assessments From Nuclear Safety Specialists

The State A&E branch will be assisted in assessing the emergency by reactor safety specialists from the NFO, and NRC, as well as other State agencies, and will provide an on-going diagnosis and prognosis of the emergency. This assessment will identify events which are in progress or have occurred that involve likely and imminent major failures of plant functions needed for protection of the general public. In addition, assessment of the ingestion pathway will include input from the State DOH, Agriculture and Markets, and Environmental Conservation.

2.4.2 Evaluation

The State A&E branch will evaluate the assessment data to determine whether implementation of one or more of the protective action response options should be recommended to the State Commissioner of Health.

Under most circumstances, the State Commissioner of Health recommends implementation of protective actions for the plume pathway (Early Phase) to the Chief Elected Official of the affected counties.

Directing implementation of protective actions for the ingestion pathway, deposited radionuclides, and recovery phase (Intermediate and Late Phases) of the emergency will be accomplished by the State Commissioner of Health. Implementation of the protective actions so ordered for the Intermediate and Late Phases is the responsibility of the Departments of Agriculture and Markets and DOH (e.g. Agriculture and Markets - milk and food products, Health - public water supplies, relocation of the public and decontamination).

Protective Action Guides (PAGs)

During the evaluation phase, the protective action response options which will be recommended for implementation are determined in order to execute the mission of this plan. This plan provides Protective Action Guides (PAGs) for determining appropriate responses during the Early, Intermediate and Late Phases of radiological emergencies. The PAGs for these three phases are given in Procedure H and are briefly described below.

Plume Exposure (Early Phase) Protective Action Guides

This plan adopts the PAGs, developed by the EPA for determining appropriate responses during radiological emergencies involving plume exposure pathways. In keeping with the objective of

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preventing or minimizing radiation exposure of the population in the event of a radiological emergency, the State Health Commissioner may recommend protective actions for projected doses lower that the EPA PAGs.

In evaluating which of the protective action response options to implement during the Early Phase of the emergency, the State A & E branch will integrate the following input data and boundary conditions to establish a basis for the decision-making process:

- EPA PAGs;
- Implementation time requirements for the protective action response options, including analysis of the applicable Evacuation Time Estimates (ETE);
- Current status of road and meteorological conditions;

and site prognosis via the NFO and NRC.

The PAGs for evacuation, or as an alternative in certain cases shelter-in-place, are expressed in terms of the projected sum of the effective dose equivalent from external radiation and the committed effective dose equivalent incurred from inhalation of radioactive materials from exposure and intake during the Plume or Early Phase.

Evacuation of the general public will usually be justified when the projected total effective dose equivalent (TEDE) savings to an individual is one (1) rem, or the projected committed dose equivalent (CDE) savings to the thyroid is five (5) rem. (see Table 2)

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TABLE 2

PAG's for the Early Phase of a Nuclear Incident

Protective Action	PAG (projected dose)	Comments
Evacuation (or Sheltering-IN-Place [a])	1-5 rem [b]	Evacuation (or for some situations, Sheltering –In-Place[a]) should normally be initiated at 1 rem.
Administration of stable iodine [d]	5 rem [c]	Requires approval of State Commissioner of Health.

[a] Sheltering –In-Place may be the preferred protective action when it will provide protection equal to or greater than evacuation, based on consideration of factors such as source term characteristics, and temporal or other site-specific conditions.

[b] The sum of the effective dose equivalent resulting from exposure to external sources and the committed effective dose equivalent incurred from all significant inhalation pathways during the early phase. Committed dose equivalents to the thyroid and to the skin may be 5 and 50 times larger, respectively.

[c] Committed dose equivalent to the child thyroid from radioiodine.

[d] Recommendation will be made at the General Emergency ECL.

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Ingestion Exposure Pathway (Intermediate Phase) Protective Action Guides

This plan adopts PAGs, for use in the event of accidental radiation contamination of milk, other food and water, developed by the Food and Drug Administration (FDA) for the ingestion pathway.

The 1982 FDA recommendations were developed from the prevailing scientific understanding of the relative risks associated with radiation as described in the 1960 and 1961 reports of the Federal Radiation Council (FRC 1960, 1961). Since 1982, FDA and the other federal agencies in the United States have adopted the methodology and terminology for expressing radiation doses provided by the International Commission on Radiological Protection (ICRP) in 1977 (ICRP 1977, ICRP 1984a, EPA 1987). The ICRP's dose quantities for radiation protection purposes include effective dose equivalent, committed effective dose equivalent, dose equivalent for a specific tissue, and committed dose equivalent for a specific tissue.

These current recommendations replace the Preventive and Emergency PAG's with one set of PAG's for the ingestion pathway. The PAG's are 5 mSv (0.5 rem) for committed effective dose equivalent or 50 mSv (5 rem) committed dose equivalent to an individual tissue or organ, whichever is more limiting. These correspond to the "intervention levels of dose" consensus values set by international organizations. Intervention levels of dose are radiation doses at which introduction of protective actions should be considered (ICRP 1984b). The FDA guidance retains use of the term Protection Action Guide (PAG) for consistency with the U.S. federal and state needs.

Deposited Radioactive Materials (Intermediate Phase) PAGs

External gamma radiation exposure from deposited radioactive materials (groundshine) is a potential exposure pathway for the general public following a nuclear accident. Furthermore, internal radioactive exposure from inhalation of resuspended radioactive materials is an additional potential pathway in the Intermediate Phase of an accident. This plan adopts PAGs, for use in the event of extensive deposition of radioactive materials, developed by the Environmental Protection Agency. In keeping with the objective of preventing or minimizing radiation exposure of the population in the event of a radiological emergency, the State Health Commissioner may recommend protective actions for projected doses lower that the EPA PAGs. The major relevant protective action during this phase is relocation of the public to areas of lesser radiological exposure. Projected doses for the second year and total 50 year dose are also determined to ascertain whether protective actions other than relocation are required.

The established PAGs for deposited radioactive materials are expressed in terms of the projected doses, over a one year period of time, above which specified protective actions may be warranted. The PAGs should be considered mandatory only for use in planning purposes. During the course of a radiological emergency, because of unanticipated local conditions and constraints and because the immediacy of the emergency has passed, application of these PAGs should be considered flexible.

These exposure pathways have a single Protective Action Guide. If the exposure to the public in any given area, based on isotopic soil samples, equals or exceeds 2 rem (= or >) projected for a 1 year

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exposure period, relocation of the public from that area is recommended. For projected 1 year exposures of less than 2 rem (<) simple dose reduction techniques for the general public are recommended. These techniques can include decontamination techniques such as scrubbing or flushing of hard surfaces, soaking or plowing of the soil, or minor removal of soil in areas where radioactivity is concentrated. Simply spending more time indoors or in other low exposure areas is also an effective dose reduction technique.

Critical Time Frames

Once the input parameters and boundary conditions have been established, the State A & E branch will identify the critical time frames necessary to complete the missions of this Plan for a particular emergency. Specifically, the critical time frames to be identified for a particular emergency are the implementation time frames for the various protective action response options and the time frame until the safe termination of the emergency.

The implementation time frame for a particular protective action has three components - notification time, preparation/mobilization time and execution time.

Notification time refers to the time required to notify the population-at-risk. Preparation/mobilization time is the time needed by that population to begin to take the recommended protective action and to deploy whatever emergency services personnel and equipment are necessary for the particular protective action response option(s) ordered. Execution time refers to the time, after notification and preparation/mobilization is completed, required for the completion or full execution of that particular protective action.

Other critical time frames for evaluation include the projected time before any release is initiated, the time period that any release is projected to persist, and the time for the arrival of the plume at various distances.

Additional time factors must be considered in determining appropriate ingestion protective actions. Examples of these time factors include time period for peak concentration in milk after ingestion of contaminated feed, critical period for harvesting, time period for agricultural products to go through the processor to the retail market, and storage time.

For deposited radionuclides, a one year time period is the minimum time frame that must be considered when estimating radiological exposure to the general public when relocation of the public may be necessary. Two and fifty year cumulative dose time frames are also considered to ensure that the public is not exposed to excessive doses of radiation.

Projected Doses

After the decision bases and critical time frames have been established, the A & E branch in coordination with County A & E branch will determine the projected doses for the particular emergency response planning areas by extrapolating projected dose rates and projected depositions

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over the critical time frames, for the various protective action response options and for the estimated duration of the emergency. These values represent the projected dose for the particular emergency planning area for the time frame of interest. Projected doses approaching the appropriate PAG levels are indications of the increasing desirability of implementing one or more of the protective actions in this plan and local plans.

Decision Process

The output of the assessment activity, input parameters and boundary conditions, critical time frames, and projected doses will be evaluated for determining which protective action should be implemented. (Detailed in Procedure H).

2.5 Plume Pathway (Early Phase) Protective Action Options

The protective action options have been developed to provide the State Commissioner of Health the capability to execute the primary mission of the State Plan. The State Commissioner of Health may recommend more than one of the protective action response options at the same time for a particular radiological emergency. In addition, the State Commissioner of Health can recommend implementation of the protective action response options for the specific population-at-risk. This flexibility will tend to maximize the effectiveness of the protective action response options. The options consist of plume exposure pathway actions, ingestion pathway actions and soil deposition actions. A section of each county plan also specifies actions necessary to protect special populations and special facilities.

2.5.1 Plume Exposure (Early Phase) Protective Action Response Options

In this section the following plume exposure protective action response options are described:

Initial Precautionary Options;
Shelter-In-Place;
Evacuation;
Thyroid Blocking Agents.

Initial Precautionary Options

The Initial Precautionary Option has been developed to provide an effective initial protective action which can be relatively easily implemented and which will facilitate the implementation of the other protective action response options, if they become necessary.

The implementation of the Initial Precautionary Option will require a minimal commitment of emergency resources and will cause a minimal amount of inconvenience for the general public while yielding maximum benefits, such as simplifying and facilitating the implementation of the other protective action options. Also, the implementation of this option will effectively decrease the number of individuals who have to be addressed under other protective action options, as well as

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effectively increasing the number of available emergency response personnel.

The implementation and execution of the initial Precautionary Option may include the following:

- the temporary closing of tourist areas, such as parks and campgrounds, within the appropriate EPZ;
- the temporary closing of elementary, secondary schools and day care centers within the appropriate EPZ;
- the temporary suspension of noncritical patient admissions at hospitals within the appropriate EPZ;
- the establishment of access control traffic check points for all major routes into the plume exposure EPZ; and
- the activation of the State EOC and the appropriate field and county EOC's.

Shelter-In-Place

In general, protective actions will be taken in accordance with the EPA PAG guidelines. The Commissioner of Health may recommend protective actions at projected doses below these guidelines to minimize radioactive exposure to particular groups such as individuals who could not be safely evacuated, if an evacuation were recommended. This would include individuals who have been designated medically unable to withstand the physical and/or psychological stress of an evacuation, as well as those individuals who require constant, sophisticated medical attention.

The implementation and execution of the Shelter-In-Place Option will include the following:

- the appropriate local health officer, in conjunction with the special facilities administrators and other local officials will make an initial determination of the number of those individuals unable to evacuate and their medical care requirements. This will be compared with the sheltering and medical capabilities otherwise available to these individuals;
- if this preliminary disposition indicates that additional medical personnel, equipment, and/or supplies are needed, local and State officials will assist in acquiring whatever is needed;
- the local health officer will conduct an on-going assessment as to the possibility and desirability of evacuation for those persons initially determined to be. This assessment would be based on the availability of evacuation capabilities, which would minimize the medical risk to those persons; and
- when the projected dose rates outside any facility reach the various protective action levels, the local health officer will notify the facility and other local officials, who will begin the

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- immediate implementation of sheltering for these persons.

For actual or projected off-site doses of 1 to 5 rem TEDE, the protective action option shelter-in-place may be implemented for the general public in the affected areas of the plume exposure EPZ. This response option can also be implemented for puff-type releases of low doses, as a precautionary measure. For doses where evacuation would be indicated, but where evacuation cannot be implemented because hazardous weather and/or impediments to highway movement, shelter-in-place may be implemented in lieu of evacuation.

Shelter-in-place will be implemented by the local Chief Elected Official, following consultation with and upon the recommendation of the State Commissioner of Health.

Instructions to shelter-in-place are provided for each household, school, special facility, and place of business in the plume exposure EPZ. These instructions are contained in the emergency public information brochure or calendar distributed annually to the plume exposure EPZ population.

Shelter-in-place information is initiated by the county public notification system with explicit directions over the EAS. Implementation can be affected for various Emergency Response Planning Areas or Protection Action Areas (a subdivision of the plume exposure EPZ) or for the entire EPZ. Instructions to the public include directions to stay indoors; close all doors and windows; turn off air conditioners and other ventilation systems, extinguish fires in fireplaces and then close flues; and stay off the roads. (Goal is to minimize air exchange where possible). Members of the public will also be directed to take KI in concert with this protective action. The seven nuclear counties have all implemented a plan to pre-distribute KI within the 10 mile EPZ. Directions for post event distribution of KI will be included in EAS follow- on message.

Evacuation

For actual or projected off-site dose levels of 1 to 5 rem TEDE, the protective action evacuation may be implemented for the affected areas of the plume exposure EPZ. Members of the public will also be directed to take KI in concert with this protective action. The seven nuclear counties have all implemented a plan to pre-distribute KI within the 10 mile EPZ. Directions for post event distribution of KI will be included in EAS follow- on message.

Upon declaration of a General Emergency by the NFO, evacuation of an area 2 miles in radius and 5 miles downwind will be immediately considered.

Evacuation will be implemented by the local Chief Elected Official, following consultation with or upon the recommendation of the State Commissioner of Health. Each County within the plume exposure EPZ has a detailed evacuation plan and maps showing evacuation routes. Emergency Response Planning Areas/Protective Action Areas, Reception Centers and Congregate Care Centers are also shown in County Plans.

Telephone numbers may be announced through the news media which will inform mobility impaired

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on how to obtain transportation assistance. In addition, these impaired persons may be identified in advance by the submission of a mail-in postcard furnished as part of the emergency public information brochure and calendar distributed annually to the plume exposure EPZ population.

These public information mailings also provide instructions on evacuation for each household, school, special facility, and place of business.

Implementation of evacuation is initiated by the county public notification system, with explicit direction over EAS. Implementation can be effected for various ERPA's or for the entire EPZ.

Public transportation will be provided to persons without transportation. Special traffic control procedures and mechanisms will be implemented to insure an efficient vehicle flow. Congregate Care Centers will be provided in host areas, including provisions for feeding, lodging, and medical care. Special facilities, including hospitals and nursing homes, have specific evacuation procedures, including the acquisition of special transport vehicles. Each NFO has evacuation plans for onsite personnel. NFOs will coordinate evacuation procedures with local authorities to insure coordination of evacuation activities. Normally, on-site personnel will use the evacuation routes that are used by the public in the ERPA where the nuclear power plant is located. Evacuation plans with detailed evacuation routes are shown in the County Plans.

Harriman/Bear Mountain State Park Evacuees

The Harriman and Bear Mountain state parks are located in Rockland and Orange Counties north and west of the Indian Point Nuclear Power Plant Station. It is the policy of the State and local governments as a precautionary option to close the parks at the Alert classification of an emergency at Indian Point. In the event of an immediate General Emergency involving a release of radioactive materials, the counties may require supplemental monitoring assistance to assist with the monitoring of the park transients.

Thyroid Blocking Agents

Potassium Iodide (KI) in water soluble table form (65mg & 130 mg) or liquid form is recommended as an appropriate thyroid blocking agent for use by emergency workers, and captive populations and the general public including school children.

Distribution of KI will be in accordance with Appendix K.

2.6 Ingestion Pathway (Intermediate Phase) Protective Action Options

The Ingestion Pathway Protective Action Options enable the State Commissioner of Health to recommend effective actions to ensure that the potential for the general population to receive radiation doses in excess of recommended limits through the various ingestion pathways is minimized.

These options may involve restricting public consumption of contaminated drinking water and

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agricultural products. Routine operations would be resumed in those areas cleared for unrestricted use.

2.6.1 Environmental Surveillance

Contaminated lands and water supplies will be identified through environmental surveillance consisting of aerial and ground monitoring. Milk and agricultural sampling is to be performed in a manner which permits sufficient time for action to be taken at an appropriate stage in the farm-processor-retail market cycle. Methods of radionuclide measurement will include complex laboratory methods, rapid analytical methods employing simple laboratory or modified field techniques, and field methods using conventional radiation survey instruments and the DOE's Aerial Measuring System (AMS). In general, these analyses will be the basis for implementing other ingestion pathway protective action options.

Implementing the environmental surveillance response option will include the following:

- Utilizing aerial monitoring (DOE AMS) to establish general patterns of exposure rates from deposited radioactive material;
- increasing the frequency of air sampling;
- undertaking field survey readings;
- and additional sampling of water, milk, and vegetation.

2.6.2 The Milk Pathway

The pathway now has one set of FDA Protective Action Guides (PAGs) for milk and dairy products:

- 0.5 REM Committed Effective Dose Equivalent (CEDE).
- 5.0 REM Committed Dose Equivalent (CDE) to an individual organ, which ever is more limiting.

The primary protective action option prerequisite for the Milk Pathway is to place milk animals on stored feed and water to limit their intake of any radioactive contaminants. Other protective action response options include:

- establishing liaison with the industry receiving milk from the affected area;
- acceptance of milk produced by cattle on stored feed;
- condemnation of milk produced from all other animals in the affected area.
- laboratory analysis of milk samples taken from, in and around the affected area.
- diversion of whole milk potentially contaminated with short-lived radionuclides to products with a long shelf life to allow radioactive decay of the radioactive material.

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Initial precautionary directives to place lactating animals on stored feed to prevent contamination of the milk chain will usually be prescribed in the early phase of the radiological emergency.
If laboratory analysis of milk and dairy products indicates that the projected dose may equal or exceed the PAG, the Commissioners of Health and Agriculture and Markets will order the following protective action:

- condemnation of milk and/or milk products and their destruction.

2.6.3 Other Agricultural Products

This response option has the same FDA PAG's covered in the preceding section (2.6.2). This option provides for:

- establishing liaison with the industry receiving products from the affected area;
- determining types of products produced in the affected area;
- embargoing food pending evaluation;
- a sampling program; and
- procedures for collecting and disposal of contaminated products.

If analysis indicates the projected dose equals or exceed the PAG 0.5R CEDE or 5REM CDE, one or more of the following actions will be ordered:

- for livestock: move livestock to uncontaminated habitat; remove milk producing animals and other livestock used for meat production from pasturage to uncontaminated stored feed; substitute source of uncontaminated water.

- for consumable fruits and vegetables: advise home gardeners to remove potential surface contamination by washing, brushing, scrubbing, peeling or processing; advise against public consumption; use substitute sources of specific food items; and remove from marketplace and destroy.

- for meat and meat products: use substitute source of specific food item; advise against public consumption; divert to non-human, non-food pathway use; and remove from marketplace and destroy.

- for grains: mill whole grains, remove the bran from wheat and polish rice; use substitute sources; advise against public consumption; divert to non-human, non-food chain use; and condemn and destroy.

- for animal feeds: prohibit use by livestock; preserve and store for radionuclide decay; use alternate feed sources; divert to non-livestock, non-food chain use; increase time between deposition and harvest, to maximize time for weathering, plant growth, dilution, and radioactive decay; and condemn and destroy.

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- for agricultural land: alter use of land to allow radioactive decay of short-lived radionuclides; remove contaminated surface crops and destroy; for grasses, cutting and rolling sod, raking and removing mulch; removal of surface soil, allow natural surface erosion, or irrigate and leach; and isolate and prohibit land use.

Additionally, the following action may be ordered:

- for all of the above agricultural products, immediate action will be taken to isolate these contaminated products and prevent their introduction into commerce. The following factors will be taken into consideration when an embargo of these foodstuffs may be called for; availability of other protective actions, relative proportion represented by the item in the diet, importance of the foodstuff in the diet and available substitutes, relative contribution of other foods to the total dose and time and effort to effect the necessary corrective actions.

2.6.4 Water Sources

10 NYC RR Part 5 (New York Commissioners Rules & Regulations) has regulations regarding limits on radionuclides in water sources that may be utilized for human consumption, directly or via the food chain. This response option provides for:

- identifying public water sources that may be affected by the release;
- establishing liaison with the water supply operators;
- collecting and analyzing representative samples; and
- alerting individuals and water supply operators using water sources that may be contaminated.

One or more of the following protective actions will be ordered for implementation when the projected dose for ingestion of water sources, equals or exceeds the PAG:

- advise the reduction in population daily intake.
- use alternate drinking water sources and supplies and restrict use of the contaminated water sources for sanitary and fire-fighting purposes;
- use of typical water treatment; coagulation, settling, and filtration;
- use of special water treatment removal techniques; sand, filters, ion exchange, and lime-soda ash softening;
- alter use to allow radioactive decay of short-lived radionuclides; and
- prohibition of water supply use.

2.6.5 Coordination with Government Agencies Outside of New York State

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If a serious emergency occurred, that could result in the contamination of milk or food products that may be shipped into New York State, the Departments of Agriculture and Markets and Health will initiate the following actions as appropriate:

- establish liaison with their counterpart in the federal government and in the state(s) where milk or food products may have been contaminated;
- estimate the type and amount of milk, dairy products, or other agricultural products being shipped into the State from the affected area;
- determine the surveillance and controls being exercised to ensure that products contaminated in excess of acceptable limits will not be shipped into the State; and

**Note:* The data (e.g., maps, regional and statewide listings of water sources, dairies, food processing plants, etc.) used in making the technical decisions is on file in the State ECC.

- provide recommendations for a sampling program for surveillance of milk and food shipped into New York State.

The U.S. Department of Agriculture has established an USDA Emergency Board in every State and county to coordinate USDA State or county disaster assistance efforts. All of the USDA agencies having major emergency responsibilities are represented on these councils. USDA emergency personnel are to establish continuing liaison with State and/or county agricultural agencies to insure coordination assistance activities and damage assessments.

2.7 Emergency Personnel - Radiological Exposure Control

The Radiological Exposure Control procedure (Procedure G) has been developed to provide the State Commissioner of Health with the capability of controlling and minimizing the radiological exposure of emergency response personnel. Emergency response personnel include individuals engaged in accident assessment, rescue of endangered or injured personnel, lifesaving activities, evacuation of affected populations, and protection or prevention of property damage or loss within the 10 mile emergency planning zone.

Emergency activities may be necessary to protect lives and reduce escalation of the radiological problem. It is possible that involved emergency workers may be exposed to radiation and become contaminated while carrying out their duties. The underlying radiation protection principle is to limit their exposure to as low as reasonably achievable, within the whole body limits prescribed for radiation workers, which is 5 rem total effective dose equivalent per year. In an emergency situation, these guidelines may not provide the flexibility required for essential emergency operations. In these cases, all possible measures will be taken to limit radiation exposure of emergency workers. Specific exposure guidance, when lifesaving actions or extraordinary emergency operations are required, is provided below. If possible, volunteers should be used for emergency operations which are projected to exceed established guidelines.

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Exposure control procedures for emergency response personnel include the following:

- instructing emergency response personnel to wear their personnel dosimetry to include permanent record dosimeters and direct reading dosimeters);
- issuing emergency response personnel direct-reading dosimeters and chargers, upon activation for field operations;
- emergency workers have been supplied potassium iodide (KI) as a thyroid blocking agent.
- instructing each person performing emergency service functions inside affected areas of the 10 mile EPZ following a release to take dosimeter readings at 15 to 30 minute intervals. Should an indicated exposure exceed 1R of accumulated dose at any time during the shift, a report will be made to the individual's immediate supervisor or team leader. If an accumulated exposure of 3R is registered, personnel will immediately report the reading to the individual's supervisor or the appropriate EOC and request instructions. Doses in excess of 5 rem TEDE or 25 rem CDE Thyroid must be authorized by the Commissioner of the NYS DOH; (different limits for reporting dosimeter readings may be provided based on the specific type(s) of radioactive materials released)
- instructing decontamination personnel who perform a decon function to remain upstream of any water spray utilized in decontamination activities;
- establishing provisions for obtaining whole body counts or bioassays for radiological evaluation of emergency personnel, including identification of medical service facilities equipped to evaluate and/or treat contaminated/injured individuals;
- allowing female emergency workers the opportunity to declare pregnancy;
- recording the radiological doses received by all exposed emergency workers;
- establishing facilities for the monitoring and decontamination of emergency personnel;
- selecting emergency personnel for lifesaving actions or protection of large populations using the following criteria, if practical:

  emergency personnel for needed lifesaving actions should be volunteers and preferably professional rescue personnel;

  emergency personnel should be familiar with the consequences of radiological exposure;

  pregnant women or women capable of reproduction should not take part in these actions;

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volunteers above the age of 45 should be selected.

- maintaining emergency worker dose limits as outlined in Table 3 as follows:
- The Department of Health A & E branch leader will activate the State Emergency Worker PMC's at the Site Area Emergency Classification Level (SAE ECL) or when emergency workers have been assigned in the 10 mile EPZ.
- providing expert medical treatment, consultation, and service to emergency personnel receiving radiation doses equal to or in excess of those indicated above (25 Rem or more TEDE).

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TABLE 3

Guidance on Dose Limits for Emergency Workers

Dose limit [a] (rem)	Activity	Condition
5	All	
10	Protecting valuable property	Lower dose not practicable
25	Life saving or protection of large populations	Lower dose not practicable
>25	Life saving or protection of large populations	Only on a voluntary basis to persons fully aware of the risks involved

[a] Sum of external effective dose equivalent and committed effective dose equivalent to nonpregnant adults from exposure and intake during an emergency situation. Workers performing services during emergencies should limit dose to the lens of the eye to three times the listed value and doses to any other organ (including skin and body extremities) to ten times the listed value. These limits apply to all doses from an incident, except those received in unrestricted areas as members of the public during the intermediate phase of the incident.

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2.8 Response Organization Structures

The State responds to any emergency situation of localized scope with no special organizational change. State Agencies, working through the SEMO will provide initial emergency assistance to one or more affected counties. When conditions become serious enough to require the Governor to execute a "State Declaration of Disaster Emergency" the Executive Law provides, under Article 2-B, section 21, that the DPC consider creating a temporary organization to manage the necessary response efforts. In a radiological emergency the DOH has been pre-designated as the "lead agency". For assessment and evaluation the Commissioner of Health will act as the head of this temporary organization. The integration and coordination of the organizations implementation responsibilities will be directed by the SEMO under the auspices of the DPC.

The following charts reflect these interrelationships:

A. PRIOR TO GUBERNATORIAL "STATE DECLARATION OF DISASTER EMERGENCY"

B. AFTER GUBERNATORIAL "STATE DECLARATION OF DISASTER EMERGENCY"

C. ACTIVATION OF EMERGENCY OPERATIONS CENTERS

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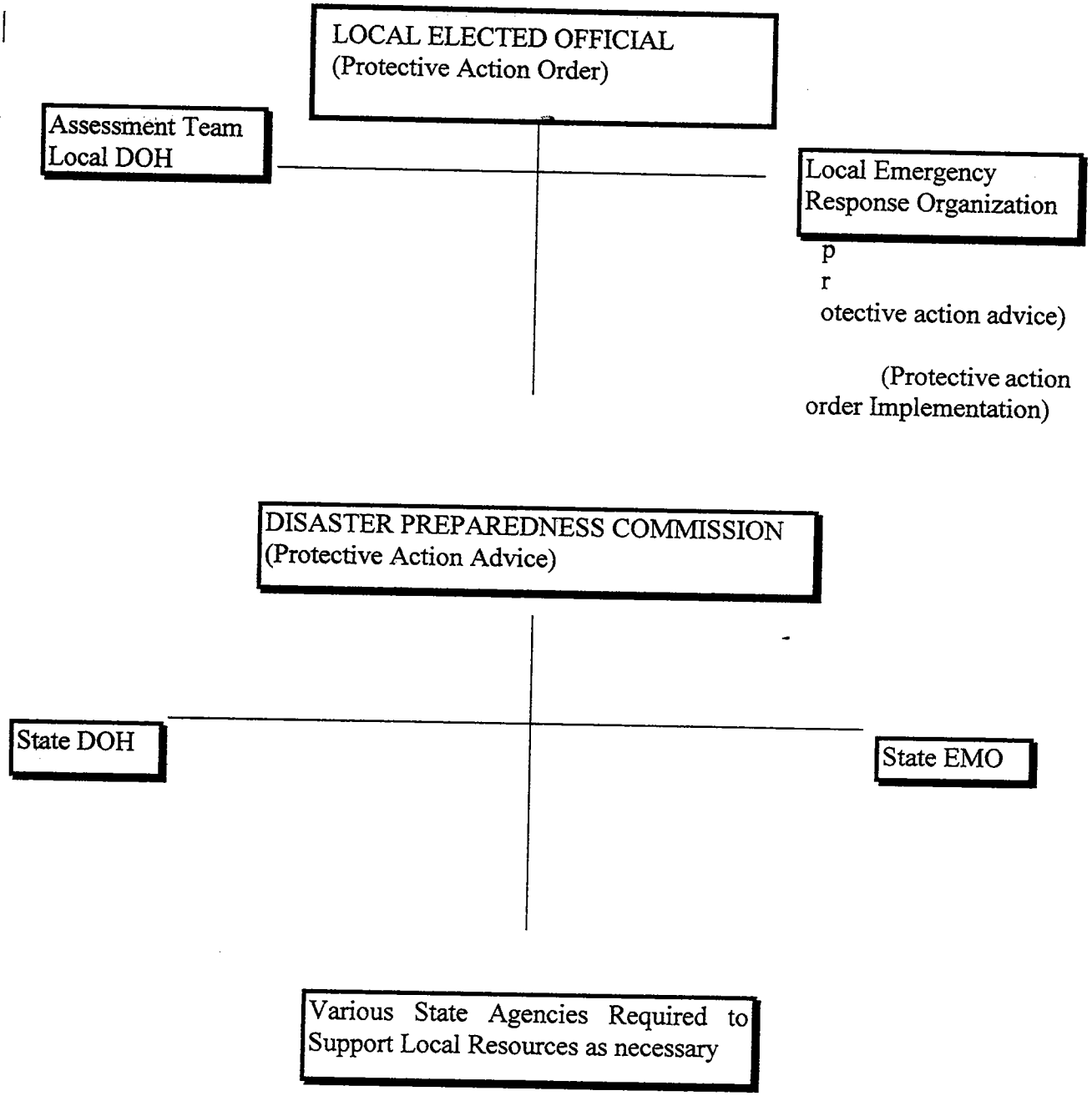
A. RESPONSE ORGANIZATION STRUCTURE
LINES OF AUTHORITY

Prior to State Declaration of Disaster Emergency



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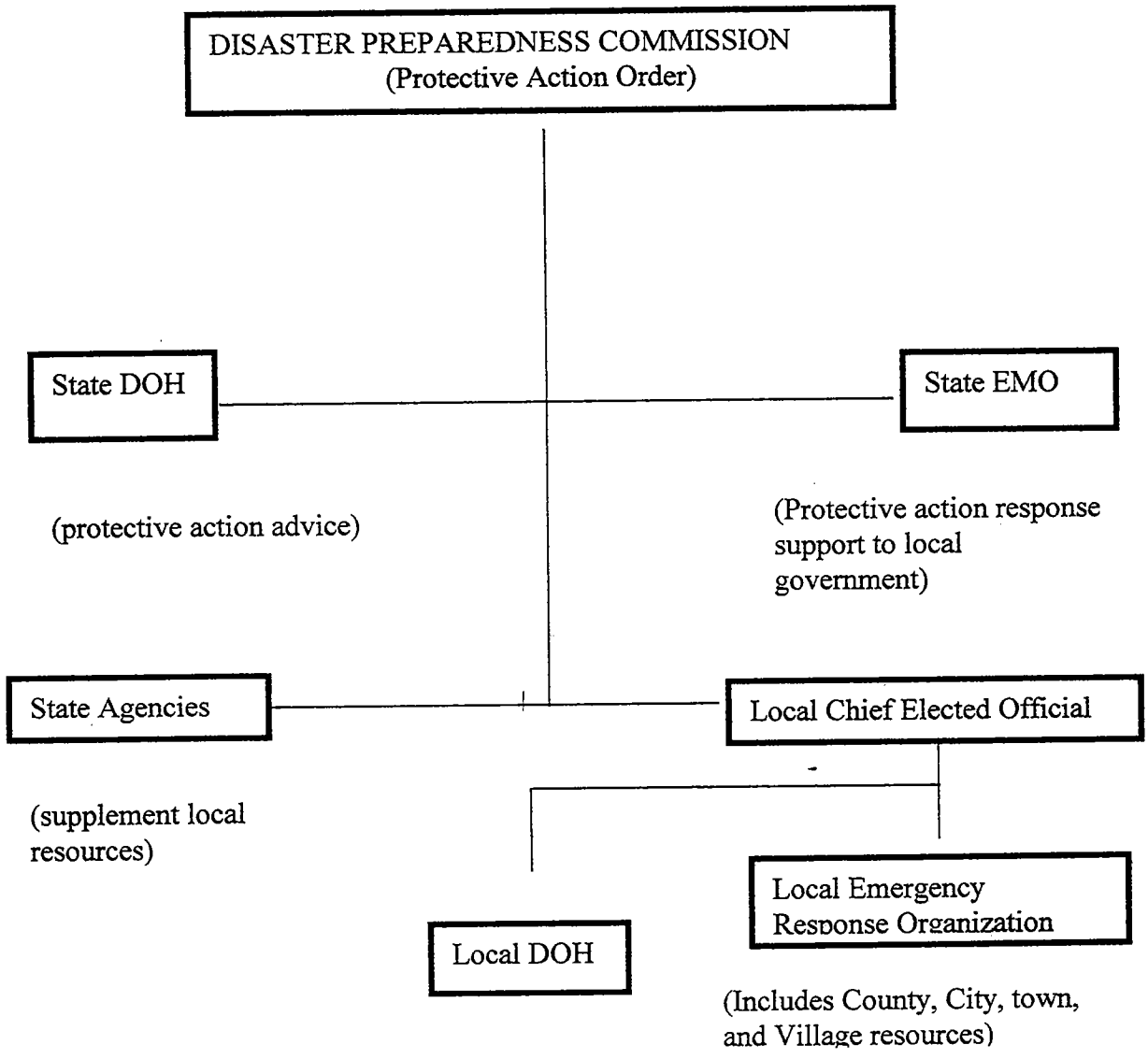
B. RESPONSE ORGANIZATION STRUCTURE LINES OF AUTHORITY

State Declaration of Disaster Emergency



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C. ACTIVATION OF EMERGENCY OPERATIONS CENTERS

1. Emergency Classification- Notification of Unusual Event (NUE)

State Activation	10 Mile EPZ County Activation	50 Mile EPZ County Activation
All involved State agencies will utilize their normal working areas for response activities.	All involved County agencies will utilize their normal working areas for response activities.	All involved County agencies will utilize their normal working areas for response activities.

2. Emergency Classification- Alert

State Activation	10 Mile EPZ County Activation	50 Mile EPZ County Activation
Notify appropriate State agency personnel to report to State ECC. (See Procedure B, attachment 10) Send SEMO liaisons to affected counties, States, or local EOCs, JIC and the DPC rep to EOF.	Full activation of County EOC. Send designated County liaison officer to. EOF.	County agency personnel to report to county EOC if required.

3. Emergency Classification- Site Area Emergency (SAE)

State Activation	10 Mile EPZ County Activation	50 Mile EPZ County Activation
Full activation of State EOC. (See Procedure B Attachment 10) Send SEMO liaisons to affected counties, States, or local EOCs, JIC and the DPC rep to EOF	Full activation of County EOC.	County agency personnel to proceed to County. EOC, if required

4. Emergency Classification- General Emergency (GE)

State Activation	10 Mile EPZ County Activation	50 Mile EPZ County Activation
Full activation of State EOC (See Procedure B Attachment 10) Send SEMO liaisons to affected Counties, States, local EOCs, JIC and the DPC rep to the EOF.	Full activation of County EOC.	Advise specific County agency personnel to proceed to County EOC, if required

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(NOT USED)

SECTION IV

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(NOT USED)

1.0 INTRODUCTION

The intermediate phase of an accident at a nuclear power plant is defined as that period beginning after the source and releases have been brought under control and environmental measurements are available for use as a basis for decisions on protective actions.

During this phase the primary source of exposure to the population is assumed to be due to deposited radionuclides which include the following pathways:

- external gamma radiation from deposited radioactive materials or groundshine which is expected to be the dominant source;
- internal exposure from inhalation of resuspended materials;
- ingestion of food and water (covered in Section III);
- beta radiation; and
- direct ingestion of contaminated soil.

During this phase of an accident, protective action responses will include restrictions on food and/or water (covered in Section III); and relocation. It is expected that this phase of an accident might last from weeks to many months.

The late phase of a nuclear power plant accident consists of recovery activities aimed at reducing radiation levels in the environment so as to permit unrestricted, long-term use of property. This phase of the accident, which may last from months to many years, ends when all recovery activities have been completed.

As provided by the New York State Comprehensive Emergency Management Plan, a Recovery Committee (here after referred to as The Committee) having authority and major responsibilities to make decisions relating to intermediate and late phase activities will be appointed by the DPC. This committee will be comprised of representatives of the Commission's membership, and such other agencies as the Commission Chairman may designate. Specifically included will be representatives of the Departments of Agriculture and Markets, Office of Economic Development, Health, Environmental Conservation, Labor, Temporary & Disability Assistance, State, Transportation, Office of General Services, New York State Energy Research and Development Authority, Public Service Commission, Division of State Police and Division of Military and Naval Affairs and SEMO. Response organizations will be notified that recovery activities are being initiated. This will be accomplished utilizing the Executive Hotline, the RECS line, EOC briefings, conference calls and press releases.

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2.0 RESPONSIBILITIES

The Committee is responsible for directing State resources and intermediate and late phase activities and for assisting in the total cooperative effort involving any or all of the other organizations having recognized roles in intermediate and late phase operations. During intermediate and late phase operations the Committee is responsible for developing practical time parameters and activities consistent with this plan, and insures that there are adequate communications systems and processes for all State activities. The Committee reports to the DPC and keeps it appraised of all matters relating to the recovery effort.

The New York State Commissioner of Health continues to have the primary responsibility for recommending protective actions i.e. relocation; for overseeing the total related radiological program including recovery activities; for modifying, and relaxing protective actions including allowing the reentry of evacuated or restricted areas; and discontinuing protective actions allowing the return of the evacuated population.

The Director of the State Emergency Management Office (SEMO) coordinates State and Federal assistance and programs in support of the local jurisdictions.

Local Chief Elected Officials assess the needs of their affected areas in conjunction with the State Emergency Management Office. They direct intermediate and late phase operations in their jurisdictions. State directed intermediate and late phase operations and protective actions are coordinated with the respective jurisdictions.

3.0 RELOCATION AND RETURN OPERATIONS

3.1 Before assessing relocation and/or reentry of the public, it is necessary to ensure that the source of the release or the threat of a release is under control. The Planning Section, Assessment & Evaluation (A & E) Branch considerations include:

- whether there is a radioactive material inventory capable of being released offsite;
- if barriers to a release are threatened by fire, facility control, the presence of hydrogen or other explosive gas, core melt through, pressure build up (decay heat), direct containment heating (high pressure melt through), or isolation failure;
- whether the reactor is shutdown (subcritical) and whether or not it can go critical; and
- whether the core is being cooled.

3.2 Based on analysis of survey results including aerial monitoring data, Aerial Measuring System (AMS), ground monitoring (Federal, State, County and NFO field team data), and sample isotopic

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analysis, the A & E branch will determine the location of the isodose line corresponding to the relocation PAG [> (greater than) or = 2 rem projected dose in the first year]. Relocation PAGs are outlined in Table 1.

3.3 Based on A & E branch recommendations, and in consultation with local officials, the Commissioner of DOH will order the establishment of a restricted zone which will include that area in excess of the relocation PAG and an appropriate buffer zone. Buffer zone considerations include geopolitical boundaries, major roads and landmarks, neighborhood boundaries, as well as the potential for transport of the deposited radionuclides.

3.4 Division of State Police in conjunction with county and local police agencies will identify control points necessary to control access to the restricted zone.

3.5 The Committee, and specifically the Human Services Branch, in coordination with appropriate federal, county and local agencies, will implement the relocation order and address the various needs of the relocating population including short and long term housing, job loss, replacement of belongings, and any special needs that may arise. To the extent possible, human need services, federal disaster assistance, and NFO insurance assistance will be coordinated at Disaster Assistance Service Centers located as to be convenient to the relocating population. Priority will be given to relocation of persons in the highest exposure rate areas. Persons previously evacuated from areas now determined to be restricted will be designated as relocated.

3.6 Persons previously evacuated from areas which have not been contaminated will be allowed to return. Return orders will be formulated in conjunction with the local chief elected officials and shall be issued via media releases and announcements at reception centers and congregate care centers. Transportation for transit dependent members of the returning population will be arranged.

3.7 Persons evacuated from contaminated areas outside the restricted zone will be allowed to return on gradual basis as confidence is gained from sample analysis and field measurements that relocation PAGs (Table 1) will not be exceeded.

3.8 Factors being considered prior to allowing the return of evacuees include:

- sampling and monitoring results
- status of decontamination activities
- public safety status including police, fire and EMS capabilities
- availability and operability of public utilities including electric power, gas, telephone, water and sewer;

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- adequacy of transportation systems and network; and any other needs identified by the State Human Services Branch.

3.9 Additional monitoring/decontamination stations will be established to support control of the restricted zone.

4.0 REENTRY OPERATIONS

4.1 Following the establishment of a restricted area, it may be deemed prudent by the Commissioner of DOH, in conjunction with local officials, to allow temporary reentry into the restricted zone. Reentry can be allowed for any of the following reasons:

- retrieval of personal belongings or property by members of the population being relocated from the restricted zone;
- security patrols;
- the reestablishment or operation of vital services including fire department operations, EMS, water or sewage control facilities, utility operations, or critical businesses or industries; and
- care and feeding of livestock;

4.2 Restricted zone perimeter access control points will be established prior to allowing reentry.

4.3 Monitoring and decontamination centers will be established to support reentry operations.

4.4 Efforts will be undertaken utilizing state and local resources to decontaminate access ways and facilities.

4.5 Persons allowed to reenter the restricted zone will be issued permanent record dosimetry, and may be issued direct reading dosimetry, and will be advised to control their exposure and limit the spread of contamination. Persons will be instructed to periodically read their direct reading dosimeters and report any unusual or unexpected levels. Known areas of high exposure rate will be previously identified, and appropriate exposure control guidance will be issued.

4.6 Persons and equipment exiting the restricted zone will be monitored and decontaminated as required.

4.7 Exposures to persons reentering the restricted zone will be limited to normal occupational limits for workers exposed to radiation (see Table 2).

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TABLE 1

Protective Action Guides for Exposure to Deposited Radioactivity
During the Intermediate Phase of a Nuclear Accident

Protective Action	PAG (projected dose)*	Comments
Relocate the general Public. **	> or = 2 rem	Beta dose to skin may be up to 50 times higher
Apply simple dose reduction techniques.***	< 2 rem	These protective actions should be taken to reduce doses to as low as practicable levels.

* The projected sum of effective dose equivalent from external gamma radiation and committed effective dose equivalent from inhalation of resuspended materials, from exposure or intake during the first year. Projected dose refers to the dose that would be received in the absence of shielding from structures or the application of dose reduction techniques. These PAGs may not provide adequate protection from some long-lived radionuclides, therefore, 1) doses in any single year after the first will not exceed 0.5 rem, and 2) the cumulative dose over 50 years (including the first and second years) will not exceed 5 rem.

** Persons previously evacuated from areas outside the relocation zone defined by this PAG may return to occupy their residences. Cases involving relocation of persons at high risk from such action (e.g., patients under intensive care) should be evaluated individually.

*** Simple dose reduction techniques include scrubbing and/or flushing hard surfaces, soaking or plowing soil, minor removal of soil from spots where radioactive materials have concentrated, and spending more time than usual indoors or in other low exposure rate areas.

Source EPA 400-R-92-001, p.4-4

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TABLE 2

Radiation Exposure Limits For Persons Entering the Restricted Zone	
Total Effective Dose Equivalent (TEDE)	5 rem/year (0.05 Sv/year)
Lens of the eye	15 rem/year (0.15 Sv/year)
Dose to any individual organ or tissue (deep dose equivalent + committed dose equivalent)	50 rem/year (0.5 Sv/year)
Shallow Dose Equivalent (to skin or any extremity)	50 rem/year (0.5 Sv/year)

Sources: EPA 400- R-92-001, p E-19
10 NYCRR Part 20

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APPENDIX A

DEFINITIONS

Access Control: All activities accomplished for the purpose of controlling entry or re-entry into a restricted zone to minimize the radiation exposure of individuals. This function is needed to prevent the general public from entering the restricted zone and permitting only emergency workers with essential missions and limited members of the general public to enter a restricted zone.

Activation: A process by which a facility is brought up to emergency mode from a normal mode of operation. Activation is completed when the facility is ready to carry out full emergency operations.

Aerial Measuring System (AMS): Department of Energy (DOE) operated aerial radiation surveillance program which may be used for plume verification and ground deposition monitoring.

Airborne Radioactive Material: Any radioactive material dispersed in the air in the form of dusts, fumes, mists, vapors or gases.

Alert: Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

Assessment: The compilation and analysis of all available accident data and information in order to determine actual and projected radiation doses to the affected population that may result from the accident.

Background Radiation: Radiation arising from man's natural environment including cosmic rays and radiation occurring from the natural radioactive elements.

Buffer Zone: An area adjacent to a restricted zone, to which residents may return, but for which protective measures are recommended to minimize exposure to radiation.

Chain-of-Custody Form: The documentation of the transfer of samples from one organization/individual to another with respect to the name of the organization/individual and dates of acceptance and/or transfer of samples.

Check Source: A radioisotope with a relatively fixed activity level used to determine the responsiveness of survey instruments.

Chief Elected Official: A County Executive, the Chairman or other presiding Officer of the county legislative body, the Mayor of a city or village, or the Supervisor of a town.

Committed Dose Equivalent (CDE): The dose equivalent to a single organ from an intake of radioactive material during the 50 year period following the exposure.

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Committed Effective Dose Equivalent (CEDE): The sum of the weighting factors applicable to each of the organs of tissue that are irradiated and the CDE to each of these organs or tissues.

Congregate Care Center: A facility where short-term housing feeding would be provided for evacuees.

Contaminated, injured, or exposed individuals: individuals who are; contaminated, contaminated and otherwise physically injured, or exposed to levels of radiation.

Contamination (Radioactive): Deposition of unwanted material on the surfaces of structures, areas, objects, or personnel.

Declared Pregnant Woman: A woman who has voluntarily notified her employer in writing, of her pregnancy.

Decontamination: The reduction or removal of unwanted radioactive material from a structure, area, object or person.

Direction and Control: The management of emergency functions within particular context (e.g., emergency operations center) through leadership and use of authority.

Derived Intervention Levels (DIL): The DILS are limits on the concentrations of various radionuclides permitted in human food distributed in commerce for human consumption.

Disaster Field Office: The temporary operations facility for the coordination of federal response and recovery activities.

Dose: A generic term that means absorbed dose, dose equivalent, effective dose equivalent, committed dose equivalent, committed effective dose equivalent, or total effective dose equivalent.

Dose Equivalent: The product of the absorbed dose in tissue, factor, and all other necessary modifying factors at the location of interest. The unit for dose equivalent is the Rem (R).

Dose Limits for Emergency Workers: The allowable accumulated during the entire period of the emergency. Action to avoid exceeding the limit is taken based on actual measurements of integrated gamma exposure. In contrast, protection action guides are trigger levels of projected dose at which actions are taken to protect the public. These actions are taken prior to the dose being received.

Dose Rate: The radiation dose delivered per unit of time. Measured, for example, in Roentgen per hour.

Dosimeter: A personal monitoring instrument that measures radiation exposure to gamma or X-Ray Radiation. (Direct Reading or Permanent Record)

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Drill: An event involving organizational responses to a simulated accident to develop, test, and monitor specialized emergency skills that constitute one or more components of an emergency plan and procedure.

Effective Dose Equivalent (EDE): The dose to the body from external radiation sources (assumed to be uniform over the body).

Embargo: A legal order which restricts the movement, distribution, and/or sale of food stuffs.

Emergency Alert System (EAS): A system which uses commercial radio and television stations to furnish an expedited means of furnishing real time communications to the public in the event of an emergency (i.e., storm warning, local crises, etc.).

Emergency Operations Center (EOC): A secure area with a wide range of communications capability that provides an operating area for those agencies involved in emergency response to man-made or natural disasters.

Emergency Operations Facility (EOF): A facility operated by the licensee for the purpose of evaluating and controlling emergency situations and coordinating responses.

Emergency Operations Plan: A plan which provides comprehensive emergency management for all types of emergencies within the State. The Radiological Emergency Preparedness Plan is an integral part of the State Emergency Operations Plan.

Emergency Planning Zone (EPZ): The area surrounding a nuclear power plant site for which offsite planning is required. For nuclear power plants, the EPZ is defined as an area with a radius of about ten (10) miles for the plume exposure pathway and a radius of about fifty (50) miles for the ingestion exposure pathway.

Emergency Response Planning Area (ERPA): A subdivision of the plume exposure (10-mile) emergency planning zone.

Emergency Worker: An individual who has an essential mission within or outside the plume exposure pathway emergency planning zone to protect the health and safety of the public who could be exposed to ionizing radiation from the plume or from its deposition. Some examples of emergency workers are: radiation monitoring personnel; traffic control personnel; evacuation; vehicle drivers; fire and rescue personnel, including ambulance crews; medical facilities personnel; emergency operations center personnel; personnel carrying out backup alerting procedures; and essential services or utility personnel.

Evacuation: The removal of the public from an area.

Evacuation Time Estimate: An estimate, contained in emergency plans, of the time that would be required to evacuate general and special populations within the plume pathway emergency planning zone under emergency conditions.

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Exercise: An event involving organizational response to a simulated commercial nuclear power plant accident with radiological and other offsite consequences. The purpose of an exercise is to test the integrated capabilities of involved organizations to implement emergency functions set forth in plans and procedures.

Exposure: A measure of the ionization produced in air by X-ray or gamma radiation. The Roentgen (R) is the unit of exposure. The term "dose", sometimes used interchangeably with exposure, actually refers to absorbed radiation.

Exposure Rate: The amount of gamma radiation that an individual would receive in one hour as measured in air (typically expressed in units of milliroentgens per hour or Roentgens per hour).

Federal Radiological Monitoring Assessment Center (FRMAC): This center is usually located at an airport near the scene of a radiological emergency from which the DOE offsite FRMAC Director coordinates radiological monitoring and assessment assistance to the affected area. This center need not be located near the onsite or Federal-State centers as long as its operations can be coordinated with them.

Fixed Contamination: Contamination that remains after loose contamination has been removed by decontamination.

Geiger-Mueller Detector: A type of radiation detector that can be used to measure the gamma, or detect beta plus gamma radiation depending on whether the detector is covered by a beta shield.

General Emergency: Indicates that events are in process or have occurred that involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity. Releases can reasonably be expected to exceed EPA PAG exposure levels offsite, beyond the immediate site area.

General Population: All people in the plume exposure emergency planning zone including residents and transients but not special facility populations in schools, camps, parks.

Host Area: A geographical area outside the plume pathway emergency planning zones where functions such as congregate care, radiological monitoring, decontamination, and registration are conducted.

Ingestion Emergency Planning Zone: For planning purposes, the area surrounding a site, where the principal exposure from an accident would be from the ingestion of contaminated water or foods. For nuclear power plants the ingestion EPZ is an area of about a fifty (50) mile radius around a nuclear plant.

Initial Notification: The first notification by a Nuclear Facility Operator to State and local agencies and the Nuclear Regulatory Commission of one of the four event classifications.

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Initial Precautionary Options: A response action taken on the basis of the potential for a release of radioactive materials.

Ionizing Radiation: Any radiation capable of displacing electrons from atoms or molecules, thereby producing ions. (For example, radiation produced by x-ray equipment.)

Joint Information Center The facility used as the central point for dissemination of information by county, State and licensee representatives to the news media. This facility is located offsite, and is the only location which allows media access during an emergency.

KI (potassium iodide): A prophylactic drug that can be used effectively to block the uptake of radioiodine by the thyroid gland.

Local Government: For the purposes of the Plan any County, City, Town or Village.

Millirem (mRem): One-thousandth (1/1000) of a rem.

Mitigation: The emergency phase that is aimed at eliminating or reducing the probability of the occurrence of a radiological emergency, and in minimizing the impact of a radiological emergency on public health and property.

Monitoring: The measurement of radiation levels, usually with a portable survey instrument.

National Atmospheric Release Advisory Capability (NARAC): Atmospheric computer modeling system based at Lawrence Livermore National Laboratory - can be utilized for making dose projections.

National Response Framework (NRF): This document establishes a comprehensive all-hazards approach on how the federal government coordinates with state, local and tribal governments and the private sector during incidents.

Noble Gases: The chemically inert radioactive gases that are released during an accident at a nuclear power plant.

Notification of Unusual Event: Unusual events are in process or have occurred which indicate a potential 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.

Nuclear Facility Operator (NFO): The entity licensed by the Nuclear Regulatory Commission to operate a nuclear facility.

Nuclear Reactor: A device in which nuclear fission may be sustained and controlled in a self-supporting nuclear reaction.

IPEC00201286

Off-Site: Area outside the site boundary of a particular nuclear power plant facility.

On-Site: Area inside the site boundary of a nuclear power plant facility.

Optically Stimulated Luminescence Dosimeter (OSLD): A dosimetry badge used to measure possible exposure to ionizing radiation. (Permanent record - requires processing to read.)

Personnel Monitoring Center (PMC): Those facilities or locations where emergency workers, vehicles and equipment will be monitored for radioactive contamination and decontaminated if necessary.

Plume Exposure Pathway: For planning purposes, the area surrounding a site where the principal exposure sources are: (a) whole body exposure to gamma radiation from the plume and from deposited material, and (b) inhalation exposure from the passing radioactive plume. For nuclear power plants the plume EPZ is defined as an area with a radius of about ten (10) miles.

Portal Monitor: A radiation monitor consisting of several radiation detectors arranged in a fixed position within a frame that forms a passageway for individuals being monitored.

Projected Dose: The estimated or calculated amount of radiation dose to an individual from exposure to the plume and/or deposited materials, over a period of time, in the absence of protective action.

Protective Action: Any action taken to protect the public health in response to a radiological emergency.

Protective Action Area: A subdivision of the plume exposure (10-mile) emergency planning zone around the Indian Point Energy Center.

Protective Action Guide (PAG): Projected dose to an individual in the general population that warrants the implementation of protective action. Specific PAGs have been recommended in terms of the level of projected dose that warrants the implementation of evacuation/sheltering, relocation, and limiting the use of contaminated food, water, or animal feed.

Protective Action Recommendation (PAR): NFO recommended protective actions.

Radioactivity: The property of certain nuclides of spontaneously emitting nuclear particles or gamma or X-ray radiation, or of undergoing spontaneous fission.

Radioactive Materials: Material containing atoms having excess energy. It contains excited, unstable atoms that are disintegrating, emitting radiation.

Radioiodines: A family of radioactive iodines - I-131, I-132, I-133 and I-135 - these are the radioiodines of primary significance for radiological emergencies involving nuclear power plants.

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Radiological Emergency: A situation which may result in the loss of control of a radiation source causing a hazard, or potential hazard, to health or property.

Radiological Monitoring: The detection and measurement of ionizing radiation from radiological releases by means of survey instruments.

Reception Center: A predesignated location outside the Plume Exposure Pathway through which evacuees will pass to receive assistance which may include registration, first aid, radiation monitoring and direction to a Congregate Care Center or medical facility.

Recovery: The emergency phase in which efforts are carried out to return to pre-emergency conditions.

Re-entry: Temporary entry of individuals into a restricted zone under controlled conditions.

Release: Escape of radioactive materials into the environment.

Relocation: A protective action, taken in the pose-emergency phase, through which individuals not evacuated during the emergency phase are asked to vacate a contaminated area to avoid chronic radiation exposure from deposited radioactive material.

Rem: The unit of dose equivalent in body tissue. It is a measure of radiation exposure that indicates the potential impact on human cells.

Response: The emergency phase in which public protective actions are carried out.

Restricted Zone: An area of controlled access from which the population has been evacuated or relocated.

Return: Reoccupation of areas cleared for unrestricted residence or use by previously evacuated or relocated populations.

Roentgen (R): The unit of radiation exposure in air. Roentgens are the units for quantities of X-ray or gamma radiation measured by detection and survey meters. (For planning purposes 1 Roentgen is equivalent to 1 Rem).

Sampling: Collecting specimens of materials (e.g. soil, vegetation, or radioiodine in the air) at field locations.

Shelter-In-Place An action taken to minimize exposure to radiologically contaminated air by going indoors and limiting the intake of outside air.

Site Area Emergency: Indicates that events are in process or have occurred that involve actual or likely major failures in the plant functions needed for protecting the public. Releases are not expected to exceed EPA PAG exposure levels, except near the site boundary.

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Special Facility: Institution or location with a special population.

Special Populations: Groups or individuals that may need assistance when protective actions are implemented.

State Emergency Communications Center (SECC) A location established at the SEMO for the purposes of receiving and promulgating warning information 24 hours a day, 7 days a week, aka Warning Point.

Survey Meter: A portable instrument used to detect and measure ionizing radiation.

Thyroid Blocking Agent: A chemical compound taken to prevent or reduce the absorption by the thyroid of radioiodine. Potassium iodide (KI) is the typical blocking agent used in the United States.

Thyroid Exposure: Exposure of the thyroid gland to radioactive isotopes of iodine which have been either inhaled or ingested.

Optically Stimulated Luminescence Dosimeter: A dosimetry badge used to measure possible exposure to ionizing radiation. (Permanent record - requires processing to read.)

Total Effective Dose Equivalent (TEDE): The sum of the external and internal exposures; i.e. TEDE = EDE + CEDE.

Traffic Control: All activities accomplished for the purpose of facilitating the evacuation of the general public in vehicles along specific routes.

IPEC00201289

APPENDIX B

Abbreviations and Acronyms

ACP - Access Control Points

Ag & Mkts - New York State Department of Agriculture and Markets

AMS - Aerial Measuring System

ARC - American National Red Cross

BERP - Bureau of Environmental Radiation Protection

BWR - Boiling Water Reactor

CEDE - Committed Effective Dose Equivalent

CFR - Code of Federal Regulations

CPM - Counts Per Minute

DEC - New York State Department of Environmental Conservation

DHS- U.S. Department of Homeland Security

DIL – Derived Intervention Level

DMNA - New York State Division of Military and Naval Affairs

DOE - United States Department of Energy

DOH - New York State Department of Health

DOT - New York State Department of Transportation

DPC - Disaster Preparedness Commission

DRL – Derived Response Level

DSP - New York State Division of State Police

EAL - Emergency Action Level

EAS - Emergency Alert System

ECL - Emergency Classification Level

EOC - Emergency Operations Center

EOF - Emergency Operations Facility

EPA - United States Environmental Protection Agency

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EPZ - Emergency Planning Zone

ERPA - Emergency Response Planning Area

ETE - Evacuation Time Estimate

FDA - United States Food and Drug Administration

FEMA - United States Federal Emergency Management Agency

FRMAC - Federal Radiological Monitoring & Assessment Center

FSAR - (Licensee) Final Safety Analysis Report

GE - General Emergency

GIS – Geographic Information System

JIC - Joint Information Center

KI - Potassium Iodide

LLNL - Lawrence Livermore National Laboratory

LOA - Letter of Agreement

LOCA - Loss of Coolant Accident

MOU - Memorandum of Understanding

mR – Milliroentgen

NARAC – National Atmospheric Release Advisory Capability

NRF – National Response Framework

NAWAS - National Warning System

NFO - Nuclear Facility Operator

NRC - United States Nuclear Regulatory Commission

NYSERDA - New York State Energy Research and Development Authority

NUE - Notification of Unusual Event

NYSPIN - New York Statewide Police Information Network

OGS - New York State Office of General Services

OHS- New York State Office Of Homeland Security

IPEC00201292

OSLD- Optically Stimulated Luminescence Dosimeter

PAA- Protective Action Area

PAD – Protective Action Decision

PAG - Protective Action Guide

PAR - Protective Action Recommendation

PIO - Public Information Officer

PMC- Personnel Monitoring Center

PWR - Pressurized Water Reactor

R - Roentgen

RAC - Regional Assistance Committee

RACES - Radio Amateur Communications Emergency Service

RAP - Radiological Assistance Plan

RECS - Radiological Emergency Communications System

REM - Roentgen Equivalent Man

REPP - New York State Radiological Emergency Preparedness Plan

SAE - Site Area Emergency

SEOC- New York State Emergency Operations Center

SECC- State Emergency Communications Center

SEMO - State Emergency Management Office

TEDE - Total Effective Dose Equivalent

TSC - Technical Support Center

TCP - Traffic Control Point

USDA - United States Department of Agriculture

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(NOT USED)

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APPENDIX C

PERSONNEL MONITORING CENTER RESOURCES

New York State Emergency Worker Personnel Monitoring Centers (PMCs) are pre-established and pre-stocked facilities used for the monitoring and decontamination of State emergency workers, vehicles and equipment in the event of an incident at a commercial nuclear power plant.

The DOH Bureau of Environmental Radiation Protection (BERP), in consultation with the SEMO, will place all personnel having responsibility at PMCs on standby at the Alert emergency classification.

In accordance with the operational procedures contained in Procedure G of this plan, and the 2008 PMC Manual (on file at the State EOC), the BERP, in consultation with SEMO will activate the State PMC's at the Site Area Emergency and they will be staffed by appropriate radiologically trained personnel from the Division of State Police, State Department of Transportation, SEMO, Office of Fire Prevention & Control, Department of Health and other DPC agencies as requested. Once activated, PMC personnel will be required to provide the State EOC with information on initial findings of contamination and also periodic periodic updates. It is estimated that between 50 to 100 State Emergency Workers per shift could be within the 10 mile Emergency Planning Zone during a nuclear power plant incident, and be in need of monitoring for radiological contamination.

State PMC's will remain operational until such time that the State BERP, in coordination with SEMO, advises that operations can be terminated.

Predesignated State Emergency Worker PMC's for each nuclear facility site are located at the following installations:

A Ginna Site

A NYS Department of Transportation
Equipment Management Shop
2797 Clover Street
Pittsford
Phone: (585) 586-1252

A NYS Department of Transportation
Wayne Residency
1140 E. Union Street
Newark
(315) 332-4000

B Indian Point Site

B NYS Department of Transportation
Dutchess South-Putnam Residency
Ludingtonville Road
Lake Carmel
(845) 878-6361

B NYS Department of Transportation
Eastview Facility
92 Old Saw Mill River Road
Eastview
Phone: (914) 592-6557

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B NYS Department of Transportation
Monroe Sub-Residency
Routes 208 & 17
Monroe
Phone: (845) 343-4638 (Orange West)
(845) 783-9121 (Monroe)

B NYS Department of Transportation
Townline Sub- Residency
228 Townline Road
W. Nyack, NY
Phone: (845) 634-4661

C Nine Mile/FitzPatrick

C NYS Department of Transportation
Sub-Residency
Route 3 (Approx. 4 mi. west of
Village of Fulton)
Fulton
Phone: (315) 963-3730(Oswego Residency)
(315) 593-2802 (Fulton Sub)

C NYS Department of Transportation
Mapleview Sub-Residency
Route 104 (approx. ½ mi. East of
I-81
Maple View
Phone:(315)963-3730(Oswego Res.)
(315) 625-7243 (Mapleview Sub)

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APPENDIX D

RESOURCES AND FACILITIES TO SUPPORT THE FEDERAL RESPONSE

Designated FRMAC Facilities
TBD

New York State will work with the federal family of agencies to locate facilities suitable for a FRMAC operation working through the Logistics Section Chief at the State EOC. Specifically, the New York State Office of General Services will work with the Federal General Services Administration to locate available space near the affected site. NYSEMO will coordinate with the State Division of Military & Naval Affairs to locate possible Air National Guard airbases which may be usable as entry ports for equipment and supplies to support the federal effort. NYSEMO will also coordinate all logistical arrangements with the affected County.

IPEC00201299

(NOT USED)

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APPENDIX E

NEW YORK STATE

List of Letters of Agreement

1. James A. Fitzpatrick - April 2009
2. Nine Mile Point –April 2009
3. Indian Point Energy Center –November 2008
4. R.E. Ginna-April 2009

Copies of current LOAs are on file at the State Emergency Management Office.

New York State agencies will respond in accordance with procedures contained within the State REP Plan. The authority to respond as identified is found in Article 2B of the New York State Executive Law. No letters of agreement are necessary between NYS and its Counties or between NYS and its Agencies.

IPEC00201302

APPENDIX E

(NOT USED)

IPEC00201303

APPENDIX F

DEPARTMENT OF HEALTH

Division of Health Facility Planning

MS-1 HOSPITAL LISTING

Following are three lists of hospital facilities in upstate New York State submitted in compliance with FEMA Guidance Memorandum MS-l, Medical Services.

The first listing denotes designated primary and backup MS-l hospital facilities (L.1.). Written agreements have been obtained with these hospitals for the treatment of radiologically contaminated injured individuals.

The second listing denotes hospitals within upstate New York State capable of providing support for radiologically contaminated injured individuals (L.3.). These hospitals are licensed under Part 16 of the New York State Sanitary Code (Ionizing Radiation) as having diagnostic Nuclear Medicine Departments and therefore have procedures, trained personnel and equipment to deal with radiological contamination.

The third list denotes additional military and federal hospitals that could also provide assistance for contaminated injured individuals.

Footnotes:

1 Ambulatory capacity is based upon average daily ED visits.

2 Non Ambulatory capacity is based upon certified bed capacity

Key:

* - No Emergency Department

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DESIGNATED PRIMARY AND BACKUP MS-1 HOSPITAL
FACILITIES IN NEW YORK STATE

NINE MILE SITE

PRIMARY

Oswego Hospital
110 W. Sixth Street
0swego, NY 13126
(315) 349-5511

BACKUP

University Hospital
SUNY Health Science Center
750 East Adams Street
Syracuse, NY 13210
(315) 464-5540

GINNA SITE

PRIMARY

Rochester General Hospital
1425 Portland Avenue
Rochester, NY 14621
(585) 338-4000

BACKUP

Newark-Wayne Community
Hospital
111 Driving Park Avenue
Newark, NY 14513
(315) 332-2223

INDIAN POINT SITE
HUDSON RIVER EAST

PRIMARY

Westchester Medical Center
Grasslands Reservation
Valhalla, NY 10595
(914) 493-7000

BACKUP

Putnam Hospital Center
670 Stoneleigh Avenue
Carmel, NY 10512
(845) 279-5711

HUDSON RIVER WEST

PRIMARY

Good Samaritan Hospital of Suffern
255 Lafayette Avenue
Suffern, NY 10901
(845) 368-5000

BACKUP

St. Luke's Cornwall Hospital / Cornwall
19 Laurel Avenue
Cornwall, NY 12518
(845) 534-7711

IPEC00201306

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN

APPENDIX F

HOSPITALS WITHIN NEW YORK STATE
CAPABLE OF PROVIDING MEDICAL SUPPORT FOR
RADIOLOGICALLY CONTAMINATED INJURED INDIVIDUALS

County/Hospital	Phone	Ambulatory Capacity[1]	Non Ambulatory Capacity[2]
Albany County			
Albany Medical Center Hospital 43 New Scotland Avenue Albany 12208	(518) 262-3125	117	631
Albany Memorial Hospital 600 Northern Blvd Albany 12204	(518) 471-3221	81	165
St. Peters Hospital 315 South Manning Boulevard Albany 12208	(518) 454-1550	94	442
Allegany County			
Jones Memorial Hospital 191 North Main Street Wellsville 14895	(585) 593-1100	33	70
Broome County			
United Health Services Hospitals Inc. Binghamton General Hospital Division 10-42 Mitchell Avenue Binghamton 13903	(607) 762-2200	71	220
Our Lady of Lourdes Memorial Hospital Inc. 169 Riverside Drive Binghamton 13905	(607) 798-5111	89	267

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United Health Services Hospitals Inc. Wilson Hospital Division 33-57 Harrison Street Johnson City 13790	(607) 763-6000	74	280
Cattaraugus County			
Olean General Hospital 515 Main Street Olean 14760	(716) 373-2600	26	186
Cayuga County			
Auburn Memorial Hospital 17 Lansing Street Auburn 13021	(315) 255-7011	72	226
Chautauqua County			
Brooks Memorial Hospital 529 Central Avenue Dunkirk 14048	(716) 366-1111	35	99
Woman's Christian Association 207 Foote Avenue Jamestown 14701	(716) 487-0141	83	254
TLC Health Network Lake Shore Health Care Campus 845 Routes 5 & 20 Irving 14081	(716) 951-7000	35	62
Chemung County			
Arnot-Ogden Medical Center 600 Roe Avenue Elmira 14905	(607) 737-42300	60	216
St. Josephs Hospital 555 East Market Street Elmira 14902	(607) 733-6541	81	224

IPEC00201308

Chenango County

Chenango Memorial Hospital 179 North Broad Street Norwich 13815	(607) 335-4111	33	58

Clinton County

Champlain Valley Physicians Hospital Medical Center 75 Beekman Street Plattsburgh 12901	(518) 561-2000	90	341

Columbia County

Columbia Memorial Hospital 71 Prospect Avenue Hudson 12534	(518) 828-7601	56	192

Cortland County

Cortland Memorial Hospital Inc 134 Homer Avenue Cortland 13045	(607) 756-7525	75	181

Delaware County

The Hospital 43 Pearl Street West Sidney 13838	(607) 561-2100	14	45

Dutchess County

Northern Dutchess Hospital 6511 Springbrook Avenue Rhinebeck 12572	(845) 871-3001	33	68
St. Francis Hospital 241 North Road Poughkeepsie 12601	(845) 471-2000	104	300

IPEC00201309

Vassar Brothers Medical Center 45 Reade Place Poughkeepsie 12601	(845) 454-8500	122	315
Erie County			
Bertrand Chaffee Hospital 224 East Main Street Springville 14141	(716) 592-2871	30	49
Buffalo General Hospital 100 High Street Buffalo 14203	(716) 859-5600	77	501
The Childrens Hospital of Buffalo 219 Bryant Street Buffalo 14222	(716)878-7000	134	200
Erie County Medical Center 462 Grider Street Buffalo 14215	(716) 898-3000	126	550
Kenmore Mercy Hospital 2950 Elmwood Avenue Kenmore 14217	(716) 447-6100	80	184
Mercy Hospital of Buffalo 565 Abbott Road Buffalo 14220	(716) 826-7000	136	364
Millard Fillmore Hospital 3 Gates Circle Buffalo 14209	(716) 887-4600	57	189
Millard Fillmore Suburban Hospital 1540 Maple Road Amherst 14221	(716) 568-3600	68	201
Roswell Park Cancer Institute Elm and Carlton Streets Buffalo 14263	(716) 845-2300	*	133

IPEC00201310

Sheehan Memorial Hospital 425 Michigan Avenue Buffalo 14203	(716) 848-2000	34	109
Sisters of Charity Hospital 2157 Main Street Buffalo 14214	(716) 862-1000	89	413
St. Joseph Hospital of Cheektowaga 2605 Harlem Road Cheektowaga 14225	(716) 891-2400	22	208
Franklin County			
Adirondack Medical Center-Saranac Lake Site 2233 State Route 86 Saranac Lake 12983	(518) 891-4141	22	95
Alice Hyde Medical Center 133 Park Street Malone 12953	(518) 483-3000	38	76
Fulton County			
Nathan Littauer Hospital 99 East State Street Gloversville 12078	(518) 725-8621	69	124
Genesee County			
United Memorial Medical Center 127 North Street Batavia 14020	(585) 343-6030	45	70
Herkimer County			
Little Falls Hospital 140 Burwell Street Little Falls 13365	(315) 823-1000	36	100

IPEC00201311

Jefferson County

Samaritan Medical Center 830 Washington Street Watertown 13601	(315) 785-4000	73	287
Carthage Area Hospital, Inc. 1001 West Street Carthage 13619	(315) 493-1000	30	48

Lewis County

Lewis County General Hospital 7785 North State Street Lowville 13367	(315) 376-5200	30	54

Livingston County

Nicholas H. Noyes Memorial Hospital 111 Clara Barton Street Dansville 14437	(585) 335-6001	36	72

Madison County

Community Memorial Hospital, Inc. 150 Broad Street Hamilton 13346	(315) 824-1100	28	40
Oneida Healthcare Center 321 Genesee Street Oneida 13421	(315) 363-6000	43	101

Monroe County

Highland Hospital 1000 South Avenue at Bellevue Drive Rochester 14620	(585) 473-2200	41	261
Lakeside Memorial Hospital 156 West Avenue Brockport 14420	(585) 637-3131	54	61

IPEC00201312

Park Ridge Hospital 1555 Long Pond Road Rochester 14626	(585) 723-7012	65	256
Rochester General Hospital 1425 Portland Avenue Rochester 14621	(585) 338-4000	142	528
Montgomery County			
Amsterdam Memorial Hospital 4988 State Highway Route 30 Amsterdam 12010	(518) 842-3100	38	39
St. Mary's Hospital at Amsterdam 427 Guy Park Avenue Amsterdam 12010	(518) 842-1900	80	143
Nassau County			
North Shore University Hospital at Plainview 888 Old Country Road Plainview 11803	(516) 681-8900	66	276
North Shore University Hospital at Glen Cove 101 St. Andrews Lane Glen Cove 11542	(516) 674-7580	76	265
Franklin Hospital Medical Center 900 Franklin Avenue Valley Stream 11580	(516) 256-6000	93	305
Long Beach Medical Center 455 East Bay Drive Long Beach 11561	(516) 897-1000	47	203
Mercy Medical Center 1000 North Village Avenue Rockville Centre 11570	(516) 255-2780	85	387
New Island Hospital 4295 Hempstead Turnpike Bethpage 11714	(516) 520-2301	73	223
Nassau University Medical Center			

IPEC00201313

2201 Hempstead Turnpike East Meadow 11554	(516) 572-6011	222	631
North Shore University Hospital 300 Community Drive Manhasset 11030	(516) 562-4050	135	731
South Nassau Communities Hospital One Healthy Way Oceanside 11572	(516) 763-3999	99	435
St. Francis Hospital 100 Port Washington Boulevard Roslyn 11576	(516) 562-6903	36	279
North Shore University Hospital at Syosset 221 Jericho Turnpike Syosset 11791	(516) 496-6401	45	116
Winthrop-University Hospital 259 First Street Mineola 11501	(516) 663-2200	100	591
Niagara County			
Kaleida Health - Degraff Hospital 445 Tremont Street North Tonawanda 14120	(716) 694-4500	68	70
Mount St. Mary's Hospital and Health Center 5300 Military Road Lewiston 14092	(716) 297-4800	43	175
Niagara Falls Memorial Medical Center 621 Tenth Street Niagara Falls 14302	(716) 278-4301	95	195
Lockport Memorial Hospital 521 East Avenue Lockport 14094	(716) 514-5700	40	134

IPEC00201314

Inter-Community Memorial Hospital at Newfane, Inc. 2600 Williams Street Newfane 14108	(716) 778-5111	25	71
Oneida County			
Faxton – St. Luke's Healthcare Faxton Division 1676 Sunset Avenue Utica 13502	(315) 738-6200	88	166
Rome Memorial Hospital Inc. 1500 N James Street Rome 13440	(315) 338-7000	59	144
St. Elizabeth Medical Center 2209 Genesee Street Utica 13413	(315) 798-8100	69	201
Faxton – St. Luke's Healthcare St. Luke's Division 1656 Champlain Avenue New Hartford 13413	(315) 798-6001	73	266
Onondaga County			
Community-General Hospital of Greater Syracuse 4900 Broad Road Syracuse 13215	(315) 492-5011	21	306
Crouse Hospital 736 Irving Avenue Syracuse 13210	(315) 470-7111	105	576
St. Josephs Hospital Health Center 301 Prospect Avenue Syracuse 13203	(315) 448-5111	114	431
University Hospital SUNY Health Science Center 750 East Adams Street Syracuse 13210	(315) 464-5540	117	366

IPEC00201315

Ontario County

Clifton Springs Hospital and Clinic 2 Coulter Road Clifton Springs 14432	(315) 462-1311	24	154
F F Thompson Hospital 350 Parrish Street Canandaigua 14424	(716) 396-6527	49	113
Geneva General Hospital 196-198 North Street Geneva 14456	(315) 787-4000	47	132

Orange County

Orange Regional Medical Center – Goshen Campus 4 Harriman Drive Goshen 10924	(845) 294-5441	65	174
St. Luke's Cornwall Hospital / Cornwall 19 Laurel Avenue Cornwall 12518	(845) 534-7711	48	125
Orange Regional Medical Center – Middletown Campus 60 Prospect Avenue Middletown 10940	(845) 343-2424	95	276
Bon Secours Community Hospital 160 East Main Street Port Jervis 12771	(845) 856-5351	48	141
St. Anthony Community Hospital 15-19 Maple Avenue Warwick 10990	(845) 986-2276	34	73
St. Luke's Cornwall Hospital / Newburgh 70 Dubois Street Newburgh 12550	(845) 561-4400	112	242

IPEC00201316

Orleans County

Medina Memorial Hospital 200 Ohio Street Medina 14103	(716) 798-2000	19	71

Oswego County

Oswego Hospital 110 W. Sixth Street Oswego 13126	(315) 349-5511	47	132
A. L. Lee Memorial Hospital 510 South Fourth Street Fulton 13069	(315) 592-2224	45	67

Otsego County

Aurelia Osborn Fox Memorial Hospital One Norton Avenue Oneonta 13820	(607) 432-2000	56	128
Mary Imogene Bassett Hospital One Atwell Road Cooperstown 13326	(607) 547-3456	37	180

Putnam County

Putnam Hospital Center 670 Stoneleigh Avenue Carmel 10512	(845) 279-5711	53	164

Rensselaer County

Samaritan Hospital 2215 Burdett Avenue Troy 12180	(518) 271-3300	79	238
Seton Health System -St. Mary's Campus 1300 Massachusetts Avenue Troy 12180	(518) 268-5000	57	201

IPEC00201317

Rockland County

Good Samaritan Hospital of Suffern 255 Lafayette Avenue Suffern 10901	(845) 368-5000	76	370
Nyack Hospital 160 North Midland Avenue Nyack 10960	(845) 348-2000	86	375

St. Lawrence County

Canton-Potsdam Hospital 50 Leroy Street Potsdam 13676	(315) 265-3300	47	94
Claxton - Hepburn Medical Center 214 King Street Ogdensburg 13669	(315) 393-3600	37	130
E. J. Noble Hospital of Gouverneur 77 West Barney Street Gouverneur 13642	(315) 287-1000	30	47
Massena Memorial Hospital 1 Hospital Drive Massena 13662	(315) 764-1711	38	50

Saratoga County

Saratoga Hospital 211 Church Street Saratoga Springs 12866	(518) 587-3222	83	171

Schenectady County

Bellevue Woman's Hospital 2210 Troy Road Niskayuna 12309	(518) 346-9400	*	55
Ellis Hospital 1101 Nott Street Schenectady 12308	(518) 243-4000	100	368

IPEC00201318

St. Clares Hospital 600 McClellan Street Schenectady 12304	(518) 382-2000	114	200
Steuben County			
Corning Hospital 176 Denison Parkway East Corning 14830	(607) 937-7200	49	99
St. James Mercy Hospital 411 Canisteo Street Hornell 14843	(607) 324-8000	42	157
Suffolk County			
Brookhaven Memorial Hospital Medical Center Inc. 101 Hospital Road Patchogue 11772	(631) 654-7100	112	321
Brunswick Hospital Center Inc 366 Broadway Amityville 11701	(631) 789-72250	74	256
Central Suffolk Hospital 1300 Roanoke Avenue Riverhead 11901	(631) 548-6064	66	154
Eastern Long Island Hospital 201 Manor Place Greenport 11944	(631) 477-1000	19	80
Good Samaritan Hospital Medical Center 1000 Montauk Highway West Islip 11795	(631) 376-3000	126	431
Huntington Hospital Association 270 Park Avenue Huntington 11743	(631) 351-2000	118	398

IPEC00201319

J.T. Mather Memorial Hospital of Port Jefferson 75 North Country Road Port Jefferson 11777	(631) 473-1320	85	248
Southampton Hospital 240 Meeting House Lane Southampton 11968	(631) 726-8555	61	168
Southside Hospital 301 East Main Street Bay Shore 11706	(631) 968-3000	113	371
St. Charles Hospital 200 Belle Terre Road Port Jefferson 11777	(631) 474-6600	52	289
St. Catherine of Siena Hospital 50 Route 25A Smithtown 11787	(631) 862-3000	88	311
University Hospital SUNY Health Science Center Nicolls Road Stony Brook 11794	(631) 444-6000	220	504
Sullivan County			
Catskill Regional Medical Center 68 Harris-Bushville Road Harris 12742	(845) 794-3300	128	174
Tompkins County			
Cayuga Medical Center at Ithaca 101 Dates Drive Ithaca 14850	(607) 274-4011	70	204
Ulster County			
Benedictine Hospital 105 Mary's Avenue Kingston 12401	(845) 338-2500	78	222

IPEC00201320

Ellenville Regional Hospital Route 209 Ellenville 12428	(845) 647-6400	29	51
The Kingston Hospital 396 Broadway Kingston 12401	(845) 331-3131	42	160
Warren County			
Glens Falls Hospital 100 Park Street Glens Falls 12801	(518) 926-1000	115	410
Wayne County			
Newark-Wayne Community Hospital 111 Driving Park Avenue Newark 14513	(315) 332-2223	41	120
Westchester County			
Community Hospital at Dobbs Ferry 128 Ashford Avenue Dobbs Ferry 10522	(914) 693-0700	22	50
Lawrence Hospital Center 55 Palmer Avenue Bronxville 10708	(914) 787-1000	70	291
Mount Vernon Hospital 12 North 7th Avenue Mount Vernon 10550	(914) 664-8000	76	228
Sound Shore Medical Center of Westchester 16 Guion Place New Rochelle 10802	(914) 632-5000	84	321
Northern Westchester Hospital Center 400 East Main Street Mount Kisco 10549	(914) 666-1303	60	233

IPEC00201321

Hudson Valley Hospital Center 1980 Crompond Road Cortlandt Manor 10567	(914) 737-9000	56	128
Phelps Memorial Hospital Center 701 North Broadway Sleepy Hollow 10591	(914) 366-3000	67	235
St. John's Riverside Hospital – St. John's Division 967 North Broadway Yonkers 10701	(914) 964-4200	70	262
St. Josephs Medical Center 127 South Broadway Yonkers 10701	(914) 378-7000	71	194
New York United Hospital Medical Center 406 Boston Post Road Port Chester 10573	(914) 934-3100	60	224
Westchester Medical Center Grasslands Reservation Valhalla 10595	(914) 493-7000	71	635
White Plains Hospital Center 41 East Post Road White Plains 10601	(914) 681-0600	70	313
Wyoming County			
Wyoming County Community Hospital 400 North Main Street Warsaw 14569	(585) 786-2233	28	102

APPENDIX F

Military/Federal Facilities County/Hospital	Phone	Ambulatory Capacity	Non- Ambulatory Capacity
Albany VA Medical Center: Samuel Stratton 113 Holland Avenue Albany, NY 1220	(518) 626-5000		156
Bath VA Medical Center 76 Veterans Avenue Bath, NY 14810	(607) 664-4000		440
Canandaigua VA Medical Center 400 Fort Hill Avenue Canandaigua, NY 14424	(585) 394-2000		256
Syracuse VA Medical Center 800 Irving Avenue Syracuse, NY 13210	(315) 425-4400 (800) 792-4334		235
VA Western New York Healthcare System at Batavia 222 Richmond Avenue Batavia, NY 14020	(585) 297-1000 (888) 798-2302		112
VA Western New York Healthcare System at Buffalo 3495 Bailey Avenue Buffalo, NY 14215	(716) 834-9200 (800) 532-8387	-	199

IPEC00201323

APPENDIX G

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
APPENDIX G

NEW YORK STATE RESOURCES

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(NOT USED)

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
APPENDIX G

DEPARTMENT OF AGRICULTURE AND MARKETS
DAIRY FARM AND AGRICULTURE RADIOLOGICAL CONTROL
RESOURCES LIST

EDP listings of many types of food establishments which generally indicate names and addresses and in some cases inspection information are on file in Agriculture and Markets and/or in the Bureau of Environmental Radiation Protection, Department of Health. The types of establishments for which we have computer files are as follows:

Dairy Farms	Beef Farms
Sheep Farms	Egg Producers
Stores	Bakeries (wholesale)
Food Manufacturers	Food Warehouses
Beverage Plants	Packers
Food Processing Plants	Milk Processing Plants
Nursery Dealers	Nursery Greenhouses
Produce Farms	

The computer listings of facilities and procedures are available at the Departments of Agriculture and Markets and at the State EOC, Albany.

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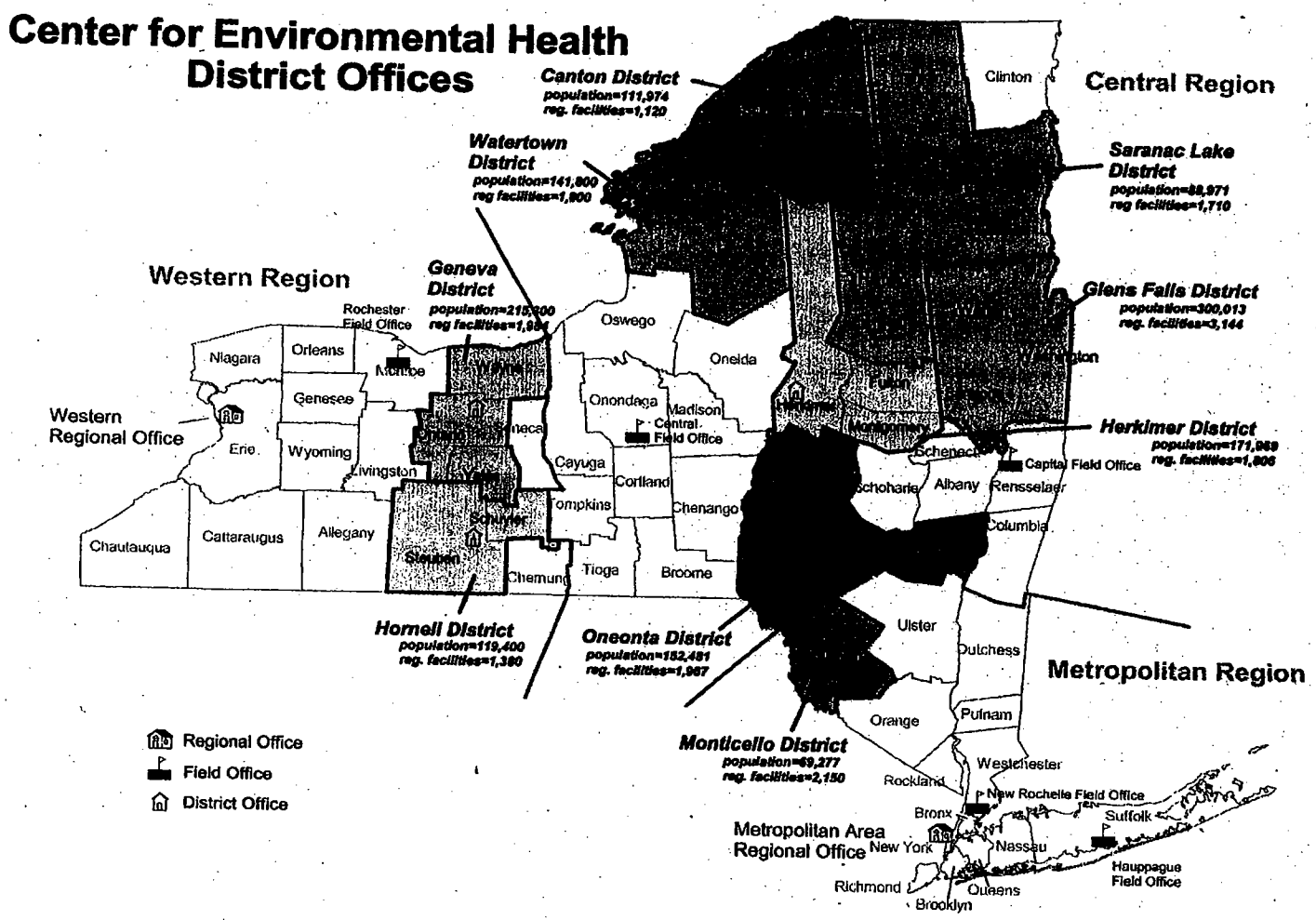

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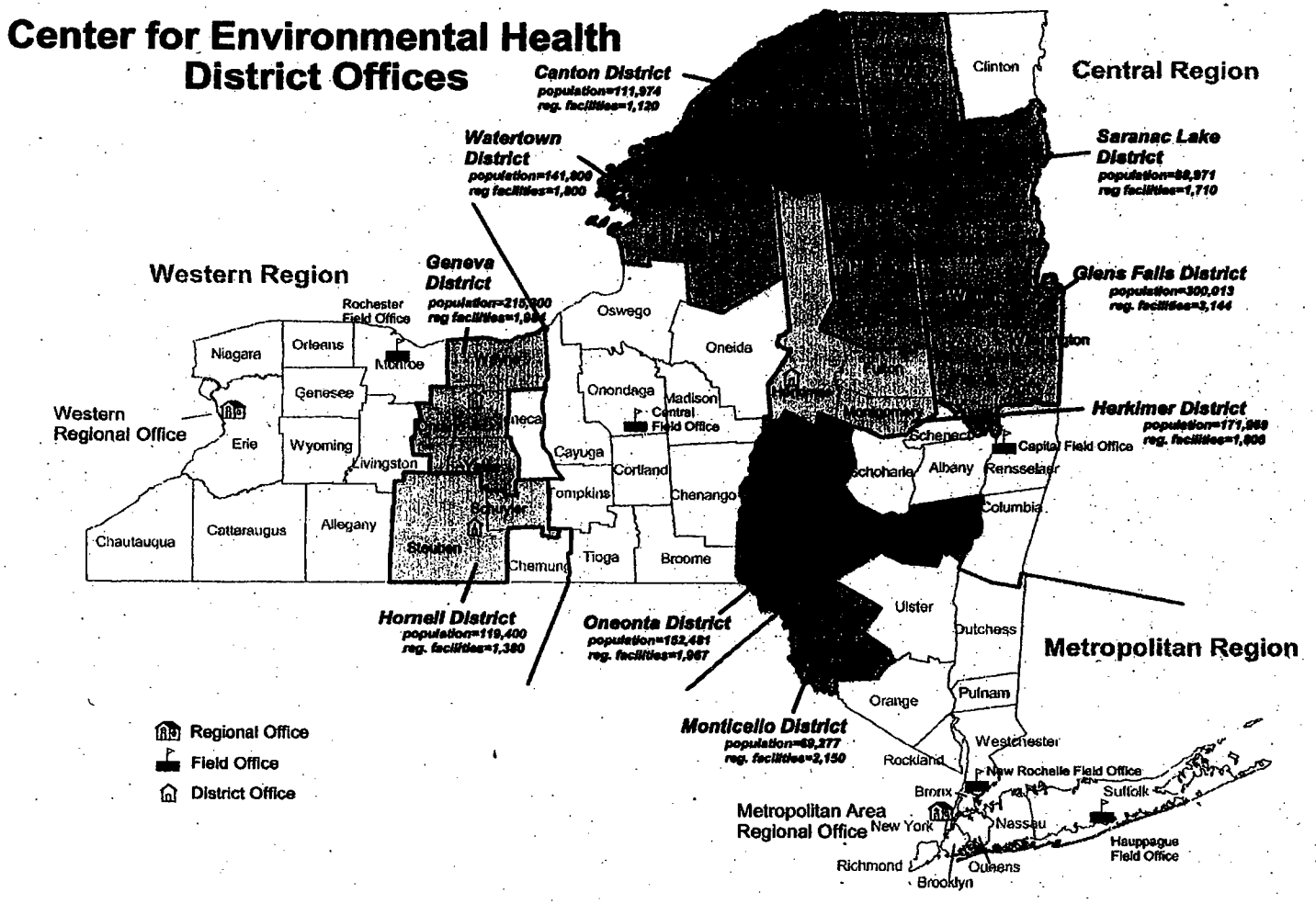

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NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
APPENDIX G

COUNTY HEALTH DEPARTMENTS

County/Region	Comm. &/Or Public Health Dir.	Address	Env. Health Responsibility	Env. Health Telephone	Env. Health Fax	Env. Health Email
ALBANY	James B. Crucetti, MD, MPH	175 Green St., PO Box 678, Albany, 12201-0678	Stephen Lukowski, P.E.	(518) 447-4620	(518) 447-4501	slukowski@albanycounty.com
ALLEGANY	Gary Ogden, MD	Co. Office Building, 7 Court St., Belmont 14813-1076	Thomas E. Hull, M.S.	(585) 268-9247	(585) 268-9712	hullte@alleganyco.com
BROOME	Claudia Edwards, MS, CM	225 Front St., Binghamton 13905	Robert Denz, P.E.	(607) 778-2887	(607) 778-3912	rdenz@co.broome.ny.us
CATTARAUGUS	Barbara J. Hastings, RN, BSN,MSN	1 Leo Moss Drive, Suite 4010, Olean, 14760-1154	Eric W. Wohlers, P.E.	(716) 373-8050 ext. 3437	(716) 373-0942	ericwo@olean.cattco.org
CAYUGA	Elaine Daly, RN, BSN	160 Genesee St.., PO Box 219, Auburn 13021	Eileen O'Connor, P.E.	(315) /253-1405	(315) 253-1478	eileen.o'connor@dfa.state.ny.us
CHAUTAUQUA	Edwin Miner	Hall R. Clothier Bldg., 7 N. Erie St., Mayville 14757	Steven M. Johnson, P.E.	(716) 753-4481	(716) 753-4344	stevej@health.co.chautaugua.ny.us
CHEMUNG	Robert E. Page	103 Washington St., PO Box 588 Elmira 14902-0588	Thomas G. Kump, P.E.	(607) 737-2019	(607) 737-0437	tkump@co.chemung.ny.us
CHENANGO**	Marcas W Flindt	County Office Bldg., 5 Court Street, Norwich 13815	Glenn Kaiser	(607) 337-1673	(607) 337-1720	glennk@co.chenango.ny.us
CLINTON	Paula Calkins LaCombe, RN	133 Margaret St. Plattsburgh 12901	John Kanoza	(518) 565-4870	(518) 565-4843	kanozaj@co.clinton.ny.us
COLUMBIA	Nancy A. Winch, RN, MS	71 North Third Street, Hudson 12534	Dale E. Rowe	(518) 828-3358	(518) 828-0124	drowe@govt.co.columbia.ny.us
CORTLAND	Jacquelyn H. Gallor	60 Central Ave., Cortland Co. Off. Bldg., Cortland 13045-2746	Audrey V. Lewis, R.S.	(607) 753-5035	(607) 758-5578	alewis@cortland-co.org
DUTCHESS	Michael C. Caldwell, MD, MPH	387 Main Street, Poughkeepsie 12601-3316	W. Stephen Capowski	(845) 486-3404	(845) 486-3545	scapowski@co.dutchess.ny.us
ERIE	Anthony Billittier,IV, MD, FACEP	Rath Building, 95 Franklin Street , Buffalo 14202	John T. Kociela, P.E.	(716) 858-7677	(716) 858-2190	kocielaj@erie.gov
GENESEE	Christopher M. Szwagiel, DPH,CHE	3837 W. Main Street Road, Batavia 14020-9406	Randy Garney, Sr. PHS	(585) 344-8506 ext. 5462	(585) 344-4713	rgarney@co.genesee.ny.us
LIVINGSTON	Joan H. Ellison	2 County Campus, Mt. Morris 14510-1691	James Mazurowski	(585) 243-7280	(585) 243-7287	jmazurowski@co.livingston.ny.us
MADISON**	David Dorrance	PO Box 605, Wampsville 13163	Geoffrey Snyder	(315) 366-2526	(315) 366-2207	geoffrey.snyder@co.madison.ny.us
MONROE	Andrew Doniger, MD, MPH	PO Box 92832, 111 Westfall Road Rochester 14692	Richard Elliot, P.E.	(585) 274-6067	(585) 274-6098	relliott@monroecounty.gov

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NASSAU	David M. Ackman, MD, MPH	240 Old Country Road, Mineola 11501-4250	Susan King, R.S.	(516) 571-3691	(516) 571-1475	sking@health.co.nassau.ny.us
NIAGARA	Paulette M. Kline, R.N., M.Ed, MPH	5467 Upper Mountain Road, Suite 100, Lockport 14094-1899	James J. Devald, P.E.	(716) 439-7453	(716) 439-7427	james.devald@niagaracounty.com
ONEIDA	Eric Faisst, MPH,REHS	800 Park Avenue, Utica 13502	Nicholas DeRosa	(315) 798-5064	(315) 798-6486	nderosa@co.oneida.ny.us
ONONDAGA	Lloyd F. Novick, MD, MPH	PO Box 15190, 421 Montgomery Street, Syracuse 13215-0190	Gary Sauda , P.E.	(315) 435-6623	(315) 435-6606	garysauda@ongov.net
ORANGE	Jean M. Hudson, MD, MPH	124 Main Street, Goshen 10924-2199	Matthias Schleifer, P.E., Asst. Comm.	(845) 291-2331	(845) 291-4078	mschleifer@co.orange.ny.us
ORLEANS	Andrew Lucyszyn	14012 Route 31 West, Albion 14411	Andrew Lucyszyn Wayne Dickinson, PHS	(585) 589-3278	(585) 589-6647	alucyszyn@ orleansny.com wdickinson@oleansny.com
OSWEGO	Kathleen A. Smith	70 Bunner Street, PO Box 3080, Oswego 13126	Natalie Jones, Assoc. PHS	(315) 349-3540	(315) 349-3228	natalie@oswegocounty.com
PUTNAM	Loretta Molinari***	1 Geneva Road, Brewster 10509	Loretta Molinari***	(845) 278-6130 ext. 2151	(845) 278-7921	loretta.molinari@putnamcountyny.com
RENSSELAER	Denise M. Ayers, MS, FNP***	Health Building, 1600 Seventh Ave., Troy 12180	Roy Champagne	(518) 270-2664	(518) 270-2638	rchampagne@rensco.com
ROCKLAND	Joan Facelle, MD	Sanatorium Road, Building D, Pomona 10970-9990	Thomas M. Micelli, P.E.	(845) 364-2609	(845) 364-2628	micellit@co.rockland.ny.us
SCHENECTADY**	Russell A. Fricke, MD, Ph.D.	107 Nott Terrace - Suite 306, Schenectady 12308-3170	G. Jack Parisi	(518) 386-2818	(518) 386-282	gjack.parisi@countyofschenectady.com
SCHOHARIE	Carl J. Stefanik	Env. Health, 276 Main Street, Schoharie 12157-0667	Janice Herrick	(518) 295-8382	(518) 295-8786	janhe@co.schoharie.ny.us
SENECA	Vickie Swinehart***	31 Thurber Drive, Waterloo 13165-1660	Vickie Swinehart***	(315) 539-1925	(315) 539-9493	vswinehart@co.seneca.ny.us
SUFFOLK	Brian Harper, MD, MPH	220 Rabro Drive East, Hauppauge, 11788-4290	Vito Minei, P.E.,, Dir. Env. Quality	(631) 853-3082	(631) 853-3927	vito.minei@co.suffolk.ny.gov
			David Graham, MD,MPH Dir. of Public Health	(631) 853-3058		
TIOGA	Johannes A. Peeters	231 Main Street, Owego 13827-1697	Johannes Peeters	(607) 687-8566	(607) 687-8636	peetersh@co.tioga.ny.us
TOMPKINS	Alice Cole, RN, MSE	401 Harris B Dates Drive, Ithaca 14850-1386	John Andersson, P.E.	(607) 274-6688	(607) 274-6695	jandersson@tompkins-co.org
ULSTER	Dean N. Palen, PE, MBA	300 Flatbush Avenue, Kingston 12401	Allan M. Dumas, III, P.E.	(845) 340-3010	(845) 340-3045	adum@co.ulster.ny.us
WESTCHESTER	Joshua Lipsman, MD, MPH	145 Huguenot Street, 8th Floor, New Rochelle 10801	Frank Guido, Asst. Comm. for PH	(914) 813-5127	(914) 813-5160	fag1@westchestergov.com
WYOMING	Gregory Collins, DO***	338 North Main Street, Warsaw 14569	Tom Guerin, PE	(585) 786-8894	(585) 786-3537	tguerin@wyomingco.net

IPEC00201332

NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE						
NEW YORK (M)	Thomas R. Frieden, MD, MPH	125 Worth Street, New York 10013	Alan Goldberg, Asst Comm for Reg. & Env. Hlth. Svcs)	(212) 788-5261 (In NYC 311)	(212) 964-0472	agoldber@health.nyc.gov
			Gregory Carmichael, PhD. Deputy Commissioner.	(212) 788-4643	(212) 676-1517	gcarmic@health.nyc.gov
		2 Lafayette Street, 11th Fl., New York 10007	Jim Luke	(212) 676-1520		jluke@health.nyc.gov

** Use Full Address for Mailing *** Acting Public Health Director **** Acting Commissioner

REGIONAL OFFICES

REGION	STAFF	ADDRESS	TELEPHONE
WESTERN REGION (W)	Salvatore Page - Associate Commissioner (SWP01)	584 Delaware Avenue, Buffalo 14202	(716) 847-4505 Fax # (716) 847-4661
-- Rochester Field Office	Michael Linse - Asst. Regional Director(retiring 8/31/04) (Western Region) (MGL01) Diane Fox-Knoll (DLK02), Administrative Assistant	Triangle Building, 335 East Main Street, Rochester 14604-2127	(585) 423-8041 Roc. (Secx8067) Fax # (585) 423-8099 (516) 847-4398 Buffalo Office (585) 423-8042
	Ralph VanHouten- Reg. Env. Health Program Dir. (RRV01) Veleta Muhs, secretary (vgm01)	Triangle Building, 335 East Main Street, Rochester 14604-2127	(585) 423-8072 Cell (585) 233-8108 (585) 423-8067 (Fax (585) 423-8128)
	Field Coordinators		
	Robert Snyder – Regional Sanitarian (RWS06)	Triangle Building, 335 East Main Street, Rochester 14604-2127	(585) 423-8066
	Ralph Harstad – Sr. Sanitary Engineer (REH03)	Triangle Building, 335 East Main Street, Rochester 14604-2127	(585) 423-8070
	Kevin Watz, Assistant Sanitary Engineer (KMW04)	584 Delaware Avenue, Buffalo, 14202	(716) 847-4500
	April Steenburgh, Public Health Specialist I (ALS03)	584 Delaware Avenue, Buffalo, 14202	(716) 847-4558 (Fax (716) 847-4333)
	Jeff Booth – Principal Sanitarian (JWB03)	584 Delaware Avenue, Buffalo, 14202	(716) 847-4500 (Fax (716) 847-4333)
METROPOLITAN NEW YORK REGIONAL OFFICE (M)	Celeste M. Johnson, Director (CMJ01) Geraldine Neal, Secretary (GXN02) Annette Larke-Griffith, Secretary – for NYC Conf Rooms	5 Penn Plaza, Rm. 401, New York 10001	(212) 268-7185(Fax (212) 268-7212)

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	Patricia Jones, Deputy Director	5 Penn Plaza, Rm. 401, New York 10001	(212) 268-7055
	Brian Devine, Reg. Env. Health Program Director (BDD02) Ellen Salovich (ERS04), Secretary	50 North Street, Suite 2, Monticello, NY12701	(845) 794-2045 (Fax (845) 794-3165) Cell 917/841-8306
	Field Coordinators		
	Judyth Niconienko – Prin. Sanitarian (JAN07)	50 North Street, Suite 2, Monticello, NY12701	(845) 794-2045 (Fax (845) 794-3165)
	Anna Stamm - Sr. Sanitary Engineer (AXS06)	5 Penn Plaza, New York 10001	(212) 268-7041 (Fax (212) 268-7218)
	George Philip – Sr. Sanitary Engineer (GXP04)	320 Carlton Ave., #5000, Central Islip, 11722	(631) 851-3082 (Fax (631) 851-4319)
CENTRAL NEW YORK REGION OFFICE (CNY)	Ronald Heerkens – Associate Regional Director (RHH01) Director of Environmental Health Maureen Barr, Secretary (MMB10)	217 S. Salina Street, Syracuse 13202	(315) 477-8484 (Fax (315) 477-8588) Cell (315) 380-1639 (315) 477-8100 (main number)
	Field Coordinators		
	Thomas Okoniewski - Reg. Sanitarian (TEO01)	217 S. Salina Street, Syracuse 13202	(315) 477-8152
	Maggie Deitrich – Reg. Sanitarian (MAD07)	217 S. Salina Street, Syracuse 13202	(315) 477-8144
	John Strepelis - Sr. Sanitary Engineer (JXS06)	217 S. Salina Street, Syracuse 13202	(315) 477-8150 (Fax (315) 477-8581)
	Erin Spier – Assistant Sanitary Engineer (EMS14)	217 S. Salina Street, Syracuse 13202	(315) 477-8149 (Fax (315) 477-8581)
	Gregor Smith – Jr. Engineer (GKS01)	217 S. Salina Street, Syracuse 13202	(315) 477-8515 (Fax (315) 477-8581)
CAPITAL DISTRICT REGION OFFICE (CD)	Geraldine Bunn, Associate Director (GAB02)	Frear Building, One Fulton Street, Troy12180-3281	(518) 408-5277 (Fax (518) 408-5280)
	J. Patrick Trapp, Reg. Env. Health Program Dir. (JPT01) Lynn Schriner (Secretary) (LAS17)	Frear Building, One Fulton Street, Troy12180-3281	(518) 408-5423 Cell (518) 796-9938 (518) 408-5423 (main number) (Fax 408-5309)
	Field Coordinators		
	Mara Holcomb – Principal Sanitarian (MEH12)	Frear Building, One Fulton Street, Troy12180-3281	(518) 408-5423
	Tim Vickerson - Sr. Sanitary Engineer (TEV01)	Frear Building, One Fulton Street, Troy12180-3281	(518) 408-5423
	Kristen Sayers – Pub. Health Spec. 3 (Env) (KMS15)	41St. Bernard St., Saranac Lake 12983-1839	(518) 891-1800 (Fax 891-5895) (518) 891-7173 (Kristen VoiceMail)

IPEC00201334

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
APPENDIX G

DISTRICT OFFICES L:\dehp\County Telephone List.doc

DISTRICT	COUNTIES SERVED	ADDRESS	DIRECTOR	TELEPHONE	FAX #
CANTON (N) (B0642)	St. Lawrence	58 Gouverneur Street, Canton 13617-3200	Victor Pisani (vep01@health.state.ny.us) Ann Basmajian (Secretary)	(315) 386-1040	(315) 386-1043
GENEVA (W) (B0637)	Ontario, Wayne, Yates	624 Pre-Emption Road, Geneva 14456-1334	Dwight Burden (dlb09@health.state.ny.us) Janice Bastian (Secretary)	(315) 789-3030	(315) 781-0831
GLENS FALLS (N) (B0646)	Saratoga, Warren, Washington	77 Mohican Street, Glens Falls 12801-4429	Anita Gabalski (amg02@health.state.ny.us) Kay Bromley (Secretary)	(518) 793-3893	(518) 793-0427
HERKIMER (N) (B0640)	Fulton, Herkimer, Montgomery	5665 State Route 5, Herkimer 13350-9721	Donald Van Patten (ddv01@health.state.ny.us) Dawn Hill (Secretary)	(315) 866-6879	(315) 866-8192
HORNELL (W) (B0638)	Schuyler, Steuben	107 Broadway, Room 105, Hornell 14843-0430	Tomas Klaseus (tgk02@health.state.ny.us) Denise Lang (Secretary)	(607) 324-8371	(607) 324-5121
MONTICELLO (M) (B0649)	Sullivan	50 North Street, Suite 2, Monticello 12701-1711	Mark Knudsen (mdk02@health.state.ny.us) Virginia Connell (Secretary)	(845) 794-2045	(845) 794-3165
ONEONTA (N) (B0644)	Delaware, Greene, Otsego	28 Hill Street, Suite 201, Oneonta 13820-9804	Robert Pierce (rap02@health.state.ny.us) Carla Huntington (Secretary)	(607)432-3911	(607) 432-0089
SARANAC LAKE (N) (B0647)	Essex, Franklin, Hamilton	41 St. Bernard Street., Saranac Lake 12983-1839	William Amberman (wra01@health.state.ny.us) Vivian Manny (Secretary)	(518) 891-1800	(518) 891-5895
WATERTOWN (N) (B0641	Jefferson, Lewis	Dulles State Office Building, 317 Washington Street, 13601-3741	Thomas Boxberger (teb03@health.state.ny.us) Lisa Hartle (Secretary)	(315) 785-2277	(315) 785-2600

DOH/CEH/Bureau of Environmental Radiation Protection Equipment

Emergency Kits:

Central Office – 3, Syracuse – 1, Buffalo – 1, Rochester – 1, MARO – partial

Ludlum Model 14C GM meter with pancake probe or equivalent

Inovision 451P pressurized ion chamber meter OR

Bicron Micro Rem survey meter or Ludlum Model 19 or Model 12S MicroR meter

Cesium-137 check source

Direct Reading Dosimeters and charging unit

ADAC portable air sampler and supplies

Wipe/Swipe sampling supplies

Water sampling supplies

Soil sampling equipment and supplies

Plastic bags

Basic tools including flashlight, pliers, screw drivers, tape measure, etc.

Tyvek coveralls, disposable gloves, shoe covers and dust masks

Potassium Iodide tablets (KI)

RAD warning signs and tape, general purpose tape and light-weight rope

Commercial decon solution and related supplies

NYS Radiological Rapid Response Card

NYS RAD-320 contact list and notification procedure

Nuclear Power Plant Notification Procedures

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Also, Exploranium GR-135M Identifier (hand-held gamma spectrometer) – in a dedicated hard case.
Currently there are 2 in the Central Office and 1 in each regional office for a total of 6 units.

DOH/CEH/Bureau of Environmental Radiation Protection Equipment (continued)

General Purpose Equipment:

12 - Victoreen ionization chamber meters, Model 470-A

12 - Inovision 451P pressurized ion chamber meters

1- Ludlum Model 17 ionization chamber meter

GM Survey Meters
- 27- Ludlum Model 14C with Model 44-9 pancake probes
- 6 - Ludlum Model 3 with Model 44-9 pancake probes or end-window probes

5 - Ludlum Model 19 MicroR meters

6 - Ludlum Model 12S MicroR meters

4 - Bicron MicroRem Meters

7 - Eberline ESP-1 Smart Portable meters with associated probes for alpha, beta and/or beta-gamma

1 - Eberline ASP-1 Analog Smart Portable meters with associated probes

6 - Ludlum Model 2221 scaler rate meters

2 - Ludlum Model 2224-1 single channel analyzer/scaler rate meters

1 - Eberline ASP-1 Analog Smart Portable with Eberline NRD neutron ball

2 - Thermoelectron Model FH 40G-L dose rate meters with Model FHT 752 SH neutron probes

2 - Bicron FIDLER Model G5LB meters

1 - Bicron FIDLER Model G5-BER meter

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Various probes: AC-3-7 alpha scintillation probe, HP-177C thick-window beta/gamma probe, HP-190 thin-window beta/gamma probe, PG-2 low-energy gamma scintillation probe, and SPA-3 high-sensitivity gamma scintillation probe

Equipment is stored and maintained in the Central Office (Troy) and DOH Regional Offices in Buffalo, Rochester, Syracuse and the Metro Regional Office. All equipment is inventoried and calibrated on an annual basis. The items and instruments in the emergency kits are inventoried and operationally checked according to the Threat Level issued by the US Dept of Homeland Security (GREEN – routine, annual inventory and check, YELLOW – monthly check, ORANGE – immediate function check on all instruments in the kits, and RED – immediate function check and set-up of the Exploranium GR-135M.

DOH/CEH/Bureau of Environmental Radiation Protection Personnel

Bureau Director

Assistant Bureau Director

35 - Radiological Health Specialists

1 - Radiological Technology Specialist

9- Clerical/Secretarial staff

Other available NYS Agency Personnel

As needed, approximately 24 additional radiation professionals are available.

NYS Dept of Environmental Conservation

Environmental Radiation Specialists

NYC Dept of Health and Mental Hygiene

Radiological Specialists

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DOH/Wadsworth Center/ Inorganic and Nuclear Chemistry Laboratory Equipment

(6) Intrinsic Germanium gamma spectrometry systems

(2) Tennelec Series 5 alpha/beta gas-flow proportional counters

(2) Packard Tri-Carb Liquid Scintillation Counters, Model 2900TR & Model 3170TR/SL

(2) Silicon surface barrier alpha spectrometry systems

(1) 2"x 2" Sodium iodide detector, dedicated for iodine bioassay/thyroid measurements

DOH/Wadsworth Center/ Inorganic and Nuclear Chemistry Laboratory Personnel

Laboratory Director

Nuclear Chemistry Staff

5-Research Scientists

5-Laboratory Technicians

1-Data Processing Technician

2-Clerical/Secretarial staff

Inorganic Chemistry Staff

16-Research Scientists, Analytical Chemists & Lab Technicians

DOH/Wadsworth Center/ Radiation Safety Office

Radiation Safety Officer

Radiation Safety Technician

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DEPARTMENT OF HEALTH
CENTER FOR ENVIRONMENTAL HEALTH
BUREAU OF WATER SUPPLY PROTECTION
547 RIVER STREET (FLANIGAN SQUARE)
TROY, NY 12180

The following information can be made available upon short notice through Department of Health resources. Information resources include the GIS based Critical Infrastructure database; the Safe Drinking Water Information System (SDWIS) database; and paper based files and maps. These information resources can be rapidly accessed from the Health Operations Center in Menands; from the Bureau of Water Supply Protection in Troy; from Regional offices in New York City, Troy, Syracuse, and Buffalo/Rochester. The nine State District offices and the 36 full service County Health Department offices have access to this information for systems found within their jurisdiction.

The Critical Infrastructure GIS database is also available remotely via secure internet portals for authorized Bureau and Regional staff with emergency and public health response roles. Remote access to SDWIS via secure internet portal is expected to be available in late 2005.

Information that is available for Community Water Systems includes:

- Water System Name
- Water System Location (mailing addresses)
- Contact Information for:
  - Emergencies (name, phone, some e-mail addresses)
  - Owners (name, address, phone, some e-mail addresses)
  - Responsible Operator in Charge (name, address, phone, some e-mail)
- Service Area (by geo-political division, or by area coverage using GIS)
- Population Served
- Source Type
- Source Location(s) (by lat/long and by GIS)
- Emergency Water Source(s)
- Treatment Processes
- Water Delivery Capacity

Most of this information is also available for non-community water systems.

Emergency Response Plans, including vulnerability assessments, have been completed by all community water systems that serve more than 3,300 people. Copies of the Emergency Response Plans for these systems are available at each water system, at the District or County office having jurisdiction, and at the Bureau of Water Supply Protection in Troy. For security reasons, the vulnerability assessment component of these plans are available only at the water

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system and in locked files in the Bureau of Water Supply Protection in Troy.

Many smaller system have also completed Emergency Plans, these are available at the water system and at District and County offices.

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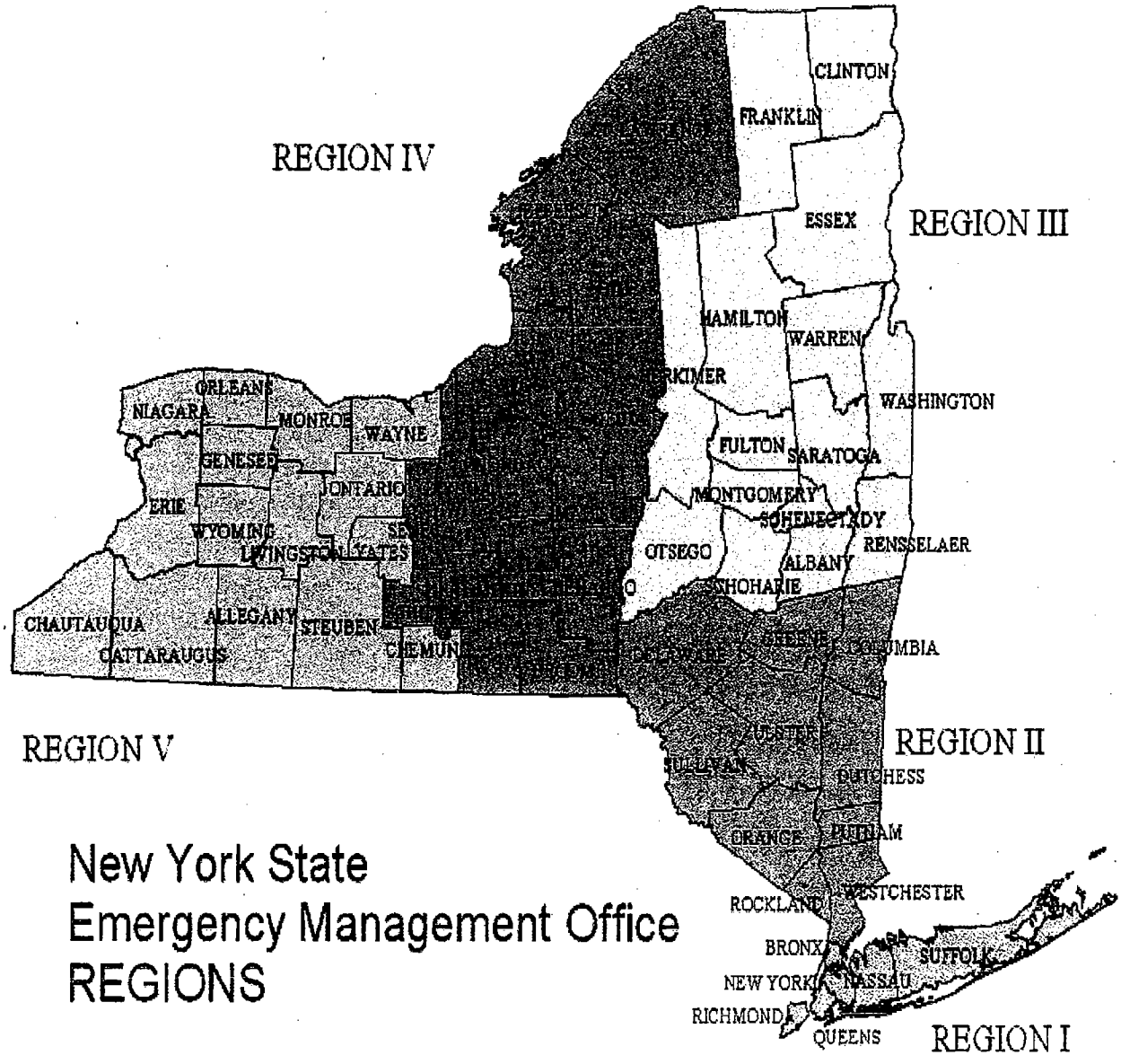

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STATE HEADQUARTERS

NY State Emergency Management Office
1220 Washington Avenue
Bldg#22, Ste 101
Albany, NY 12226-2251
518-292-2200

Regional Facilities

Region I
Suffolk State Office Building
250 Veteran's Memorial Highway
Room 4A7
Hauppauge, NY 11788-5506
518-292-2411

Region 2
171 Cheney Drive
Poughkeepsie, NY 12601-1011
518-292-2421

Region 3
5 Fox Farm Road
Queensbury, NY 12804-1107
518-292-2430

Region 4
10 Adler Dr. Suite 103
East Syracuse, NY 13057
518-292-2441

Region 5
1144 East Union Street
Newark, NY 14513-9802
518-292-2451

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EQUIPMENT SUMMARY
SEMO - RADIOLOGICAL INSTRUMENT FACILITY
STATEWIDE INVENTORY

SURVEY METERS AND EQUIPMENT		SEMO	AGENCIES	TOTAL
CDV - 700	Geiger Survey Meterr	1392	684	2076
CDV – 700M	Geiger Survey Meter	10		10
CDV - 718	Survey Meterr	9	1	10
CDV - 715	Ionization, Survey Meter	531	0	531
Ludlum 3-98	Survey Meter & 44-3/44-10 probe	4		4
Bicron	Micro R meter	3		3
Ludlum 19	Micro R Meter	3		3
Ludlum 14-C	Survey Meterr	22	32	54
Eberline E-140N	Survey Meter with HP-210 probes	3		3
Eberline E-140	Survey Meter HP-210L probe	1		1
Eberline RO-2A	Ion Chamber Survey Meter	6		6
Eberline RO-20	Ion Chamber Survey Meter	1		1
Radeco 809C	Air Pump with sampling head	3		3
TTPM 903B	Portal Monitor	1		1
DOSIMETRY AND EQUIPMENT				
CDV - 138	0-200mr Dosimeter	2176	28	2204
CDV - 730	0-20R Dosimeter	599	661	1260
CDV - 742	0-200R Dosimeter	13400	1300	14700
FEMA-730	0-20R Dosimeter	70	0	70
DC 611	Dosimeter Corp. 0-5R Dosimeter	293	200	493
AT-725	Arrow Tech 0-5R Dosimeter	400	1300	1700
CDV - 750	Dosimeter Charger	650	325	975
CDV- 750-6	Handheld Piezoelectric Charger	123	125	248
OSL	Optically stimulated luminescence Permanent record badges	164	1136	1300

Note:
1. Radiological equipment is distributed to those State agencies having radiological responsibilities under this plan (e.g. State Police, DOT, SEMO). Additionally, equipment is distributed to the nine State Personnel Monitoring Centers throughout the State and supplied to the Ingestion Pathway Kits. All the above equipment is maintained and serviced through the SEMO Radiological Instrument Facility and private contractors.

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2. Instrument maintenance and calibration is performed according to the SEMO manual RDAM 6-1 and manufacturers recommendation.

PERSONNEL MONITORING CENTERS:

Equipment Description		Quantity
Ludlum 14C	Survey meters and model 44-9 probe	4
CDV-700	Survey meter	6
DC-611	0-5R Dosimeter	25
CDV-742	0-100R Dosimeter	25
CDV-750-6	Piezoelectric dosimeter charger	2
CDV-750	Dosimeter charger with battery	3
CDV-705	Speaker for CDV-700	6
OSL	Permanent record badges-gamma , beta	25
KI	Potassium Iodide, 130mg per tablet, 14 tablets per packages	25
Batteries	1.5volts, size D	72

INGESTION PATHWAY KITS:

Equipment Description		Quantity
Ludlum 14C	Survey meter and model 44-9 probe	2
Bicron Meter	micro Rem meter or Ludlum Modes 19 survey meter	1
Eberline E 140N	Survey Meter with HP210 Probe	1
Eberline RO-2A	Ion Chamber Survey Meter	1
Radeco 809C	Air Pump with sampling head	1
Silver Zeolite	Sampling Cartridges	0
Charcoal	Sampling Cartridges	8
TLD	Thermoluminescent Dosimeter-gamma, beta	1
DC 611	0-5R Dosimeter	
1		
FEMA 730	0-20R Dosimeter	1
CDV-742	0-200R Dosimeter	1
CDV-750-6	Pizeoelectric Charger	1
CDV-750	Dosimeter Charger	1
Cs-137	Check Source, 5 uCi	1
		1

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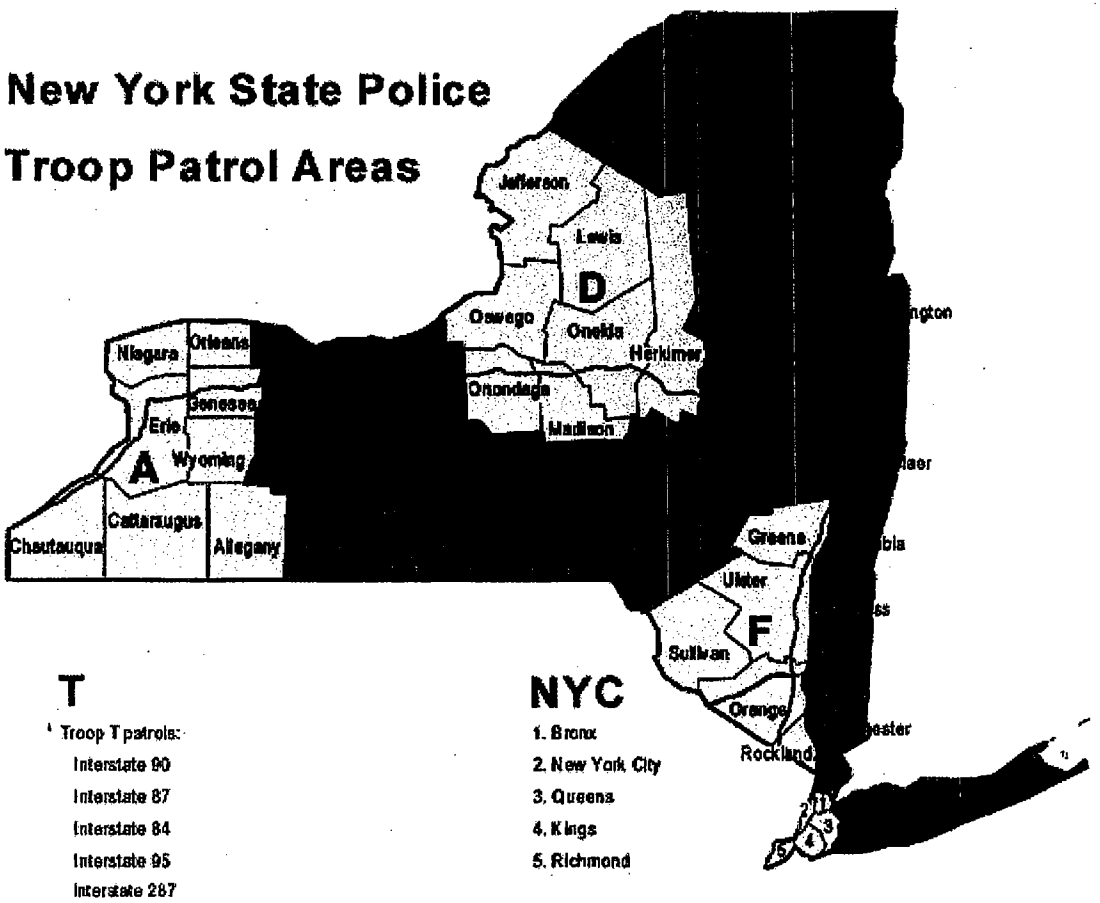
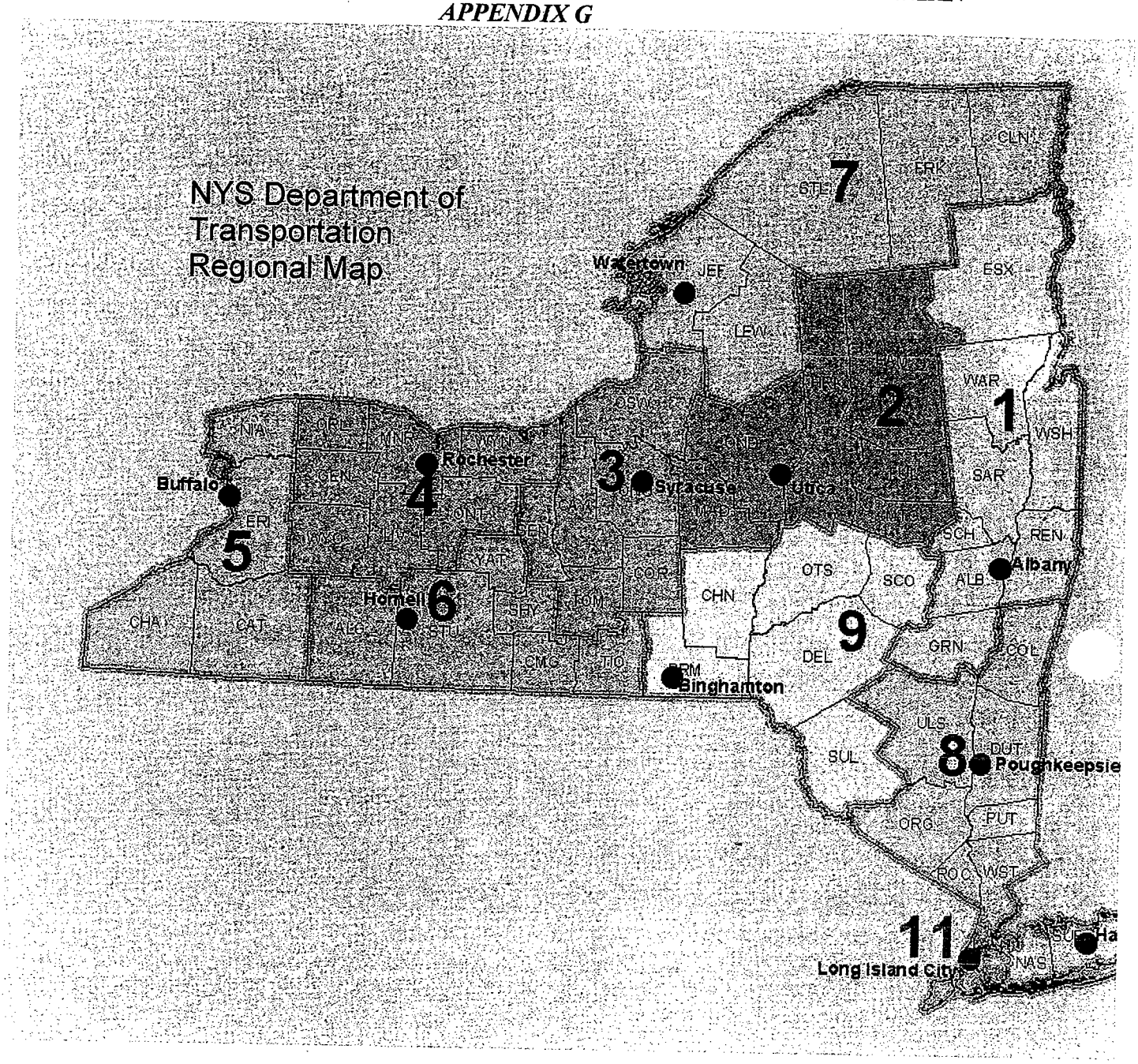
New York State Police Troop Locations

Division Headquarters
Building 22, 1220
Washington Avenue
Albany, NY 12226-2252
518-457-6811

Troop A Headquarters, Batavia
716-343-2200
Troop B Headquarters, Ray Brook
518-897-2000
Troop C Headquarters, Sidney
607-561-7100
Troop D Headquarters, Oneida
315-363-4400
Troop E Headquarters, Canandaigua
716-398-3200
Troop F Headquarters, Middletown
845-344-5300
Troop G Headquarters, Loudonville
518-783-3211
Troop K Headquarters, Poughkeepsie
914-677-7300
Troop L Headquarters, Farmingdale
516-756-3300
Troop T Headquarters, Albany
518-436-2825
Troop NYC Headquarters, NYC
718-918-0600





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DOT REGIONAL INFORMATION

DOT REGION 1
328 State Street
Schenectady, NY 12305
Regional Director: 518-388-0388
Answering Service: 518-388-0346
Counties: Albany, Essex, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington

DOT REGION 2
Utica State Office Building
207 Genesee Street
Utica, NY 13501
Regional Director: 315-793-2447
Answering Service: 315-733-2111
Counties: Fulton, Hamilton, Herkimer, Madison, Montgomery, and Oneida

DOT REGION 3
Senator John H. Hughes State Office Bldg.
333 East Washington Street
Syracuse, NY 13202
Regional Director: 315-428-4351
Answering Service: 315-422-7984
Counties: Allegany, Chemung, Schuyler, Oswego, Seneca, and Tompkins

DOT REGION 4
1530 Jefferson Road
Rochester, NY 14623-3161
Regional Director: 716-272-3310
After Hours: 585-760-7780
Counties: Genesee, Livingston, Monroe, Ontario, Orleans, Wayne, and Wyoming

DOT REGION 5
General William J. Donovan Office Bldg.
125 Main Street
Buffalo, NY 14203
Regional Director: 716-847-3238
After Hours: 716-847-2070
Counties: Cattaraugus, Chautauqua, Erie, and Niagara

DOT REGION 6
107 Broadway
Hornell, NY 14843
Regional Director: 607-324-8405
Answering Service: 866-880-7353
Counties: Cayuga, Cortland, Onondaga, Steuben, Tioga, and Yates

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DOT REGION 7
Dulles State Office Building
317 Washington Street
Watertown, NY 13601
Regional Director: 315-785-2333
Answering Services: 315-785-6203
Counties: Clinton, Franklin, Jefferson, Lewis, and St. Lawrence

DOT REGION 8
Eleanor Roosevelt State Office Bldg.
4 Burnett Boulevard
Poughkeepsie, NY 12603-2594
Regional Director: 845-431-5750
Answering Service: 845-473-4174
Counties: Columbia, Dutchess, Orange, Putnam, Rockland, Ulster
Rockland, Ulster, and Westchester

DOT REGION 9
State Office Bldg.
44 Hawley Street
Binghamton, NY 13901
Regional Director: 607-721-8116
Answering Service: 607-721-8116
Counties: Broome, Chenango, Delaware, Otsego, and Schoharie, and Sullivan

DOT REGION 10
New York State Office Bldg.
250 Veterans Memorial Highway
Hauppauge, NY 11788
Regional Director: 631-952-6632
After Hours: 631-952-6777
Counties: Nassau and Suffolk

DOT REGION 11
Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101
Regional Director: 718-482-4526
Maintenance Group:
718-482-4760
Counties: Bronx, Kings, NY, Queens, and Richmond

DOT Main Office
New York State Department of Transportation
50 Wolf Road
Albany, NY 12232
EM Office 518-485-1379
After hours 866-880-7353

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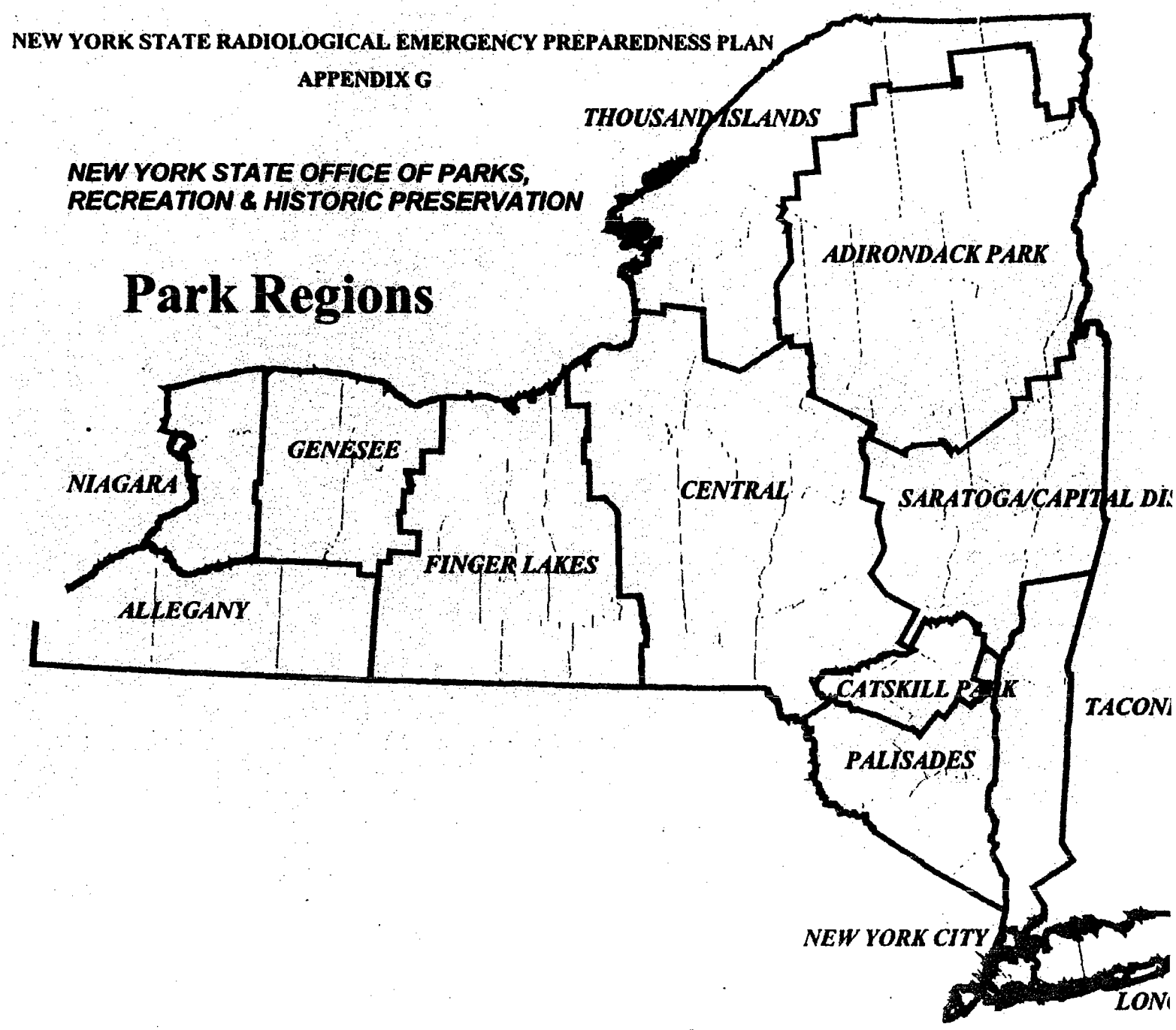

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(NOT USED)

APPENDIX H

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
APPENDIX H

CROSS REFERENCE INDEX TO THE CRITERIA FOR PREPARATION AND EVALUATION OF RADIOLOGICAL EMERGENCY RESPONSE PLANS AND PREPAREDNESS IN SUPPORT OF NUCLEAR POWER PLANTS.

Reference to lOCFR50 requirement, this index satisfies Evaluation Criteria P.8.

EVALUATION CRITERIA

	SECTION/PROCEDURE/APPENDIX
II. Planning Standards and Evaluation Criteria	
A. Assignment of Responsibility	
l.a. Identification of Response Organizations	Sect. I Sect. II Sect. III Sect. IV
b. Organization Concept Operations	Sect. I Sect. II Sect. III Sect. IV
c. Organizational Interrelationships Block Diagram	Sect. II Sect. III
d. Designation of Organization Director	Sect. I Sect. III
e. 24-Hour Response/- Communications	Sect. III Proc. B Refer to each respective County REPP
2.a. Organization Authority	Sect. I Sect. II Sect. III Refer to each respective County REPP

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	SECTION/PROCEDURE/APPENDIX
b. Legal Basis for Organization Authority	Sect. I
3. Letters of Agreement (MOU's)	App. E
4. Designated Authority for for Organization Resource Continuity	Sect. III, 2.1.2
B. Onsite Emergency Organization	Refer to each NFO's Emergency Plan
C. Emergency Support and Resources	
1.a. Specify Persons Authorized to Request RAP Assistance	Sect. III
b. Arrangements for Using Resources	Sect. III Proc. H Sect. IV
c. State Resources Available to Support Federal Response	Sect. I, 4.2.4 Sect. II App. D
2.a. Representatives at EOF	Proc. H
b. Licensee Representative	Refer to each NFO's Emergency Plan
3. Identification of Radiological Laboratories	Proc. N App. G Procedure M, Att. 10
4. Nuclear and Other Facilities Organizations or Individuals for Support	Proc. H Sect. III
D. Emergency Classification System	
1. Emergency Classification	Refer to each NFO's Emergency Plan

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	SECTION/PROCEDURE/APPENDIX
2. Initiating Conditions	Refer to each NFO's Emergency Plan
3. Establish Emergency Classification	Sect. III, 2.3.1
4. Provisions that Consistent Emergency Actions Will Be Taken	Proc. B Proc. D Proc. G Proc. H Proc. K
E. Notification Methods and Procedures	
1. Notification Verification of Response Organizations	Proc. B Sect. III
2. Alert, Notify & Mobilize Emergency Response Personnel	Sect. III Proc. B Proc. D
3. Initial Emergency Messages	Refer to each NFO's Emergency Plan
4. Follow-up Messages from the Facility to Offsite Authorities	Refer to each NFO's Emergency Plan
5. Dissemination of Public Information for Initial Notification	Sect. III Proc. C Proc. B
6. Means for Prompt Instructions to the Public within the Plume Exposure Pathway	Sect. III Proc. B Proc. C
7. Written Messages, in Draft Regarding Possible Protective Actions	Refer to Site Joint Information Center Workplan/ Procedure
F. Emergency Communications	
1.a. 24-Hour Notification Ability	Sect. III App. G Proc. B

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	SECTION/PROCEDURE/APPENDIX
b.Communications with Contiguous State & Local Government with EPZ	Sect. III Proc. B
c. Communications with Federal Response Organizations	Proc. B Proc. H
d. Communications Between NFO, EOF, State and Local EOC's and Monitoring Teams	Proc. H Sect. III
e. Alerting or Activating Personnel Emergency Personnel in Each Response Organization	Proc. B Sect. III
f. Communication By Licensee with NRC	Refer to each NFO's Emergency Plan
2. Coordinated Communication Link for Fixed & Mobile Medical Support Facilities	Sect. III App. F
3. Testing of Emergency Communications System	Proc. B, Att. 13 Sect. III, 2.1.2
G. Public Information and Education	
1. Coordinated Annual Dissemination of Information (the how & what)	Refer to each respective County REPP Sect. II Proc. C
2. Public Information	Proc. C Proc. E Refer to each respective County REPP
3.a. Designated Points of Contact and Contact and News Media Placement	Sect. III Proc. C

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	SECTION/PROCEDURE/APPENDIX
b. Joint Information Center	Proc. C Refer to Site Specific JIC Workplan/Procedures
4.a. Designate a Spokesperson	Proc. C, Sect 1.0 Sect. III, Sect. 2.1.7 Refer to respective County REPP
b. Establish Timely Exchange of Information	Proc. C Refer to Site Specific JIC Procedures
c. Public Inquiry/Rumor Control	Refer to Site Specific JIC Procedures Proc. C Sect. III
5. Annual Program to Acquaint News Media With Emergency Plans	Proc. C Sect. II
H. Emergency Facilities and Equipment	
1. Licensee Technical Support	Refer to each NFO's Emergency Center Plan
2. Licensee Emergency Operations	Refer to each NFO's Emergency Plan
3. Establish Emergency Operation Center	Proc. D Sect. III Refer to each respective County REPP
4. Activation and Staffing of Emergency Operation Center	Proc. B Proc. D Proc. H Sect.III Refer to each respective County REPP
5. Licensee Onsite Monitoring	Refer to each NFO's Emergency Plan
6. Licensee Offsite Monitoring	Refer to each NFO's Emergency Plan

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	SECTION/PROCEDURE/APPENDIX
7. Offsite Radiological Monitoring Equipment	App.G Proc. M Refer to each respective County REPP
8. Licensee Meteorological	Refer to each NFO's Emergency Plan
9. Licensee Onsite Operations	Refer to each NFO's Emergency Plan
10. Inspect, Inventory and Operationally Check Emergency Equipment	Proc. G App. G Proc. M
11. Lists of Inventory	App. G Proc. B, Attachment 14
12. Central Point for Receipt and Analyzing of all Field Monitoring Data	Proc. H
I. Accident Assessment	
1. Licensee Plant System	Refer to each NFO's Emergency Plan
2. Onsite Capability and Resources Resources to Provide Initial Values and Continuing Assessment	Refer to each NFO's Emergency Plan
3. Licensee Methods for Determining Source Term and Magnitude of Releases	Refer to each NFO's Emergency Plan
4. Relationship Between Effluent Monitor Readings and Onsite and Offsite Exposures	Refer to each NFO's Emergency Plan
5. Meteorological Data Processing Interconnections	Refer to each NFO's Emergency Plan
6. Methodology for Determining Release Rates	Refer to each NFO's Emergency Plan

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	SECTION/PROCEDURE/APPENDIX
7. Capabilities for Monitoring . Within Plume Exposure EPZ	This criteria is assigned to the respective risk County REPP
8. Capability for Assessment of Actual/Potential Magnitude of Location of Radiological Hazards	This criteria is assigned to the respective risk County REPP
9. Capability to Detect Airborne Radioiodine Concentration as Low as IE-7 uCi/cc	This criteria is assigned to the respective risk County REPP
10. Means to Estimate Integrated Dose From Projected and Actual Dose Rates	Proc. H
11. Arrangements to Locate and Track the Airborne Radioactive Plume	Proc. H Sect. III
J. Protective Response	
1. Means and Time for Warning Individuals On-site	Refer to each NFO Site Emergency Plans
2. Provisions for Evacuation Routes for Onsite Personnel	Refer to NFO and County Emergency Plan Sect. III
3. Radiological Monitoring of People Evacuated From Site	Refer to each NFO's Emergency Plan
4. Evacuation of Non-essential Personnel	Refer to each NFO's Emergency Plan
5. Ability to Account for all Individuals Onsite	Refer to each NFO's Emergency Plan
6. Protection of Individuals Remaining Onsite	Refer to each NFO's Emergency Plan
7. Mechanism for Recommending Protective Actions	Refer to each NFO's Emergency Plan

	SECTION/PROCEDURE/APPENDIX
8. Plume Exposure EPZ Evacuation Time Estimates	Refer to each NFO's Emergency Plan
9. Protective Action Guides	Sect. I Sect. III Sect. IV Proc. H Proc. K
10.a. Maps: Evacuation Routes, Evacuation Areas, Sampling and Monitoring Points, Relocation Centers, etc.	Refer to each respective County REPP
b. Map for Population Distribution by Evacuation Area	Refer to each respective County REPP
c. Means for Notifying All Segments of the Transient and Resident Population	Proc. B Proc. C Proc. E Sect. III Sect. IV Refer to each respective County REPP
d. Means for Protecting Persons Whose Mobility May Be Impaired (Institutional or Other Confinement)	Proc. E Sect. III Refer to each respective County REPP
e. Provisions for Radioactive Drugs - Quantities, Storage and Means of Distribution	Proc. G, Att.9 App. K
f. Radioprotective Drug Administration	Proc. G App. K
g. Means of Relocation	Refer to each respective County REPP Sect. III
h. Relocation Centers	Refer to each respective County REPP Sect. III
I. Projected Traffic Capacities of Evacuation Routes under Emergency Conditions	Refer to respective Site Evacuation Time Estimates (ETE)

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	SECTION/PROCEDURE/APPENDIX
j. Control of Access to Evacuated Areas; Organization and Control	Sect. III Refer to each respective County REPP
k. Identification of and Means Dealing with Potential Impediments	Sect. III Refer to each respective County REPP
l. Evacuation Time Estimates	Refer to each respective County REPP and ETE manual
m. Bases for Choice of Protective Actions within the Plume EPZ	Sect. III Proc. H
11. Protective Measures Ingestion Pathway	Sect. III Sect. IV Proc. H Proc. K Proc. L
12. Means for Registering and Monitoring Evacuees	Sect. III Refer to each respective County REPP
K. Radiological Exposure Control	
1. Onsite Exposure Guidelines	Refer to each NFO's Emergency Plan
2. Onsite Radiation Protection Program	Refer to each NFO's Emergency Plan
3a. 24-Hour Capability to Determine Emergency Worker Doses	Proc. G Sect. III
3b. Maintenance of Dose Records	Proc. G, Att.8 Sect. III
4. Decision Chain for Authorizing Emergency Workers Exposure to Exceed EPA/PAG's	Proc. G Proc. H Sect. III
5.a. Specify Action Levels for Determining the Need for Decontamination	Refer to each respective County REPP Proc. G Sect. III State Emergency Worker PMC Procedures

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	SECTION/PROCEDURE/APPENDIX
b. Means for Radiological Decontamination of Emergency Personnel	Proc. G Sect. III State Emergency Worker PMC Procedures Refer to each respective County REPP
6. Onsite Contamination Control	Refer to each NFO's Emergency Plan
7. Decontamination of Relocated Onsite Personnel	Refer to each NFO's Emergency Plan
L. Medical and Other Health Support	
1. Local and Backup Hospital and Medical Services	App. F Sect. III
2. Onsite First Aid Capability	Refer to each NFO's Emergency Plan
3. List of Hospitals	App. F
4. Transporting Victims of Radiological Accidents to Medical Support Facilities	Sect. III Refer to each County REPP Plan
M. Recovery and Reentry Planning and Post Accident Operations	
1. Plans for Recovery/Reentry	Sect. IV Sect. III Proc. L
2. Key Positions in the Facility Recovery Organization	Refer to each NFO's Emergency Plan
3. Informing Members of Response Organizations to Initiate Recovery	Sect. IV
4. Method for Periodically Estimating Total Population Exposure	Proc. H Sect. IV
N. Exercises and Drills	
1.a. Periodic Exercises of Response Capability	Proc. F Proc. C Sect. II

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	SECTION/PROCEDURE/APPENDIX
b. Exercise Critique	Proc. F
2.a. Communication Drills	Proc. B Proc. F
b. Fire Drills	Refer to each NFO's Emergency Plan
c. Medical Emergency Drills	Refer to each NFO's Emergency Plan
d. Radiological Monitoring Drills	Proc. F
e. Health Physics Drills	Proc. F
3.a. Drill Objectives	Proc. F
b. Date/Time/Place	Proc. F
c. Simulated Events	Proc. F
d. Time Schedule of Real and Simulated Initiating Events	Proc. F
e. Summary of Exercise Conduct	Proc. F
f. Description of the Arrangements for and Advance Materials Provided to Observers	Proc. F
4. Official Observers, Critique and Formal Evaluation	Proc. F
5. Evaluation of Observer and Participants Comments	Proc. F Proc. A
O. Radiological Emergency Response Training	
1. Assure Training	Proc. F Sect. II

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	SECTION/PROCEDURE/APPENDIX
1.a. Training for Offsite Emergency Organizations	Refer to each respective county REPP Proc. F
b. Offsite Response Organization Shall Participate in Training	Sect. II Proc. F
2. Training for Onsite Emergency Organizations	Refer to each NFO's Emergency Plan
3. Training for Licensee First Aid Teams	Refer to each NFO Site Emergency Plan
4.a. Specialized Training for Directors or Coordinators	Proc. F
b. Accident Assessment Personnel	Proc. F
c. Radiological Monitoring Teams	Proc. F
d. Police, Security and Firefighters	Proc. F Refer to each NFO's Emergency Plan
e. Repair and Damage Control Teams	Refer to each NFO's Emergency Plan
f. First Aid and Rescue Personnel	Proc. F
g. Local Support Services	Proc. F
h. Medical Support Personnel	Proc. F
I. Licensee's Headquarters Support Personnel	Refer to each NFO's Emergency Plan
j. Transmitters of Information	Proc. F
5. Annual Retraining	Sect. II Proc. F
P. Responsibility for the Planning Effort	
1. Training of Responsible Individuals	Proc. F, Sect 4.6

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	SECTION/PROCEDURE/APPENDIX
2. Overall Authority and Responsibility for Planning	Proc. A Sect. II
3. Designation of Emergency Planning Coordinator	Proc. A
4. Annual Review and Update of Plan	Proc. A
5. Plan Distribution and Promulgation of Plan Revisions	Proc. A
6. Listing of Support Plans	Sect. I
7. Plan Implementation	Proc. A
8. Cross Reference/Table of Contents	App. H
9. Annual Review of Emergency Preparedness Program	Refer to each County REPP Plan Proc. A
10. Quarterly Update of Telephone Numbers	Proc. A

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APPENDIX I

PROCEDURE CROSS-REFERENCE

(This listing reflects the Procedures required to implement this plan)

Procedure		Section Location
A.	Plan Maintenance	Sec.II – 3.1, 3.1.1, 3.1.2 Sec.II – 3.4, 3.4.1, 3.4.2 Sec.II – 3.6.1
B.	Communications/Warning	Sec.II – 3.6. Sec.III – 2.1.1 Sec.III – 2.1.2 Sec.III – 2.1.3 Sec.III – 2.2.2 Sec.III – 2.3.2 Sec.III – 2.5.1
C.	Public Information	Sec.II – 3.5 Sec.III – 2.1.7 Sec.III – 2.2.3, 2.3.5 Sec.IV – 6.0, 6.1, 6.1.1, 6.1.2. 6.1.3
D.	State and Field Emergency Operations Center	Sec.III – 1.3 Sec.III – 2.1.1, 2.1.5, 2.1.8, 2.1.9, 2.1.10 Sec.III – 2.2, 2.2.1 Sec.III – 2.3.3
E.	Public Education	Sec.I – 4.1.1, 4.1.2 Sec.II – 3.5, 3.5.1, 3.5.2 Sec.II – 3.6, 3.6.1
F.	Training, Drills & Exercises	Sec.II – 3.7, 3.7.1, 3.7.2
G.	Radiological Exposure Control	Sec.II – 3.6, 3.6.1 Sec.III – 2.4.1 Sec.III – 2.6, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.7 Sec.IV – 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8

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Procedure		Section Location
H.	Assessment/Evaluation	Sec.III – 1.3, Sec.III – 2.1.4 Sec.III – 2.1.5 Sec.III – 2.1.11 Sec.III – 2.3, 2.3.1 Sec.III – 2.4, 2.4.1, Sec.III – 2.4.2 Sec.III – 2.5, 2.5.1 Sec.IV– 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8
I.	NOT USED	
K.	Radiological Ingestion Exposure	Sec.I – 3.3, 3.3.1, Sec.III – 2.1.6 Sec.III – 2.3.2 Sec.III – 2.4.2 Sec.III – 2.6, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5 Sec.IV– 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 3.8 Sec.III – 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7
L.	Relocation/Return/Reentry/Ingestion	Sec.IV– 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8 Sec.IV– 4.0, 4.1, 4.3, 4.3, 4.4, 4.5, 4.6, 4.7
M.	Ingestion Sampling Team Procedures	Sec.II – 3.3.1 Sec.II – 3.6, 3.6.1 Sec.III – 1.1 Sec.III – 2.1.4 Sec.III – 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5
N.	NYS Department of Health Nuclear Emergency Procedures	Sec.II – 3.3.1 Sec.II – 3.6.1 Sec.III – 1.3 Sec.III – 2.1.4 Sec.III – 2.1.11 Sec.III – 2.4.1

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APPENDIX K

POTASSIUM IODIDE

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NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN

(NOT USED)

ATTACHMENT 1

New York State Policy on Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies
November 2002

Introduction

This Policy updates the 1982 New York State Policy on the use of potassium iodide (KI) for the general public to reduce the risk of thyroid cancer in radiation emergencies involving the release of radioactive iodine. The recommendations in this policy address KI dosage and the projected radiation exposure at which the drug should be used.

These recommendations are based on guidance provided by the United States Food and Drug Administration (FDA), "Guidance on Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies", in December of 2001.

Background

The FDA has provided guidance previously on the use of KI as a thyroid blocking agent. First, in 1978, the FDA announced its conclusion that KI is a safe and effective means by which to block uptake of radioiodines by the thyroid gland in a radiation emergency under certain specified conditions of use. In 1982, FDA announced final recommendation on the administration of KI to the general public in a general emergency. Those recommendations were formulated after reviewing studies relating radiation dose to thyroid disease risk that relied on estimates of external thyroid irradiation after the nuclear detonations at Hiroshima and Nagasaki and analogous studies among children who received therapeutic radiation to the head and neck. The former New York State Policy on KI was based on previous FDA recommendations for administering KI to emergency workers and selected captive populations. This former policy stated: "The FDA recommends that potassium iodide in doses of 130 mg per day per adult and children above one year, and 65 mg per day for children below one year of age, be considered for thyroid blocking in radiation emergencies in those persons who are likely to receive a projected radiation dose of 25 rem or greater to the thyroid gland from radioiodines released to the environment. The decision to administer KI will be made with the concurrence of local and State Health officials."

The policy that follows revises New York State's 1982 policy recommendation on the use of KI for thyroid cancer prophylaxis based on the FDA's recent comprehensive review of the data accumulated in the aftermath of the 1986 Chernobyl reactor accident relating radioiodine exposure to thyroid cancer risk,.

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Rationale for Revising the Existing KI Policy

The New York State Department of Health (NYSDOH) has reviewed the new guidance for prophylactic use of KI prepared by the FDA and is hereby recommending that the New York State Policy on KI distribution to the general public be revised. The rationale for the revision is given below.

- Studies conducted after the 1986 accident at Chernobyl have provided the most reliable information available to date on the relationship between exposure to radioiodine and thyroid cancer risk. These studies suggest that the risk of thyroid cancer is inversely related to age, and that, especially in young children, the risk may accrue at very low level of radioiodine exposure. The FDA relied on Chernobyl data to formulate its specific recommendations.

- The effectiveness of KI as a specific blocker of thyroid radioiodine uptake is well established, as are the doses necessary for blocking radioiodine uptake. As such, it is reasonable to conclude that KI will likewise be effective in reducing the risk of thyroid cancer in individuals or populations at risk for inhalation or ingestion of radioiodines.

- Short-term administration of KI at thyroid blocking doses is safe and, in general, more so in children than adults. The risks of stable iodine administration are detailed in the FDA guidance document (FDA01).

The NYSDOH, in consultation with its Radiological Health Advisory Committee, concluded that there was no medical reason not to make KI available to the general public during a radiological emergency where a large release of radioiodines had taken place. In August 1998, the NYSDOH Commissioner (Dr. DeBuono) made that recommendation to Mr. Edward Jacoby, then Chairman of the Disaster Preparedness Commission (DPC). The subsequent NYSDOH Commissioner, Dr. Novello, reiterated that recommendation when the FDA released its final guidance on the use of KI for the general public in December 2001.

Based on information available to date, New York State has decided to revise its KI policy to reflect current FDA recommendations.

New Policy

The New York State Plan endorses the 2001 FDA recommendation regarding KI. The New York State Policy on KI is revised as follows:

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ATTACHMENT 1

"The New York State Department of Health states that KI is a safe and effective means by which to prevent radioiodine uptake by the thyroid gland, under certain specified conditions of use, and thereby reduce the risk of thyroid cancer in the event of a radiation emergency. The Department will follow the FDA's lower radioactive exposure thresholds for KI prophylaxis as well as lower doses of KI for neonates, infants, and children than those previously recommended in 1982 (see Table 1). The recommendation to take KI by the general public will be issued by the Local or State Commissioner of Health, or his/her designee, during a radiological emergency where there is potential for the general public to exceed the new FDA dose limits may be exceeded by the general public. This recommendation will be based on a projected dose of 5 rem to the child thyroid.

The NYSDOH continues to recommend that the radiation emergency response plans include:

- Provisions (in the event of a radiation emergency) for informing the public about the magnitude of the radiation hazard;
- The manner of use of KI and its potential benefits and risks; and
- Medical contact, reporting, and assistance systems.

The NYSDOH recognizes FDA recommendations on availability as well as administration of KI in advance of exposure to radioiodine. The NYSDOH stresses that KI provides protection only for the thyroid from radioiodines. KI has no impact on the uptake by the body of other radioactive materials and provides no protection against external irradiation of any kind. The NYSDOH emphasizes that the use of KI should be as an adjunct to other recommended protective actions such as evacuation (itself not always feasible), sheltering, and control of foodstuffs."

Threshold Thyroid Radioactive Exposures and Recommended Doses of KI for Different Risk Groups

	KI dose (mg)	# ml liquid (65 mg/ml)	# of 65 mg tablets	# of 130 mg tablets
Adults over 40 yrs	130	2	2	1
Adults over 18 through 40 yrs				
Pregnant or lactating women				
Adolescents over 12 through 18 yrs who weigh at least 150 pounds	130	2	2	1
Adolescents over 12 through 18 yrs who weigh less than 150 pounds	65	1	1	1/2
Children over 3 through 12 yrs	65	1	1	1/2
Over 1 month through 3 years	32	1/2	1/2	1/4
Birth through 1 month	16	1/4	1/4	1/8

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ATTACHMENT 1

Commercially Available Doses of KI

KI is available, FDA-approved and over-the-counter in 130-mg tablets, 65-mg tablets and liquid.

NYSDOH supports the administration of the 130-mg tablet for children in settings such as schools or childcare centers in the event of emergencies. This is in agreement with FDA statements. (Ref) This dose is safe and well within the recommended therapeutic range of KI for other indications. The blocking effect of iodide on the thyroid lasts only a few days (daily dosing is needed as long as the child is exposed to radioiodine) and any suppressive effect of KI on thyroid function has been shown to be minimal, even in young children.

The FDA has noted that absolute precision in dosing is generally not critical to safety or efficacy, and has emphasized in their guidance document that across populations at risk for radioiodine exposure, the overall benefits of KI far exceed the risks of overdosing, especially in children.

Reference

FDA01 Guidance, Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies, US Department of Health and Human Services, Food and Drug Administration, Center for Drug Evaluation and Research. December 2001.

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ATTACHMENT 2

New York State
Nuclear Emergency Preparedness Subcommittee
Technical Issues Task Force

Implementation of the Use of Potassium Iodide (KI) as a Protective Action for the Public

Revision 2
June 2007

IPEC00201375

ATTACHMENT 2

The following individuals and organizations participated in the development of this position paper, and agree to its purpose and contents. All participants agree to implement the guidance contained herein, to the extent possible.

Constellation Energy Group (Nine Mile Point)

James D. Jones _____ _____ _____
Name Signature Date

Entergy Nuclear Northeast (J.A. FitzPatrick and Indian Point Energy Center)

Michael Slobodien _____ _____ _____
Name Signature Date

Constellation Energy Group (R.E. Ginna Station)

Sherri Kennedy _____ _____ _____
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New York State Emergency Management Office

Andrew Feeney _____ _____ _____
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New York State Health Department

Adela Salame-Alfie, Ph.D. _____ _____
Name Signature Date

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ATTACHMENT 2

Executive Summary

Licensee and State members of the Potassium Iodide (KI) Task Force (KI Task Force) developed this position paper to detail the decision process by which several recommendations regarding KI distribution will be made. The Task Force agreed that upon declaration of a General Emergency by the licensee, a recommendation to evacuate and take KI would be made simultaneously. It was also agreed that a single trigger level would be used (projected dose of 5 rem to the child thyroid). This paper discusses several approaches to determine doses/iodine concentrations and whether one approach was selected over the others due to effectiveness, timeliness, ease of implementation, etc.

The following six specific recommendations were agreed upon by the KI Task Force:

1. ***"Upon declaration of a General Emergency, the following will be directed to ingest KI:***

   - ***members of the public that are directed to evacuate***
   - ***captive populations within the evacuated area***
   - ***members of the public that would otherwise have been evacuated but are directed to shelter-in-place because evacuation is not feasible."***

2. ***"If evacuation is recommended at an ECL other than a General Emergency, or for any other reason, a direction to ingest KI as described in recommendation No. 1 <u>will not</u> be made. Ingestion of KI will be recommended only upon declaration of a General Emergency."***

3. ***"Upon declaration of a General Emergency, members of the public that are directed to shelter-in-place in order to reduce dose shall be directed to ingest KI. Members of the public who are directed to monitor the Emergency Alert System <u>will not</u> be directed to ingest KI."***

4. ***"Upon declaration of a General Emergency, <u>all</u> emergency workers located within the 10-mile EPZ will be directed to take KI (one 130-mg tablet every 24 hours). This recommendation will be made at the same time as the recommendation to ingest KI is made to the general public."***

5. ***"Members of the public and captive populations who are directed to take KI shall be directed to ingest KI in the dosage recommended by the US FDA. If a scheme of graded dosing is not possible, one 130-mg tablet per person may be ingested with minimal risk for those over one year of age. Dose to neonates should be limited to 16 mg, if possible."***

6. ***"As part of a pre-distribution effort, each member of the public should be offered a quantity of KI tablets equivalent to the following:***

   Maximum ETE (in days-rounded up) x 1 age and/or weight dependent dose/day

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Alternatively, one bottle of liquid KI may be offered per family."
The group recognizes that a strong public information campaign and clear messages during the emergency are key to a successful KI implementation program. Some implementation guidance is provided at the end of the document.

1. Purpose

The purpose of this paper is to document a technical assessment of issues associated with the distribution of Potassium Iodide (KI) to the general public, emergency workers and captive populations, and to provide implementation guidance for:

- Usage
  - General Public
  - Emergency Workers
  - Captive Populations
- Dosage and frequency
- Pre-distribution criteria

2. Regulatory Requirements and Guidance

2.1 Applicable regulations

The US Nuclear Regulatory Commission (NRC) amended emergency planning regulations to require that States consider including the prophylactic use of KI as a protective measure for the general public in the plume exposure pathway Emergency Planning Zone (EPZ) in 66 FR 5427 on 19 Jan 2001. (Ref. 1)

The Federal Emergency Management Agency (FEMA) provided notice that the Federal Radiological Preparedness Coordinating Committee (FRPCC) revised its 1985 Federal policy regarding KI use in 67 FR 1355 on 10 Jan 2002. (Ref. 2)

2.2 Current guidance

The US Food and Drug Administration (FDA) issued guidance on the use of KI in radiation emergencies in December 2001 (Ref. 3). This document concludes "Short-term administration of KI at thyroid blocking doses is safe…" (Ref. 3 IV.A.) and indicates KI dosage is dependent on age and "Predicted Thyroid Exposure" (Ref. 3 IV.B.). This document states that "The recommendation should be interpreted with flexibility as necessary to allow optimally effective and safe dosing…" Additionally, "…the overall benefits of KI far exceed the risks of overdosing…" (Ref. 3 IV.B.).

2.3 New York State Position

In 2002, New York State, in its consideration of the subject CFR, chose to incorporate KI as an adjunct to the current range of protective actions for the public. The New York State Revised KI Policy was issued in April 2002.

2.4 Upcoming Guidance

This Position Paper will be revised as necessary to accommodate any new Federal guidance and availability of KI in different dosages.

3. Assumptions

- For optimal protection against inhaled radioiodine, KI should be administered before or immediately coincident with passage of the radioactive cloud. Effectiveness drops off rather quickly as time since radioiodine exposure increases. The effectiveness drops to about 50% if KI is taken two hours after exposure, and continues to decrease as time after exposure increases. (Ref. 3. V.).

- The recommended daily dose protects the user from radioiodine uptake for approximately 24 hours.

- KI should be taken until the person is no longer exposed to radioiodine.

- Radioiodine would only be present in the environment in sufficient quantities to exceed 5 rem child thyroid dose (CDE_T), which is the minimum dose at which KI is recommended, if a General Emergency (GE) had been declared at the facility from which the source term originates. This assumption is based on the fact that radioiodine can only be present in quantities capable of producing 5 rem child CDE_T in the presence of significant core damage and loss of primary containment, which are criteria that constitute a General Emergency.

- There will only be one trigger level to recommend KI: 5 rem to the child thyroid (CDE_T). This trigger level applies to the general public, emergency workers and captive populations.

4. Implementation Analysis

This section presents six recommendations as well as the rationale, benefits and risks associated with each. Recommendations are presented for when to issue a KI recommendation, dosage, and criteria for pre-distribution. These analyses apply to members of the public, emergency workers and captive populations.

4.1 Task Force Recommendation # 1

"Upon declaration of a General Emergency, the following will be directed to ingest KI:

- ***members of the public that are directed to evacuate***

- ***captive populations within the evacuated area***
- ***members of the public that would otherwise have been evacuated but are directed to shelter-in-place because evacuation is not feasible."***

Analysis:

Three methods were investigated to arrive to this recommendation:

- Use of a dose value,
- Use of deterministic methods, and
- Use of emergency classification.

Each analysis is described separately.

4.1.1 Using Dose Value

This analysis examines a method that utilizes projected dose to the thyroid as an indication of recommendation of KI use by the public [specifically, Committed Dose Equivalent to the child thyroid (CDE_T)]. In accordance with FDA Guidance (Ref. 3), child $CDE_T \geq 5$ rem is the indication at which KI use should be recommended.

To date, none of the New York State nuclear power facilities utilize real-time iodine monitoring. Hence, releases of radioiodine to the environment during an emergency are inferred from either grab samples or back calculated from field data. Both of these methods require several steps that need, at a minimum:

- Allocation and briefing of personnel,
- Assembling equipment and procedures to enter the field to collect and analyze samples,
- Reporting the results to an emergency facility,
- Performing calculations to determine child CDE_T,
- Relaying dose assessment information to the state/county,
- Decision-making by the state/county, and
- Dissemination of recommendations to the public.

These steps are routinely performed during emergency drills, and our experience indicates that it may take anywhere from 30-90 minutes to calculate the child CDE_T once a decision has been

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made to obtain a sample. Additionally, the emergency facilities that implement this analysis may take up to 60 minutes to activate after declaration of an emergency.

Normally, the calculation of the child CDE_T takes place after the completion of protective action recommendations (PARs) based on "plant conditions". The PARs for a General Emergency are to evacuate people within two-miles around and five miles downwind of the site, and advise all remaining ERPAs to monitor the Emergency Alert System.

Given the above:

- Child CDE_T would likely be calculated and provided to the County and the State within 105-165 minutes after the declaration of the GE.

- If the County decides that the use of KI is appropriate, given the time the county takes to make the decision and prepare public information messages, this instruction could be provided to the public in 150-210 minutes after the declaration of the GE.

4.1.2 Use of Deterministic Methods

In this case, methods that determine child CDE_T utilizing parameters such as containment high range monitor status, gross core damage estimate, and/or reactor pressure vessel and containment integrity were considered. Unfortunately, the data needed to make even rough estimations of these parameters would typically be assessed after the GE-related recommendations. Hence, the time-delay risks of such a method still apply.

Benefits of these methods

Administration of KI would occur only in the presence of radioiodine in quantities that meet or exceed the "Predicted thyroid exposure guidance" in Reference 3.

Risks of these methods

- Administration of KI would occur (up to 3-4 hours) after the release of radioiodine, decreasing the effectiveness of the prophylaxis by more than 75%.

- Administration of KI would likely occur after other protective actions (that is evacuation) have already been recommended to the public. It is unknown if the public would comply with instructions to bring KI with them.

- Members of the public may delay evacuation in order to locate their KI.

- If two separate protective actions are issued to the public (for example, an order to evacuate not accompanied by a recommendation to take KI), compliance with the respective recommendations is unknown. It is possible that the public will not differentiate between the protective actions and, when told to evacuate, may take KI as well. The risk is that the public

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sees these as two separate protective actions, potentially providing confusion and non-compliance.

4.1.3 Use of Emergency Classification

This analysis examines a method that would use the emergency classification level as the indication for KI use. Specifically, the indication for KI use is a declaration of a General Emergency.

- The General Emergency classification is currently used to determine evacuation PARs.
- If KI use was always implemented concurrently with the "plant condition" protective action recommendations, the public would receive the recommendation to take KI at the same time they received the order to evacuate; that is, within an hour of the declaration of the General Emergency.
- By definition, the declaration of a General Emergency presumes that "Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area." (Ref. 7).
- The EPA Protective Action Guideline (PAG) is to evacuate populations whose actual or projected exposure level equals or exceeds 5 rem Committed Dose Equivalent to the (adult) thyroid (Ref. 8).
- New York State nuclear power plant licensees calculate CDE_T to the child thyroid, and provide this number to the counties and state for comparison against the PAG's (Ref. 9).
- Hence, when the licensee recommends evacuation due to a General Emergency declaration, a child $CDE_T \geq 5$ rem either exists or is anticipated to exist at the site boundary or beyond. Though there are exceptions to this (such as GE's declared due to security issues or electrical problems) all GE's have the potential to exceed the 5 rem child CDE_T level. Calculations performed by New York State on a variety of plant conditions postulated to exist during a GE provide confirmation of this (Ref. 6).
- Given the above, it can be reasonably assumed that the radiological conditions present within the context of a General Emergency will result in meeting or exceeding the child $CDE_T \geq 5$ rem, which is also the thyroid exposure at which the FDA recommends the use of prophylactic KI.

<u>Benefits of this method</u>

- The recommendation to take KI could be issued earlier than the other indication methods, concurrently with the recommendation to evacuate or shelter-in-place. This would likely

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occur prior to the presence of radioiodine in the environment, thus providing maximum loading dose of stable iodine to the thyroid.

- Compliance with taking KI is more likely since all protective actions are being implemented at once. Also, people would be more likely to have access to pre-distributed KI.

Risks to this method

- KI could be ingested without significant radioiodine ever being present in the environment. For example, the accident may not result in a release of radioiodine to the environment. Hence the public incurs the risk of taking KI without benefit.

Risk Analysis

- The risk of taking KI is minor (Ref. 10).
- A GE condition carries a risk of radioiodine release to the public.
- KI should be taken as soon as possible once the risk of radioiodine exposure is present.
- Using projected child CDE_T as the basis for a recommendation to take KI could significantly delay KI administration.
- Providing the public with a recommendation to take KI concurrent with an order for evacuation or sheltering-in-place provides the earliest and most effective thyroid protection with the greatest likelihood of compliance.

4.4 Task Force Recommendation # 2

"If evacuation is recommended at an ECL other than a General Emergency, or for any other reason, a direction to ingest KI as described in recommendation No. 1 will not be made. Ingestion of KI will be recommended only upon declaration of a General Emergency."

Analysis

- The recommendation to take KI should be given to any persons likely to be exposed to radioiodine in quantities that may exceed the "Predicted thyroid exposure guidance" presented in Reference 3.

- This analysis suggests that persons who are ordered to evacuate due to plant conditions or due to subsequently determined projected dose may exceed the predicted thyroid dose, and should take KI.

- For the population that has been told to evacuate for any reason other than the declaration of a General Emergency the risk of radioiodine exposure is low.

- Populations who took, or were recommended to take KI coincident with the recommendation to evacuate at an emergency classification level (ECL) other than a General Emergency, or

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for any other reason, are at risk of depleting their pre-distributed KI supply, making it unavailable in the event of radioiodine exposure.

4.5 Task Force Recommendation #3

"Upon declaration of a General Emergency, members of the public that are directed to shelter-in-place in order to reduce dose shall be directed to ingest KI. Members of the public who are directed to monitor the Emergency Alert System will not be directed to ingest KI."

Analysis

- Upon declaration of a General Emergency, the licensee will automatically recommend evacuation for the area two miles around and five miles downwind from the plant.

- In cases where a General Emergency is the first ECL declared ("fast-breaker"), resources and facilities would not be in place to allow for orderly evacuation. It is therefore likely that the population will not be directed to evacuate, but will be directed to shelter-in-place (in order to reduce dose).

- If it has been determined that an impediment to evacuation exits (i.e., lack of transportation resources, inclement weather, or road impediment) then the county or state may decide to shelter-in-place for the purpose of reducing dose rather than evacuate.

- Given the analysis in section 4.1.3, it can be reasonably assumed that the radiological conditions present within the context of a General Emergency will result in meeting or exceeding the child $CDE_T \geq 5$ rem, which is also the thyroid exposure at which the FDA recommends the use of prophylactic KI.

  - For the population that has not been evacuated and has been told to monitor the Emergency Alert System in order to maintain a heightened state of awareness, the risk of radioiodine exposure is low. The reasons for this are:

  - Due to the distance from the reactor, this population is at significantly less risk from radiation exposure from all sources, versus persons closer to the reactor.

  - Monitoring the Emergency Alert System in order to maintain a heightened state of awareness is used for projected doses of < 1 rem TEDE or < 5 rem CDE_T. Hence this population is not at risk of significant exposures to radioiodine.

- Populations that have not been evacuated, who took, or were recommended to take KI coincident with the direction to monitor the Emergency Alert System are at risk of depleting their pre-distributed KI supply, making it unavailable in the event of radioiodine exposure.

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ATTACHMENT 2

4.6 Task Force Recommendation # 4

"Upon declaration of a General Emergency, all emergency workers located within the 10-mile EPZ will be directed to take KI (one 130 mg tablet every 24 hours). This recommendation will be made at the same time as the recommendation to ingest KI is made to the general public."

Analysis

- Though current trigger levels for emergency worker KI use vary within New York State, all methods use trigger levels greater than the 5 rem child CDE_T that is associated with the general public.
- The KI Task Force has agreed that there will be one trigger level to recommend KI, and that trigger level will be 5 rem child CDE_T.
- Most emergency workers are members of the public, and many will encounter the evacuating public, who will have been told to take their KI. Additionally, emergency workers have access to the same public information that would be instructing the public to take KI. These emergency workers:
  - May not differentiate themselves from the public in the presence of instructions regarding KI.
  - May not comply with directions that differ from those being broadcast to the public.
- Since emergency workers are likely to move about between evacuated and non-evacuated areas within the EPZ, all emergency workers within the EPZ will be directed to take KI. This includes licensee emergency workers as well as county, state, and local emergency workers.
- Using the same arguments as in section 4.1, if current methods are continued, emergency workers would receive a recommendation to take KI while in the field. This method:
  - Is likely to result in a recommendation to take KI after exposure to radioiodine has already occurred.
  - Has potential delays due to the communications lag present when contacting several hundred emergency workers in the field.
- Directing emergency workers to take KI in the absence of radioiodine has the same risks and benefits detailed in section 4.1.

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4.7 Task Force Recommendation # 5

"Members of the public and captive populations who are directed to take KI shall be directed to ingest KI in the dosage recommended by the US FDA. If a scheme of graded dosing is not possible, one 130-mg tablet per person may be ingested with minimal risk for those over one year of age. Dose to neonates should be limited to 16 mg, if possible."

Analysis

The FDA guidance (Ref. 3) contains a number of age dependent doses. These recommendations are the lowest effective dose. Emergency planners and others should understand that absolute precision in dosing is generally not critical to safety or efficacy. Higher doses (e.g., up to 130 mg) would be equally effective and, particularly among school-age children, extremely safe (Ref. 10).

In addition to 130 mg tablets, KI is now FDA-approved and available in 65 mg tablets and liquid (65 mg/ml).

Threshold Thyroid Radioactive Exposures and Recommended Doses of KI for Different Risk Groups

	KI dose (mg)	# ml liquid (65 mg/ml)	# of 65 mg tablets	# of 130 mg tablets
Adults over 40 yrs	130	2	2	1
Adults over 18 through 40 yrs				
Pregnant or lactating women				
Adolescents over 12 through 18 yrs who weigh at least 150 pounds	130	2	2	1
Adolescents over 12 through 18 yrs who weigh less than 150 pounds	65	1	1	1/2
Children over 3 through 12 yrs	65	1	1	1/2
Over 1 month through 3 years	32	1/2	1/2	1/4
Birth through 1 month	16	1/4	1/4	1/8

A scheme of graded dosing may be difficult to implement during a radiological emergency involving large numbers of people. If local emergency planners conclude that graded dosing is logistically impractical, for populations at risk for radioiodine exposure, the overall benefits of taking up to 130 mg of KI instead of the lower doses recommended for certain age groups far exceed the small risks of overdosing. However, where feasible, adherence to FDA guidance should be attempted when dosing infants. Ideally, neonates should receive the lowest dose (16 mg) of KI. Excess iodine intake can lead to transient iodine-induced hypothyroidism in neonates, which can impact intellectual development. Individuals who are intolerant of KI at protective doses, as well as neonates, pregnant, and lactating women, should be given priority

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with regard to other protective measures (i.e., sheltering-in-place, evacuation, and control of the food supply) (Ref. 10).

This analysis recognizes:

- Potential confusion relating these doses to the public.
- Practical issues associated with delivering doses based on fractions of a tablet. This would require sectioning KI tablets in order to achieve a desired delivered dose.
- Likely lack of compliance regarding dose given the above issues.

Benefits to this method

- Instructions to follow the FDA recommendations if possible, but allowing up to 130 mg for persons over one year of age, and limiting neonates to 16 mg are easily related in public information material.
- Simple instructions are more likely to be complied with.

Risks to this method

This recommendation may provide a dose to children significantly in excess of the FDA requirements. In light of potential developmental consequences of even transient hypothyroidism, neonates who receive KI should be medically monitored and thyroid hormone therapy given in cases where hypothyroidism develops. This action should be incorporated into the State and county plans.

Risk Analysis

- The risk associated with excessive KI is less than the risk of exposure to radioiodine (Ref. 3).
- The public is more likely to comply with simple dose instructions.
- The FDA has indicated that the use of a single 130-mg dose for all members of the public is safe, regardless of age (Ref. 10).

4.8 Task Force Recommendation # 6

"As part of a pre-distribution effort, each member of the public should be offered a quantity of KI tablets equivalent to the following:

Maximum ETE (in days-rounded up) x 1 age and/or weight dependent dose/day.

Alternatively, one bottle of liquid KI may be offered per family."

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Analysis

- The public should be provided with sufficient KI to assure that thyroid prophylaxis is available to accommodate an expected duration of exposure to radioiodine.

- Given that evacuation of the public is the preferred method of preventing exposure, in an incident that could result in the release of radioiodine, the public could be expected to be exposed for a period of time equal to the greatest Evacuation Time Estimate (ETE) for the facility in question.

- One dose of KI protects the thyroid for approximately 24 hours (one day).

It is possible that impediments to evacuation may prevent the egress of portions of the population that would otherwise be evacuated (examples are road impediments such as heavy snowfall or transportation resource shortfalls), however, those conditions are accommodated in each nuclear facility's ETE.

- Given the above, pre-distribution efforts should provide sufficient KI in accordance with the following:

  Maximum ETE (in days-rounded up) x 1 age and/or weight dependent dose/day
  = # KI tablet(s) per person that should be pre-distributed

  Example: At Nine Mile Point, the maximum amount of time it would take to evacuate any member of the public is 8 hours, 20 minutes, as indicated in that facility's ETE (Ref. 4). Rounded up, that is equivalent to 1 day. Plugging this into the above formula:

  1 day x 1 age and/or weight dependent dose/day
  = 1 age and/or weight dependent dose

  In this example, one tablet of the appropriate dosage should be offered per person in a pre-distribution method. If 65 mg tablets are not available, 130 mg tablets may be offered. Alternatively, one bottle of liquid KI per family may be offered.

5. Implementation Considerations

This section provides suggestions for implementing the recommendations contained above.

5.1 Licensee actions

The Part 1 Notification Fact Sheet item 7.B. should be modified to read, "Evacuate and implement the KI plan for the following ERPA's". This action was completed 5 May 2003.

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ATTACHMENT 2

5.2 County and State actions

- Emergency plans should be modified to include:
  - The addition of KI as a protective action for the public.
  - The above protective action may be implemented for the evacuating public and those directed to shelter-in-place upon declaration of a General Emergency.
  - The recommended dose will be in accordance with FDA guidance. If a scheme of graded dosing is not possible, one 130-mg tablet per person may be ingested with minimal risk for those over one year of age. Dose to neonates should be limited to 16 mg, if possible.
  - Dose should be repeated every 24 hours while the person is exposed to radioiodine.
  - All emergency workers located within the 10-mile EPZ will be instructed to take KI upon declaration of a General Emergency (that is, concurrent with the recommendation to the evacuating population).
  - KI distribution policies and procedures, both pre- and post-event.
- Public information plans should be modified to include:
  - KI purpose, dose, distribution methods (pre- and post-event) and precautions (consistent with NYS and FDA guidance) in public education materials.
  - Incorporation of KI protective action details into EAS follow-up messages.

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ATTACHMENT 2

6. Glossary/Acronyms

CDE_T (Committed Dose Equivalent to the thyroid) -the radiation dose due to radioiodine in the thyroid over the 50-year period following exposure. In this document, *CDE_T* is used to refer to the committed dose equivalent to the child thyroid.

CFR (Code of Federal Regulations) -

Day - 24 hour period

ECL (Emergency Classification Level) - one of four classes used to describe emergencies at nuclear power plants.

EAS (Emergency Alert System) - broadcasting facilities that have been authorized by the Federal Communications Commission to operate in a controlled manner during a war, state of public peril or disaster, or other national emergency.

EPZ (Emergency Planning Zone) - the 10-mile radius around a nuclear power plant used for emergency planning purposes.

Evacuation - the urgent removal of people from an area to avoid or reduce high-level, short-term exposure, usually from the plume or from deposited radioactivity. Evacuation may be a preemptive action taken in response to a facility condition rather than an actual release.

ETE (Evacuation Time Estimate) - the time it is estimated to take to evacuate a certain area taking into consideration population size, road conditions, etc.

FEMA (Federal Emergency Management Agency) - the federal agency responsible for coordinating federal response to an emergency.

FR (Federal Register)

FRPCC (Federal Radiological Preparedness Coordinating Committee)

GE (General Emergency) - the most serious of four NRC emergency classes. Classification as a general emergency indicates that events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential loss of containment integrity. Releases can reasonably be expected to exceed EPA Protective Action Guide exposure levels offsite for more than the immediate site area.

Maintain a heightened state of awareness - go inside and monitor EAS.

Neonate - infant under 1 month of age

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ATTACHMENT 2

NRC (Nuclear Regulatory Commission) - the federal agency that licenses and regulates nuclear power plants. The NRC would be the lead federal agency for responding to an emergency at a nuclear power plant.

PAG (Protective Action Guide) - the projected dose to reference man, or other defined individual, from an accidental release of radioactive material at which a specific protective action to reduce or avoid that dose is warranted.

Shelter-in-Place - a protective action where people go indoors, close all doors and windows, turn off all sources of outside air, and remain indoors until officially notified that it is safe to go out.

US FDA (United States Food and Drug Administration) - the federal agency, which among other things, is responsible for evaluating and approving drugs.

ATTACHMENT 2

7. References

(Ref. 1) 66 FR 5427 (19 Jan 2001).

(Ref. 2) 67 FR 1355 on (10 Jan 2002).

(Ref. 3) Guidance: Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies: USFDA, Dec 2001.

(Ref. 4) Nine Mile Point / James A. FitzPatrick Nuclear Facility Development of Evacuation Time Estimates, August 2003

(Ref. 5) EPA 400-R-92-001, Manual or Protective Action Guides and Protective Actions for Nuclear Incidents, USEPA, May 1992.

(Ref. 6) (NYSDOH RASCAL calculation).

(Ref. 7) NUREG-0654 FEMA REP 1: Appendix 1.

(Ref. 8) EPA 400-R-92-001, Manual or Protective Action Guides and Protective Actions for Nuclear Incidents, USEPA, May 1992, Table 2-2 footnote b.

(Ref. 9) Implementation of the new EPA Protective Action Guides in Existing Emergency Programs for Nuclear Power Plants in New York State, March 1994.

(Ref. 10) Guidance for Industry: KI in Radiation Emergencies – Questions and Answers, Revision 1, USFDA, December 2002.

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PROCEDURE A

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(NOT USED)

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
PROCEDURE A – PLAN MAINTENANCE

1.0 PURPOSE

This procedure provides for the control, distribution, amendment and updating of this Plan to ensure its accuracy and uniformity with local plans, NFO site-plans, the State's overall Comprehensive Emergency Management Plan and contiguous states' and provinces' plans.

2.0 RESPONSIBILITIES

2.1 The appropriate Commissioner, Director, or other designated head of each State agency with a designated responsibility under this Plan, and the Chief Elected Official of each affected county will insure the development and maintenance of plans to carry out such agency's or county's radiological emergency response responsibilities.

2.2 The Director of the SEMO under the auspices of the DPC is responsible for the administration of this New York State REPP.

These responsibilities include:

2.2.1 providing for and controlling the distribution, amendment, and updating of this Plan;

2.2.2 coordinating the development by State emergency response agencies of their procedures for implementing this Plan;

2.2.3 providing for an annual review of this Plan, updating with current information based on the results of periodic drills and annual exercises.

2.2.4 ensuring that rosters of key personnel's telephone numbers are updated at least quarterly.

3.0 IMPLEMENTATION

3.1 The Director of the SEMO will control the distribution of the Plan and its procedure to all officials as required.

3.1.1 An up-to-date plan distribution list will be maintained.

3.1.2 All amendments or updates of this Plan will reflect the date of such change in the lower right hand corner of each page.

3.2 Oversight of emergency response agencies as recorded in this Plan will be the responsibility of the Director of the SEMO.

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3.2.1 Each agency will forward their new or revised procedures to the NYSEMO, REP Section, State Campus, Building 22, Ste 101, 1220 Washington Ave., Albany, NY, 12226-5000.

3.2.2 State agencies and their disaster-related responsibilities will be coordinated by the Director of the SEMO in accordance with the Comprehensive Emergency Management Plan.

3.2.3 The Director of the SEMO will review and update quarterly, lists of telephone numbers of key personnel.

3.3 This Plan will be reviewed annually, or sooner, if necessary, to ensure its applicability to current policy and its compatibility with each local plan.

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1 Procedures for the New York State Radiological Emergency Communications System (RECS)
2 Test Procedures for the New York State RECS
3A RECS Indian Point Unit 2 and Unit 3
3B RECS Nine Mile Point Nuclear Station (NMPNS) & James A. FitzPatrick Nuclear Power Plant (JAFNPP)
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4 Radiological Emergencies Procedure for Initial Response for Department of Health-BERP Personnel
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11. Specialized contact list for radiological emergency information or support
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13. National Warning System in NYS
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NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN

(NOT USED)

PROCEDURE B

1.0 INTRODUCTION

The NY State Emergency Communications Section (SECC) will disseminate the appropriate information in conjunction with the county REPP, NYS REPP, and each nuclear power operator's Site Emergency Plan and procedures - Indian Point Unit 2 (IP 2), Indian Point Unit 3 (IP 3), Nine Mile Point Nuclear Station (NMPNS), Unit 1 and Unit 2, James A. FitzPatrick Nuclear Power Plant (JAFNPP), and Robert E. Ginna Nuclear Station (Ginna). Communication systems, equipment and personnel are available to respond to a radiological emergency (Attachment 12).

2.0 INITIAL COMMUNICATION

The initial notification that a potential or actual radiological emergency has occurred at a nuclear power plant will be made by the NFO over the Radiological Emergency Communications System (RECS). Attachment 1 lists procedures for using RECS and Attachment 2 lists procedures for testing RECS. IP-2, IP-3, NMPNS-l, NMPNS-2, JAFNPP, and Ginna will use dedicated 24-hour telephone lines to notify the SECC, and the appropriate SEMO Field Office, and the DOH during duty hours. During non-duty hours, DOH radiological staff, State staff and appropriate SEMO field staff will be notified by the SECC by commercial telephone. (See Attachment 3A, 3B and 3C for diagrams of RECS. Notification lists are contained in Attachments 4, 5 and 6.) Note - If initial notification is a General Emergency condition the NFO control room operator of any New York State nuclear power plant will immediately refer to (Attachment l) procedures for the New York State RECS under I.A.6, II.A.6 or III.A.6 as appropriate.

NFO will transmit initial information as shown in Part I of Attachment 7A and 7B to the officials indicated above.

The notification systems described have radio backup. Satellite Telephone Network is the second backup. Radio communications will be from counties, through SEMO field offices to SECC.

2.1 Incidents with No Potential Off-Site Consequences

For incidents classified as an Unusual Event, the NFO will notify the SECC and county warning points/EOCs through prescribed communication channels (outlined in Section 3.0) that an unusual event is in progress or has occurred. No release of radioactive material requiring off-site response or monitoring is expected unless further degradation of safety systems occurs.

2.2 Incidents with Potential Off-Site Consequences

2.2.1 Alert

For incidents classified as an Alert, the NFO will notify the SECC and county warning points/EOCs through prescribed communication channels (outlined in Section 4.0) that events

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are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the EPA protective action guideline exposure levels.

2.2.2 Site Area Emergency

For incidents classified as Site Area Emergency the NFO will notify the SECC and warning points/EOCs through prescribed communication channels (outlined in Section 5.0) that events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA protective action guideline exposure levels except near site boundary.

2.2.3 General Emergency

For incidents classified as General Emergency the NFO will notify the SECC and county warning points/EOCs through prescribed communication channels (outlined in Section 6.0) that events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases can be reasonably expected to exceed EPA protective action guideline exposure levels offsite for more than the immediate site area.

3.0 RESPONSE ACTION - UNUSUAL EVENT

3.1 Upon initial notification from the NFO- (IP 2, IP 3, NMPNS-l, NMPNS-2, JAFNPP, or Ginna) of an Unusual Event, the SECC Operator located at Building #22, State Campus, Albany, will answer the RECS phone and record the information utilizing the Radiological Emergency Data Form (Attachment 7A and 7B). The SECC Operator will then contact the appropriate SEMO Duty Officer and 1st Deputy Director, DOH and DSP personnel, as well as Engineering Technical Specialists (Attachment 10) and transmit the information received from the NFO as recorded on the Radiological Emergency Data Form.

The SECC Operator will telephone the appropriate SEMO Regional office personnel as shown in Attachment 6 and transmit the information received from the NFO.

3.2 The SEMO Duty Officer/1st Deputy Director will continue to monitor the situation. The SECC will take any necessary actions, including activating other SEMO communication systems (Attachment 8) and staff, until termination or escalation to a higher emergency classification level by the NFO.

4.0 RESPONSE ACTION - ALERT

4.1 Upon initial notification from the NFO (IP 2, IP 3, NMPNS-l, NMPNS-2, JAFNPP, or Ginna) of an Alert, the SECC Operator will answer the RECS phone and record the information using the Radiological Emergency Data Form (Attachment 7A and 7B). The SECC operator will then telephone the appropriate SEMO Duty Officer. All other calls are made by the SEMO

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Notification System to the 1st Deputy Director, DOH and DSP personnel, as well as Engineering Technical Specialists (Attachment 10). The caller receives a message read into the system by the SECC operator; the message offers the level of event. The DOH/Engineering Technical Specialist representative will then telephone the NFO to verify the information received.

4.2 The SEMO will ensure that the Chairman of the DPC is advised of the situation.

4.3 The SECC Operator will notify appropriate staff to respond to the ECC (Attachment 10) and will also notify appropriate SEMO regional office personnel (Attachment 6) and transmit the information received from the NFO.

4.4 The SECC Operator will notify as appropriate Federal agencies, contiguous states, ingestion EPZ counties, the Province of Ontario (Ginna and Nine Mile Site only) and others and inform them of the situation (Attachment 10 and 12).

4.5 The SEMO Duty Officer/1st Deputy Director will continue to monitor the situation. The SECC will take the necessary action, including activating other SEMO communications systems and staff, until termination or escalation to a higher emergency classification level by the NFO (Attachment 8).

5.0 RESPONSE ACTION - SITE AREA EMERGENCY

5.1 Upon initial notification from the NFO (IP 2, IP 3, NMPNS-1, NMPNS-2, JAFNPP, or Ginna) of a Site Area Emergency, the SECC Operator will answer the RECS phone and record the information using the Radiological Emergency Data Form Sheet (Attachment 7A and 7B). The SECC Operator will then telephone the appropriate SEMO Duty Officer and 1st Deputy Director, DOH and DSP personnel, as well as Engineering Technical Specialists (Attachment 10) personnel and read the information received from the NFO. The DOH/Engineering Technical Special representative will telephone the NFO to verify the information received.

5.2 The SEMO will insure that the Chairman of the DPC is advised of the situation.

5.3 The SECC Operator will notify appropriate staff and activate the ECC (Attachment 10) and will also notify appropriate SEMO regional office personnel (Attachment 6) and transmit the information received from the NFO.

5.4 The SECC Operator will notify as appropriate Federal agencies, contiguous states, ingestion EPZ counties, the Province of Ontario (Ginna and Nine Mile Site only) and inform them of the situation (Attachment 10 and 12).

5.5 The SEMO will continue monitoring the situation. SEMO will coordinate necessary actions until termination or escalation to the General Emergency classification level by the NFO.

6.0 RESPONSE ACTION - GENERAL EMERGENCY

IPEC00201403

6.1 Upon initial notification from the NFO (IP 2, IP 3, NMPNS-1, NMPNS-2, JAFNPP, or Ginna) of a General Emergency, the SECC Operator will answer the RECS phone and record the information using the Radiological Emergency Data Form (Attachment 7A and 7B). The SECC operator will then telephone the appropriate SEMO Duty Officer and 1st Deputy Director, DOH and DSP personnel, as well as Engineering Technical Specialists (Attachment 10) personnel and read the information received from the NFO. The DOH/Engineering Technical Specialist representative will then telephone the NFO to verify the information received.

6.2 The SEMO will ensure that the Chairman of the DPC is advised of the situation.

6.3 The SECC Operator will notify appropriate staff and activate the ECC (Attachment 10) and will also notify appropriate SEMO regional office personnel (Attachment 6) and transmit the information received from the NFO.

6.4 The SECC Operator will notify as appropriate Federal agencies, contiguous states, ingestion EPZ counties, the Province of Ontario (Ginna and Nine Mile Site only) and inform them of the situation (Attachment 10 and 12).

6.5 SEMO will continue monitoring the situation. SEMO will coordinate necessary actions until the emergency classification level declared by the NFO is terminated.

NOTE:
For nuclear facilities other than those listed above, the SECC Operator will record the information received via telephone using the Radiological Emergency Data Form (Attachment 7A and 7B). Procedures listed above will be followed for each appropriate emergency classification starting with the procedure to call SEMO, DOH, DSP and Engineering Technical Specialists representatives.

IPEC00201404

ATTACHMENT 1

PROCEDURES FOR THE NEW YORK STATE
RADIOLOGICAL EMERGENCY COMMUNICATIONS SYSTEM (RECS)

In the event of a classified radiological incident, initial and follow-up notification will be made by the NFO to State and counties. State and county agencies will comply with the following procedures for Unusual Event, Alert, Site Area Emergency and General Emergency.

I. INDIAN POINT UNIT 2 and INDIAN POINT UNIT 3

A. LICENSEES

1. Control room operator will initiate the call. "THIS IS TO REPORT AN INCIDENT AT (SITE). STAND BY FOR ROLL CALL." (Conduct roll call to include the following stations :)

   Westchester County Warning Point
   Peekskill City Warning Point
   Rockland County Warning Point
   Orange County Warning Point
   Putnam County Warning Point
   NYSECC

During duty hours, the following stations may be manned to receive information:

*NYS DOH (Radiological Health)
*Westchester County EOC
*Orange County EOC
*Putnam County EOC
*Rockland County EOC
*Peekskill City EOC
*West Point EOC
*Indian Point AEOF
*Indian Point Technical Support Center (TSC)
*Indian Point EOF
*These stations do not have to be present on telephone before licensee operator begins the message information. If these stations want a repeat of information, the SECC will comply.

NOTE #1 - In the event a County Warning Point/EOC station does not answer roll call, licensee operator will proceed with the information. The SECC will be responsible to notify the non-answering station and give the required information.

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2. Upon completion of roll call, operator will give information outlined on Radiological Emergency Data Form (Attachment 7A and 7B)

3. Operator will again call roll, by saying, "(NAME OF STATION) did you copy?"

4. Operator will sign off by saying, "(LICENSEE NAME) out at (TIME) and (DATE)."

5. Operator will record dissemination of information on log.

B. COUNTY or CITY WARNING POINT (EOC)

1. When phone rings (light ON), operator will pick up handset immediately and after hearing its station name being called, depress the hand set push-to-talk button and identify by saying, "THIS IS (NAME) COUNTY or CITY, and release button.

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress hand set button and answer, "(NAME) County or City copied."

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

6. Operator will notify county or city officials in accordance with local notification procedures.

C. STATE EMERGENCY COMMUNICATIONS CENTER (SECC)

1. When phone rings (light ON), operator will pick up handset and after hearing its station depress the handset push-to-talk button and identify by saying, "THIS IS STATE EMERGENCY COMMUNICATIONS CENTER and release the button.

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress the push–to-talk button and answers: "STATE EMERGENCY COMMUNICATIONS CENTER copied."

4. Operator will remain on the line until all parties have verified receipt of message.

5. Operator will record receipt of information on log.

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6. The SECC operator will call via telephone the SEMO Duty Officer and 1st Deputy Director, State DOH, DSP and Engineering Technical Specialist personnel (Attachment 10), and transmit information received.

AT ALL TIMES: SECC - If a county warning point/EOC does not answer roll call, SECC operator will notify non-answering station and give required information (see Note #1).

7. The SECC Operator will notify State officials in accordance with State notification procedures (Attachment 10 & 12).

D. STATE HEALTH DEPARTMENT

1. When phone rings (light ON), operator will pick up handset after hearing its station name being called, depress the handset push-to-talk button identify by saying, "THIS IS STATE HEALTH DEPARTMENT," and release the button.

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data

Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress the handset push-to-talk button and answer, "STATE HEALTH DEPARTMENT copied."

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

6. Operator will notify DOH officials in accordance with the department's notification procedures (Attachment 10 & 12).

II. NINE MILE POINT NUCLEAR STATIONS and JAMES A. FITZPATRICK NUCLEAR POWER PLANT

A. LICENSEES

1. Control Room operator will initiate the call. "THIS IS TO REPORT AN INCIDENT AT (SITE). STAND BY FOR ROLL CALL." (Conduct roll call to include the following stations :) Oswego County Warning Point, NYSECC.

During duty hours, the following stations may be manned to receive information:

*NYS DOH (Radiological Health)

*Oswego County EOC
*These stations do not have to be present on the telephone before licensee operator begins message information. If these stations want a repeat of information, SWP will comply.

NOTE #1 - In the event the Oswego County Warning Point does not answer roll call, the licensee operator will proceed with the information. The SECC will be responsible to notify the Oswego County Warning Point and give the required information.

2. Upon completion of roll call, operator will give information outlined on Radiological Emergency Data Form (Attachment 7A and 7B).

3. Operator will again call roll, by saying, "(NAME OF STATION) did you copy?"

4. Operator will sign off by saying, "(LICENSEE NAME) out at (TIME) and (DATE)".

5. Operator will record dissemination of information on log.

B. COUNTY WARNING POINT (EOC)

1. When phone rings (light ON), operator will pick up handset after hearing its station name being called, depress handset push-to-talk button and identify by saying, "THIS IS OSWEGO COUNTY."

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress handset button and answer, "OSWEGO COUNTY copied" and release button.

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

6. Operator will notify County officials in accordance with local notification procedures.

C. STATE EMERGENCY COMMUNICATIONS CENTER (SECC)

1. When phone rings (light ON), operator will select circuit and after hearing its station name being called, depress the push-to-key and identify by saying, "THIS IS STATE EMERGENCY COMMUNICATIONS CENTER (SECC)," and release key.

2. Operator will take information as given by licensee operator and copy on Radiological

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Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress key and answer: "STATE EMERGENCY COMMUNICATIONS CENTER copied" and release button.

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

6. The SECC operator will call via telephone the SEMO Duty Officer and 1st Deputy Director, State DOH, DSP and Engineering Technical Specialist personnel (Attachment 10), and transmit information received.

STATE EMERGENCY COMMUNICATIONS CENTER - If Oswego County Warning Point does not answer roll call, the SECC operator will notify Oswego County Warning Point and give required information. (See Note #2.)

6. Operator will notify State officials in accordance with State notification procedures (Attachment 10 & 12).

D. STATE HEALTH DEPARTMENT

1. When phone rings (light ON), operator will pick up handset immediately and after hearing its station name being called, depress the handset push-to-talk key and identify by saying, "THIS IS STATE HEALTH DEPARTMENT and release key.

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress the hand set button and answer, "STATE HEALTH DEPARTMENT copied" and release key.

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

AFTER BUSINESS HOURS, WEEKENDS AND HOLIDAYS: STATE EMERGENCY COMMUNICATIONS CENTER - DOH personnel will be notified by SECC personnel and copy the information received. (See Note #1.)

6. Operator will notify DOH officials in accordance with the Department's procedures.

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III. ROBERT E. GINNA (GINNA) NUCLEAR POWER PLANT

A. LICENSEE

1. Control Room operator will initiate the call, "THIS IS TO REPORT AN INCIDENT AT the Ginna Nuclear Station. STAND BY FOR ROLL CALL." (Conduct roll call to include the following stations :)

- Wayne County Warning Point
- Monroe County Warning Point
- NYSECC

During duty hours, the following stations may be manned to receive information:

*NYS DOH (Radiological Health)
*Wayne County EOC
*Monroe County EOC

*These stations do not have to be present on telephone before licensee operator begins message information. If these stations want repeat of information, SECC will comply.

NOTE #1- In the event a county warning point station does not answer roll call, the licensee operator will proceed with the information, or the SECC (during non-duty hours) will be responsible to notify the non-answering station and give the required information.

2. Upon completion of roll call, operator will give information outlined on Radiological Emergency Data Form (Attachment 7A and 7B).

3. Operator will again call roll, by saying, "(NAME OF STATION) did you copy?"

4. Operator will sign off by saying, "Ginna Nuclear Station out at (TIME) and (DATE)."

5. Operator will record dissemination of information on log.

B. COUNTY WARNING POINT (EOC)

1. When phone rings (light ON), operator will pick up handset and after hearing its station name being called, depress the handset push-to-talk button and identify by saying, "THIS IS (NAME) County", and release button.

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will answer, "(NAME) County copied."
4. Operator will sign off by hanging up handset.

IPEC00201410

ATTACHMENT 1

5. Operator will record receipt of information on log.

6. Operator will notify County officials in accordance with local notification procedures.

C. STATE EMERGENCY COMMUNICATIONS CENTER (SECC)

1. When phone rings (beehive light ON), operator will pick up handset after hearing its station name being called, identify by saying, "THIS IS STATE EMERGENCY COORDINATION CENTER (SECC),"

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will answer: "STATE EMERGENCY COMMUNICATIONS CENTER copied."

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

STATE EMERGENCY COORDINATION CENTER - If a County Warning Point does not answer roll call, SECC operator will notify non-answering station and give required information (see NOTE #1).

6. The SECC operator will call via telephone the SEMO Duty Officer and 1st Deputy Director, State DOH, DSP and Engineering Technical Specialist personnel (Attachment 10), and transmit information received.

7. Operator will notify State Officials in accordance with State Implementing Procedures (Attachment 10 & 11)

D. STATE HEALTH DEPARTMENT

1. When phone rings (light ON), operator will pick up handset and after hearing its station name being called, identify by saying, "THIS IS STATE HEALTH DEPARTMENT, " and release the button.

2. Operator will take information as given by licensee operator and copy on Radiological Emergency Data Form (Attachment 7A and 7B).

3. After hearing its name, operator will depress hand set key and answer, "STATE HEALTH DEPARTMENT copied" and release button.

IPEC00201411

ATTACHMENT 1

4. Operator will sign off by hanging up handset.

5. Operator will record receipt of information on log.

IF AFTER DUTY HOURS - DOH personnel will be notified by the NYSECC personnel and copy the information received. (See Note #1.)

6. Operator will notify DOH officials in accordance with the Department's notifications procedures.

IPEC00201412

ATTACHMENT 2

TEST PROCEDURES FOR THE NEW YORK STATE
RADIOLOGICAL EMERGENCY COMMUNICATIONS SYSTEM (RECS)

*****The SECC initiates the RECS Line test for the Nine Mile Point (NMP) Site and the Ginna Nuclear Station. Initiation at the IPEC is performed by EOF. In this attachment, the initiator is identified as the "test originator".*****

1. Test originator will initiate call and announce for the NMP and Ginna Nuclear Station: "THIS IS A TEST. REPEAT. THIS IS A TEST. This is test originator calling all stations. Stand by for roll call".

NYSECC WILL CALL ROLL ACCORDING TO SEQUENCE OF CALLS IN 9 BELOW)

2. After hearing ring (light ON) all stations will lift up handset and after hearing its station name depress the hand set push-to-button and answer roll call. "(NAME OF STATION) TEST" and release.

3. After completing roll call, test originator will recall all stations not answering saying, "Test originator recalling (NAME OF STATION NOT ANSWERING)". (NAME OF STATION RECALLED will answer using terminology in 2 above.

4. Test originator will sign off by saying, "END OF TEST, test originator out at (TIME) and (DATE)".

5. All stations will log results.

6. All stations not answering initial test will be called on commercial telephone by NYSECC for reasons. Problems will be reported immediately to the appropriate licensee.

7. TEST SCHEDULE - Tests will be conducted weekly on Tuesdays or Wednesdays according to the following:

Test will be initiated by NYSECC will be a and b:

a. Ginna at 9:15 a.m.
b. Nine Mile Point at 9:30 a.m.

Tests will be initiated by EOF will be c:

c. IPEC every Wednesday at 9:30 a.m.

8. Unannounced tests will be conducted as necessary.

9. SEQUENCE OF ROLL CALL

IPEC00201413

a. INDIAN POINT - called in the following order:

NYSECC
Putnam Warning
Orange Warning
Rockland Warning
Westchester Warning
Peekskill Warning
Unit #2 CCR
Unit #3 CCR
Westchester Command Room
West Point
AEOF
EOF
NYS Health Dept.
SEMO Region II
Putnam EOC
Orange EOC
Rockland EOC
Westchester EOC
Peekskill EOC

b. NMP/JAF - called in the following order:

Nine Mile Point Unit #1 Control Room
Nine Mile Point Unit #2 Control Room
FitzPatrick Control Room
Oswego County Warning Point
Oswego County EOC
NYS Department of Health (Radiological Health)

c. GINNA - called in the following order:

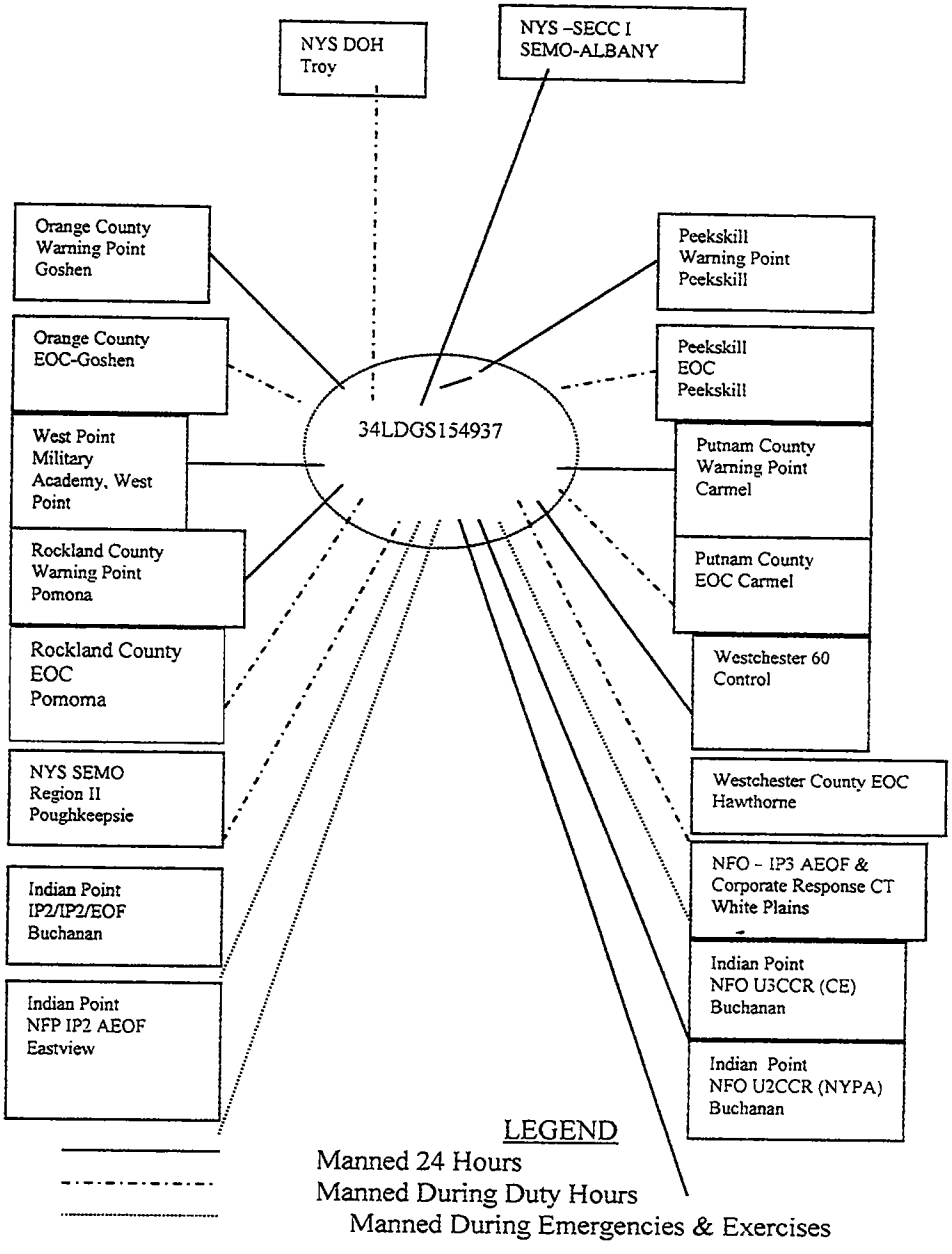
Ginna Control Room
Wayne County Warning Point
Wayne County EOC
Monroe County Warning Point
Monroe County EOC

(Other licensee operational areas having RECS phones will be tested by licensee.)

IPEC00201414

ATTACHMENT 3A

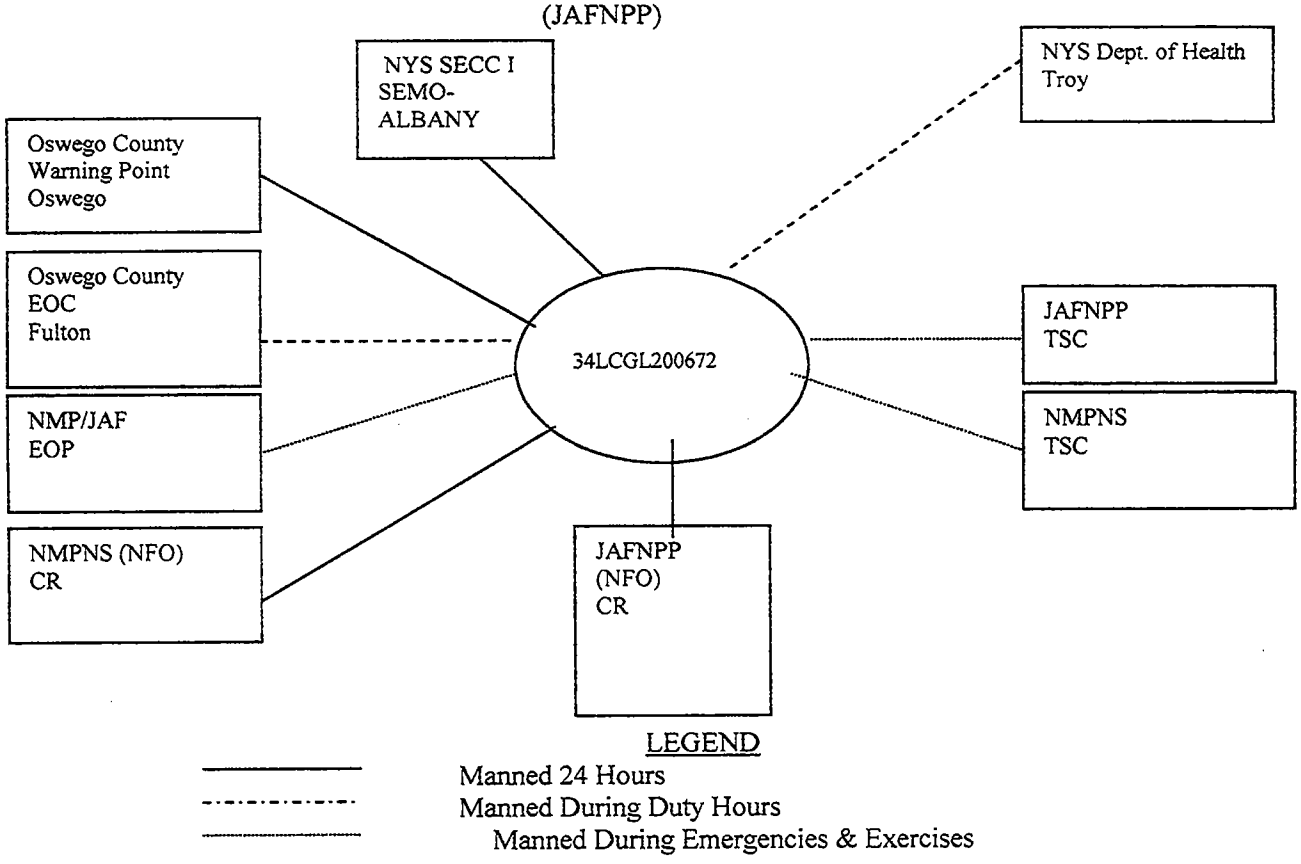
Radiological Emergency Communication System (RECS)
Indian Point Unit 2 and Unit 3



IPEC00201415

ATTACHMENT 3B

Radiological Emergency Communications System (RECS)
Nine Mile Point Nuclear Station (NMPS) & James A. FitzPatrick Nuclear Power Plant (JAFNPP)

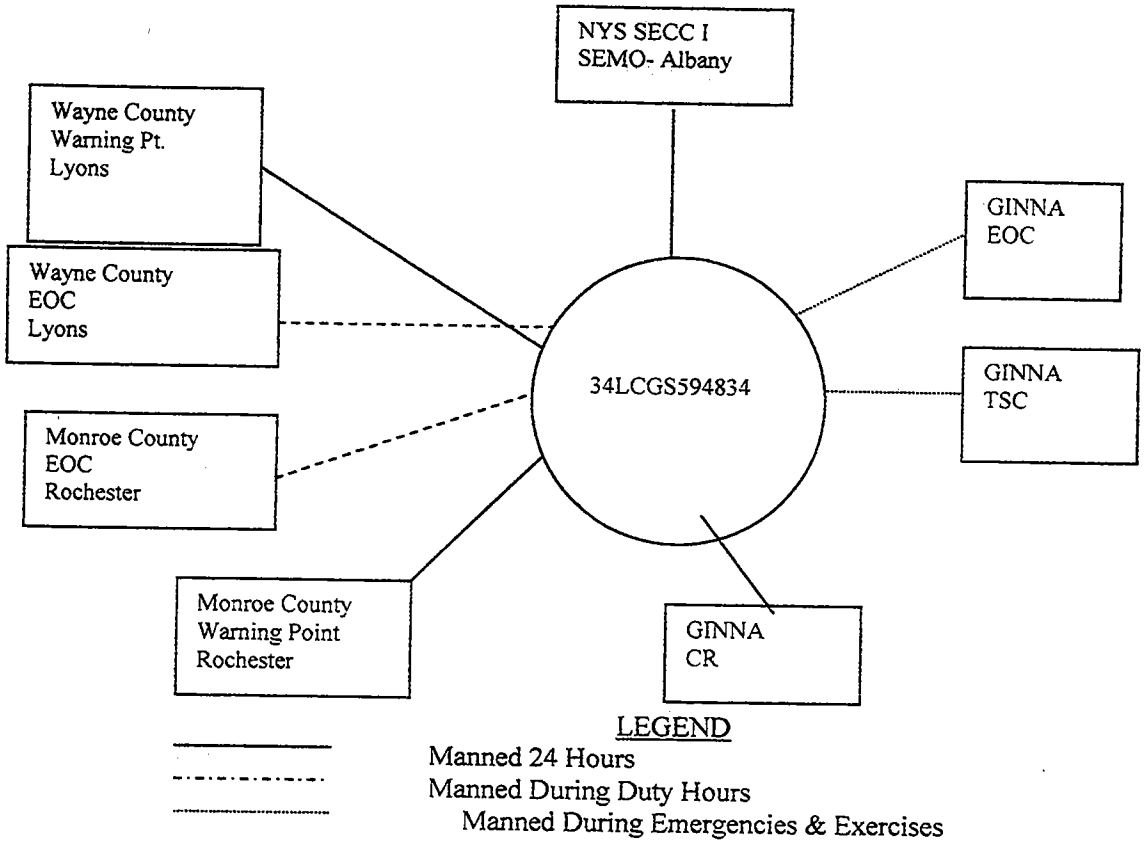


This communication system is activated by any party picking up its RECS instrument. All parties are activated simultaneously on the same line.

IPEC00201416

ATTACHMENT 3C

Radiological Emergency Communications System (RECS)
Ginna Nuclear Power Station



This communication system is activated by any party picking up its RECS instrument. All parties are activated simultaneously on same line.

IPEC00201417

ATTACHMENT 4

RADIOLOGICAL EMERGENCIES
PROCEDURE FOR INITIAL RESPONSE FOR DEPARTMENT OF HEALTH-BERP PERSONNEL

This is the call-up list that will be used by the State Emergency Communications Center (SECC) for a radiological emergency. The SECC will call down the list until someone is reached. For emergencies involving nuclear power plants that person will become Rad Heath I and will be responsible for initiating the sequence of calls required to implement the State Radiological Emergency Preparedness Plan. This list is also being provided to the U.S. Department of Energy's RAP Team at the Brookhaven National Laboratory and the U.S. Nuclear Regulatory Commission.

(These call-up lists are to be followed from top to bottom until someone is reached.

BUREAU OF ENVIRONMENTAL RADIATION PROTECTION STAFF	OFFICE TELEPHONE
*Stephen Gavitt	402-7550
*Robert Dansereau	402-7590
*Cindy Costello	402-7556
*Mark Virgil	402-7576
*Gerry O'Connor	402-7580

RAD 320 list is on file at the SECC

(24 HOUR NUMBER) STATE EMERGENCY COMMUNICATIONS CENTER 518-292-2200 FAX NUMBER (518) 322-4982

PUBLIC HEALTH DUTY OFFICER
(4:45 PM – 8 AM, weekend & holidays) 1 (866) 881-2809

REGIONALRADIOLOGICAL HEALTH SPECIALIST	NAME	OFFICE TELEPHONE
Western Region-Buffalo	*Barbara Ignatz	716-847-4501
	*Sara Koch	716-847-4501
Rochester Field Office	*Mai Tran	585-423-8068
Central New York Field Office	*Gary Baker	315-477-8448
	*Vidya Goyal	315-477-8452
	*William Kelleher	315-477-8451
Metropolitan Regional Field Office	*Andrew Bass	631-851-3083

* Home telephone numbers on file in SECC

ATTACHMENT 5

EMERGENCY NOTIFICATION ROSTER
NUCLEAR POWER PLANT EMERGENCY
NEW YORK STATE EMERGENCY MANAGEMENT OFFICE

NAME	TITLE	BUS.TELEPHONE
1. Duty Officer		(518) 292-2200
2. John Gibb	Director	(518) 292-2301
3. Andrew Feeney	1st Deputy Director	(518) 292-2305
4. Tom Fargione	Deputy Director	(518) 292-2400
5. Greg Brunelle	Deputy Director	(518) 292-2252
6. Kevin Kraus	Associate Planner	(518) 292-2359
7. Ken Bergmann	Associate Planner	(518) 292-2362
8. William Peat	PIO	(518) 292-2311
9. SEMO Region Offices	Regional Director	See Attachment 6

The SECC will notify additional SEMO staff as appropriate.

ATTACHMENT 6

SEMO REGIONAL OFFICES

REGIONAL OFFICE II – INDIAN POINT
171 Cheney Drive
Poughkeepsie, NY 12601-1098
PHONE: (845)-454-0430 (518) 292-2421 (8 AM – 5 PM)
FAX: (845)-454-4620 E-MAIL: SEMORegion2@semo.state.ny.us

NAME	TITLE	WORK PHONE
Mark Ferrari	Regional Director	845-454-0430
Eugene Lucchese	Regional Planner	845-454-0430
Nadine Macura	Regional Planner	845-454-0430
Nelson Delameter	Regional Coordinator	845-454-0430
Linda Whitlock	Secretary	845-454-0430

REGIONAL OFFICE IV-NINE MILE POINT/JAF
10 Adler Drive, Suite 103
East Syracuse, NY 13057
PHONE: (315)-438-8907 (518) 292-2441 (8 AM – 5 PM)
FAX: (315)-438-3350 E-MAIL: SEMORegion4@semo.state.ny.us

NAME	TITLE	WORK PHONE
Charles Wright	Regional Director	315-438-8907
Thomas McCartney	Regional Coordinator	315-438-8907
Ronald Raymond	Regional Planner	315-438-8907
Toni Stevens	Secretary	315-438-8907

REGIONAL OFFICE V – GINNA
1144 East Union Street
Newark, NY 14513
PHONE: (315)-331-4880 (518) 292-2451 (8 AM – 5 PM)
FAX: (315) 331-3934 E-MAIL: SEMORegion5@semo.state.ny.us

NAME	TITLE	WORK PHONE
William Clark	Regional Director	315-331-4880
Douglas Winner	Regional Coordinator	315-331-4880
William Correa	Regional Planner	315-331-4880
Elizabeth Walters	Secretary	315-331-4880

ATTACHMENT 7A

NEW YORK STATE
UPSTATE RADIOLOGICAL EMERGENCY DATA FORM
PART 1 Notification # _____

This is to report an incident at _____, Standby for roll call.

1. This message is being transmitted on: _____ (date) at _____ (time-24 hr clock) Via: A. RECS B. Other _____

2. This is :
A. An Actual Emergency B. An Exercise

3. The Emergency Classification is:
A. UNUSUAL EVENT
B. ALERT
C. SITE AREA EMERGENCY
D. GENERAL EMERGENCY
E. EMERGENCY TERMINATED
F. Other _____

4. This Emergency Classification declared on: _____ (date) at _____ (time-24 hr clock)

5. Release of Radioactive Materials due to the classified event:
A. No Release
B. Release **BELOW** federal limits
☐ To Atmosphere ☐ To Water
C. Release **ABOVE** federal limits
☐ To Atmosphere ☐ To Water
D. Unmonitored release requiring evaluation

6. The following Protective Actions are recommended to be implemented as soon as practicable:

A. **NO NEED** for **PROTECTIVE ACTIONS** outside the site boundary

B. **EVACUATE** and **IMPLEMENT** the **KI PLAN** for the following ERPAs and All remaining ERPAs **MONITOR** the **EMERGENCY ALERT SYSTEM**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

W1 W2 W3 W4 W5 W6 W7 M1 M2 M3 M4 M5 M6 M7 M8 M9

NOTE: OFFSITE AUTHORITIES SHOULD CONSIDER SHELTER-IN-PLACE + TAKE KI IF EVACUATION IS NOT FEASIBLE

C. **SHELTER-IN-PLACE** and **IMPLEMENT** the **KI PLAN** for the following ERPAs and All remaining ERPAs **MONITOR** the **EMERGENCY ALERT SYSTEM**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

W1 W2 W3 W4 W5 W6 W7 M1 M2 M3 M4 M5 M6 M7 M8 M9

7. EAL # _____

Brief Event Description & Other Significant Information _____

8. Reactor Status: A. Operational B. Shutdown _____ (date) at _____ (time 24 hr clock)

9. Wind Speed: A. _____ Miles/Hour at elevation _____ Feet
B. _____ Miles/Hour at elevation _____ Feet

10. Wind Direction: A. (From) _____ Degrees at elevation _____ Feet
B. (From) _____ Degrees at elevation _____ Feet

11. Stability Class: Unstable - A B C Neutral - D Stable - E F G

12. Reported By - Communicator's name: _____ Telephone # _____

✓ In ▷ indicates change in this item from previous Notification #

REV. 6/06

ATTACHMENT 7B

NEW YORK STATE
Indian Point Energy Center
RADIOLOGICAL EMERGENCY DATA
PART 1

Notification # _____

This is the Indian Point Energy Center with a Part 1 notification on: _____ (Date) at _____ (Time-24 hr clock)

1. This is:
   A. An Actual Emergency B. An Exercise at Unit 2 Unit 3 Both

   Reactor Status:

   Unit 2 A. Operational B. Shutdown _____ (Date) at _____ (Time-24 hr clock)

   Unit 3 A. Operational B. Shutdown _____ (Date) at _____ (Time-24 hr clock)

2. The Emergency Classification is:

   A. UNUSUAL EVENT C. SITE AREA EMERGENCY E. EMERGENCY TERMINATED

   B. ALERT D. GENERAL EMERGENCY

   This Emergency Classification declared on: _____ (Date) at _____ (Time 24 hr clock)

3. EAL # _____

   Event Description:

4. Release of Radioactive Materials due to the Classified Event:
   A. No Release
   B. Release BELOW federal limits
      ☐ To Atmosphere ☐ To Water
   C. Release ABOVE federal limits
      ☐ To Atmosphere ☐ To Water
   D. Unmonitored release requiring evaluation

5. Wind Speed: _____ Meters/Sec. at elevation 10 Meters

6. Wind Direction: (From) _____ Degrees at elevation 10 Meters

7. Stability Class: A B C D E F G

8. The following Protective Actions are recommended to be implemented as soon as practicable:
   A. NO NEED for PROTECTIVE ACTIONS outside the site boundary
   B. EVACUATE and IMPLEMENT the KI PLAN for the following Areas
      All remaining Areas MONITOR the EMERGENCY ALERT SYSTEM

   2 miles around 5-miles downwind 5 miles around 10-miles downwind Entire EPZ
   In the following Sectors 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
   NOTE: OFFSITE AUTHORITIES SHOULD CONSIDER SHELTER-IN-PLACE + TAKE KI IF EVACUATION IS NOT FEASIBLE
   C. SHELTER-IN-PLACE and IMPLEMENT the KI PLAN for the following Areas and
      All remaining Areas MONITOR the EMERGENCY ALERT SYSTEM

   2 miles around 5-miles downwind 5-miles around 10-miles downwind Entire EPZ
   In the following Sectors 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

9. Reported By - Communicator: _____ Telephone # _____

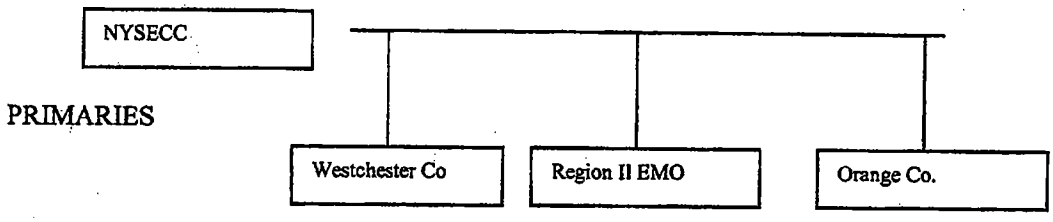
ATTACHMENT 8

SUPPLEMENTAL COMMUNICATIONS SYSTEMS

A. INDIAN POINT

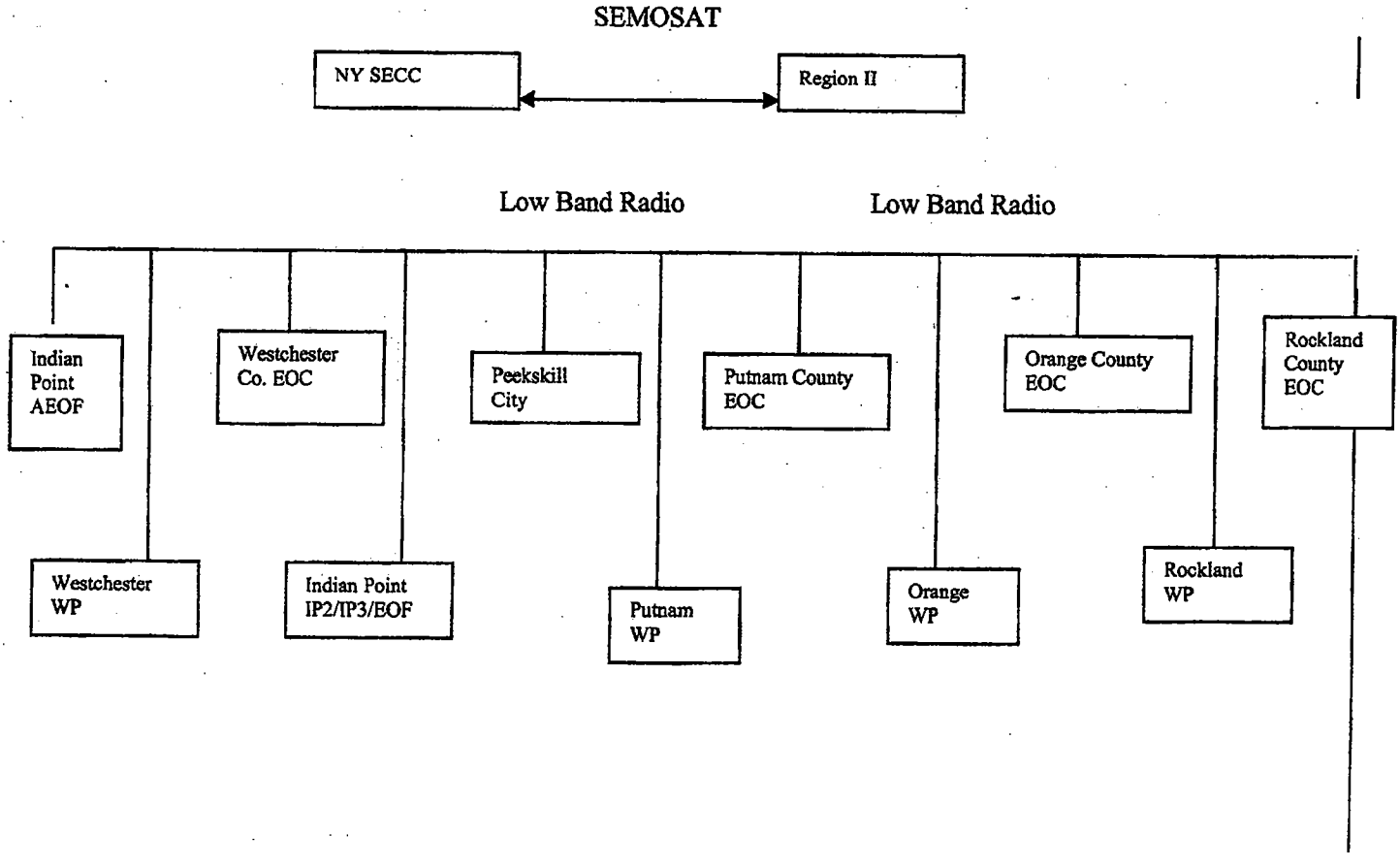
1. Commercial Telephone - Available at all locations

2. NAWAS



NOTE: This circuit is heard at twenty other locations statewide

3.. Local Government Radio Net



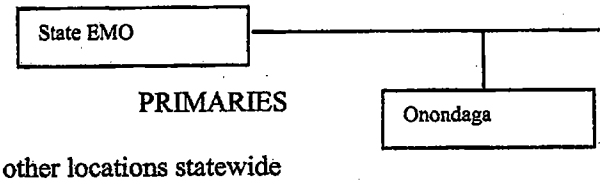
IP3-IP2-EOF-IP2 AEOF-IP3 AEOF-JNC-Westchester –Rockland-Putnam-NYSECC

ATTACHMENT 8

B. Nine Mile Point

1. Commercial Telephone - Available at all locations

2. NAWAS



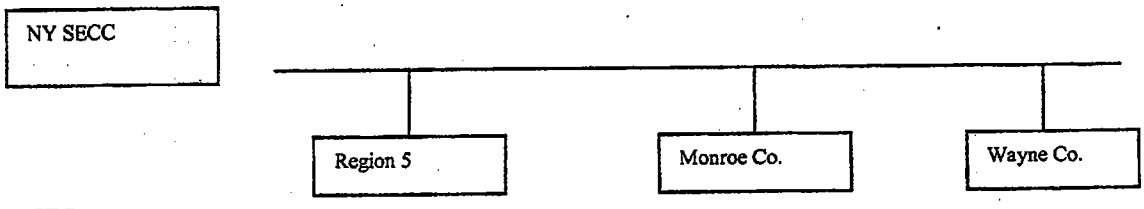
NOTE: - The circuit is heard at twenty other locations statewide

3. JAF TSC-JAF EOF-JNC Oswego –NYSECC-IP3 AEOF.

C. Ginna

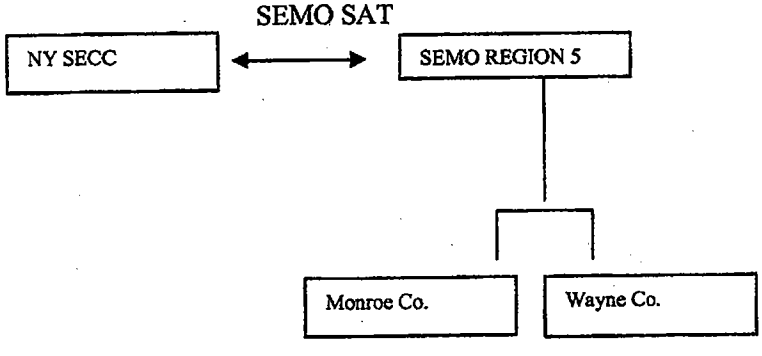
1. Commercial Telephone - Available at all locations

2. NAWAS



PRIMARIES

3. Local Government Radio Net



ATTACHMENT 9

HARRIMAN/BEAR MOUNTAIN STATE PARK RECEPTION CENTER NOTIFICATION PROCEDURE

1.0 INITIATING EVENTS

The Harriman and Bear Mountain State Parks are located in Rockland and Orange Counties north and west of the Indian Point Nuclear Power Station. It is the policy of the State and local government to close these parks at the Alert Classification of any emergency at Indian Point. In the event of an immediate General Emergency involving the release of radioactive materials, the counties may require supplemental monitoring assistance as a result of park transients arriving at general population reception centers.

To supplement local monitoring efforts, DPC agency personnel may be activated to supplement monitoring and decontamination personnel at the county general population reception centers.

(NOT USED)

ATTACHMENT 10

STATE NOTIFICATION AND ACTIVATION LIST

Upon receipt of information of an emergency at a nuclear facility, the SECC operator will notify agency representatives for stand-by or activation of the State EOC according to the emergency class declared.

I. UNUSUAL EVENT

STAND-BY	ACTIVATE TO EOC
A. STATE EMERGENCY MANAGEMENT OFFICE	
B. HEALTH DEPARTMENT (Radiological)	
C. DEPARTMENT OF HEALTH	
D. STATE POLICE	
E. ENGINEERING TECHNICAL SPECIALIST	

This list is maintained by NYSEMO. Distribution of names and phone numbers is controlled and is provided on a need-to-know basis.

Changes will be made to master copies of notification lists as changes are received at SECC. Lists will be updated and published on a quarterly basis.

II. ALERT

STAND-BY	ACTIVATE TO EOC
A. NYSERDA	A. SEMO
	B. HEALTH DEPARTMENT (RADIOLOGICAL)
B. LABOR DEPARTMENT	C. ENGINEERING TECHNICAL SPECIALISTS
C. OFFICE OF GENERAL SERVICES	D. DIVISION OF STATE POLICE
D. OFFICE OF TEMPORARY & DISABILITY ASSISTANCE	E. DEPARTMENT OF TRANSPORTATION
E. OFFICE OF MENTAL HEALTH	F. DIVISION OF MILITARY AND NAVAL AFFAIRS

ATTACHMENT 10

STAND-BY	ACTIVATE TO EOC
F. OFFICE MENTAL RETARDATION & DEVELOPMENTAL DISABILITY	G. PARKS, RECREATION & HISTORIC PRESERVATION
G. DEPARTMENT OF CORRECTIONAL SERVICES	H. NYS EDUCATION DEPARTMENT
H. OFFICE OF CHILDREN AND FAMILY SERVICES	I. DEPARTMENT OF HEALTH
I. OFFICE OF AGING	J. DEPARTMENT OF ENVIRONMENTAL CONSERVATION
J. AMERICAN RED CROSS	K. OFFICE OF FIRE PREVENTION AND CONTROL
K. DIVISION OF CRIMINAL JUSTICE SERVICES	L. FEMA REGION II
L. SALVATION ARMY	M. THRUWAY AUTHORITY
M. SUNY	N. AGRICULTURAL & MARKETS
	O. PUBLIC SERVICE COMMISSION
	P. OFFICE OF HOMELAND SECURITY
	Q. CYBER SECURITY

IPEC00201428

ATTACHMENT 10

III. SITE AREA EMERGENCY

STAND-BY	ACTIVATE TO EOC
	A. SEMO
	B. NYSERDA
	C. LABOR DEPARTMENT
	D. OFFICE OF GENERAL SERVICES
	E. OFFICE OF TEMPORARY & DISABILITY SERVICES
	F. MENTAL HEALTH
	G. MENTAL RETARDATION & DEVELOPMENTAL DISABILITY
	H. CORRECTIONAL SERVICES
	I. OFFICE OF CHILDREN FAMILY SERVICES
	J. OFFICE OF AGING
	K. AMERICAN RED CROSS
	L. DIVISION OF CRIMINAL JUSTICE SERVICE
	M. SALVATION ARMY
	N. AG&MKTS
	O. PUBLIC SERVICE COMMISSION

IPEC00201429

ATTACHMENT 10

STAND-BY	ACTIVATE TO EOC
	P. THRUWAY AUTHORITY
	Q. STATE UNIVERSITY
	R. DEPARTMENT OF HEALTH BERP
	S. DEPARTMENT OF HEALTH
	T. ENGINEERING TECHNICAL SPECIALISTS
	U. DIVISION OF STATE POLICE
	V. DEPARTMENT OF TRANSPORATATION
	W. DIVISION OF MILITARY AND NAVAL AFFAIRS
	X. PARKS, RECREATION & HISTORIC PRESERVATION
	Y. NEW YORK STATE EDUCATION DEPARTMENT
	Z. NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
	AA. OFFICE OF FIRE PREVENTION AND CONTROL
	BB. FEMA, REGION II
	CC. OFFICE OF HOMELAND SECURITY
	DD. CYBER SECURITY

IPEC00201430

ATTACHMENT 10

The Following agencies are notified for informational purposes of all Alerts, Site Area Emergencies and General Emergencies.

Agency Name:

BANKING
BRIDGE AUTHORITY
DEPARTMENT OF STATE
DEPARTMENT HOUSING COMMUNITY RENEWAL
EMPIRE STATE DEVELOPMENT CORP
INSURANCE DEPT
METRO TRANSIT AUTHORITY
OFFICE FOR HOMELAND SECURITY
OFFICE FOR TECHNOLOGY
PANY&NJ
VERMONT WARNING POINT
NEW JERSEY WARNING POINT
PENNSYLVANIA WARNING POINT
CANADA WARNING POINT ONTARIO
COAST GUARD
FAA
VOAD
RAILWAYS
TELEPHONE COMPANIES
CONNECTICUT WP
MASSACHUSETTS WP

IV. GENERAL EMERGENCY

In the event that the emergency escalates to a General Emergency without declaration of a Site Area Emergency, the SECC operator will notify all agencies as shown in the previous section.

This list is maintained by NYSEMO. Distribution of names and phone numbers is controlled and is provided on a need-to-know basis.

Changes will be made to master copies of notification lists as changes are received at SECC
Lists will be updated and published on a quarterly basis.

IPEC00201431

(NOT USED)

ATTACHMENT 11

SPECIALIZED CONTACT LIST
FOR RADIOLOGICAL EMERGENCY INFORMATION OR SUPPORT

When requested by the State DOH appropriate agencies from the following list are to be contacted and provided messages from DOH. Staff from SEMO and/or the DOH will proceed to the EOC and assist SECC personnel with completing required notification:

		Telephone No.
A. U.S. Department of Homeland Security		
24-HOUR NOTIFICATION		212-680-3627
RAC HOTLINE		800-213-8965
		202-586-8100
B. Department of Energy – RAP Team		
24-HOUR NOTIFICATION		631-344-2200 (Brookhaven National Laboratory)
C. U.S. Environmental Protection Agency - Region II		
Main Spill Hotline		212-637-5000
Main Switchboard		800-424-8802
		732-548-8730
D. Nuclear Regulatory Commission - Region I		
Nancy McNamara		610-337-5337
	Cell	484-919-8346
Marjorie McLaughlin		610-337-5337
	Cell	484-919-2198
24 HOUR NOTIFICATION		301-816-5100
BACKUP		301-951-0550
FAX		301-816-5151
E U.S. National Response Center		800-424-8802
		202-267-2675
F. U.S. Department of Transportation Chemtrec		
24 HOUR NOTIFICATION		800-424-9300
G. Food and Drug Administration		781-596-7717
24 HOUR NOTIFICATION		781-939-2380

IPEC00201433

ATTACHMENT 11

H. United States Department of Agriculture	
1. Director, Office of Emergency Planning, FSIS, USDA	202-475-3683
2. State Food and Agriculture Council	
I. New York City Bureau for Radiation Control	212-676-1572
Off Duty - Use Poison Control	212-764-7667
J. For Ginna and Nine Mile Point/FitzPatrick	
Canada - Province of Ontario	416-314-0472
National Radiation Protection Bureau	418-643-3256
Canada – Providence of Quebec	866-650-1666
Canada Nuclear Safety Commission	613-995-0479

NOTE:
DHS notifies federal agencies for informational purposes only. Requests for federal assistance other than EPA and DOE, will be initiated by the State.

USDA notification:
DHS A notifies the Office of Emergency Planning (OEP), FSIS, USDA. The OEP, FSIS, USDA will contact the State Food and Agriculture Council. If the situation warrants immediate USDA support, the State may also request DHS to contact the USDA State Food and Agriculture Council.

The SECC contacts contiguous state by using:

1. Commercial Phone - primary
2. NAWAS - backup

Canadian Notification - the Province of Ontario is notified by the SECC by use of commercial telephone. If not reachable, the National Radiation Protection Bureau will be contacted by commercial telephone. The State will ask DHS to contact the above if the SECC is unable to do so.

Changes will be made to master copies of notification lists as changes are received at SECC. Lists will be updated and published on a quarterly basis. Distribution of telephone numbers is controlled.

IPEC00201434

ATTACHMENT 12

INGESTION EPZ COUNTIES/CONTIGUOUS STATES AND CANADIAN PROVINCE WARNING POINTS AND EOC PHONE NUMBERS

Office	Warning Point	EOC/Local EMO
A. Indian Point		
Westchester		
Orange		
Putnam		
Rockland		
Dutchess		
Nassau		
New York City		
Suffolk		
Sullivan		
Ulster		
Connecticut		
New Jersey		
B. Nine Mile Point		
Oswego		
Cayuga		
Jefferson		
Lewis		
Madison		
Oneida		
Onondaga		
Ontario		
Seneca		
Wayne		
Canada-Ontario		

C. Ginna

Monroe
Wayne
Cayuga
Genesee
Livingston
Onondaga
Ontario
Orleans
Oswego
Seneca
Wyoming
Yates
Canada-Ontario

All notification lists are maintained by the SECC. Lists will be updated and published on a quarterly basis.

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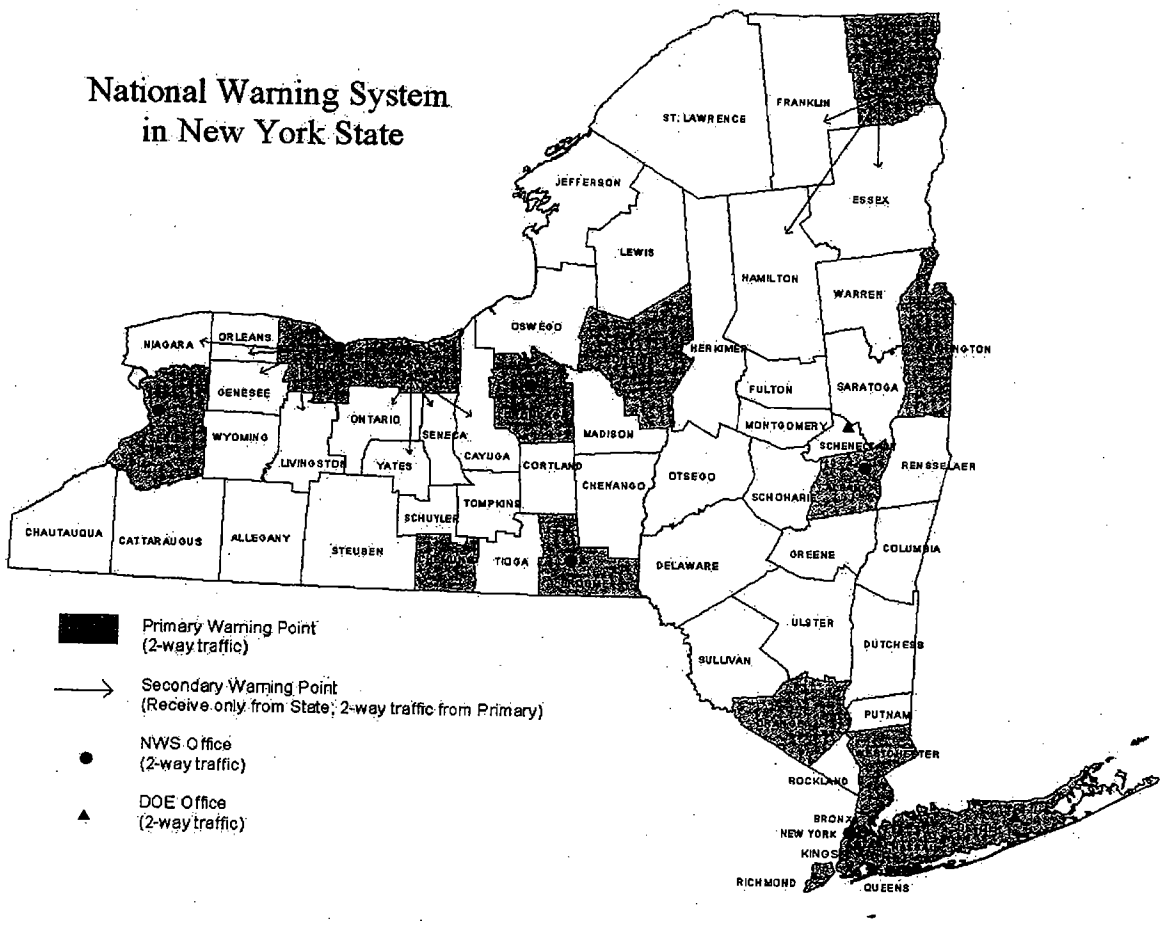
ATTACHMENT 13



IPEC00201437

NEW YORK STATE
COMMUNICATIONS SYSTEMS IN SUPPORT OF EMERGENCIES

General Discussion:

The communications system operated and maintained by the State Emergency Management Office supports response to all hazards statewide and are not dedicated to radiological response. The core of the SEMO system uses a dedicated satellite spectrum to connect SEMO's Regional Operations Centers to the State Emergency Coordination Center (SECC) in Albany. Digital microwave links extend this system to remote controlled radio repeater stations that provide coverage to most of the state. These remote radio repeaters can communicate with Local Governments and regional staff.

In addition, SEMO operates mobile and portable resources. Three broadband satellite terminals are available in vehicular and ground mount configurations. Bandwidth capacity can be as large as 3 mbps or more for commercial grade video transmission. These satellite terminals support situational awareness and video damage assessment as well as providing an electronic umbilical cord between the SECC and on-scene Command Posts. SEMO has one Mobile Command Post (Command 1) and is building five new communications vehicles. These units will have radios in all bands and will have cross-band capability in support of interoperability.

The radio spectrum supported includes HF radio to communicate with DHS and SEMO Regional Operations Centers. A secure voice and HF e-mail upgrade has been deployed in our regional offices. All public safety radio FM bands, aviation, marine, and some conventional military bands are supported. Radios that are subscribers of several local trunked radio networks are included.

SEMO headquarters maintains a stock of several dozen satellite phones, several hundred handheld VHF, 800 Mhz, and low band radios for hand receipt to state and local agencies. The Communications Section can deploy 800 Mhz repeaters to support NPSAC channels. The handheld units are packaged in lots of twelve with chargers and accessories ready for shipment by overnight shipper.

Information pertaining to specific frequencies, quantities and storage locations is sensitive and available by contacting the Communications Section.

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PROCEDURE C

NEW YORK STATE
RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN

PROCEDURE C - PUBLIC INFORMATION

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(NOT USED)

NEW YORK STATE
RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN

PROCEDURE C - PUBLIC INFORMATION

1.0 STATEMENT OF PURPOSE

The lead spokesperson for the release of information to the public and the press during a radiological emergency in New York State shall appointed by the Chair for the New York State Disaster Preparedness Commission (DPC). The NYS Department of Health, as lead agency, has typically filled this spokesperson role.

The SEMO PIO is responsible for ensuring the accurate and timely release of State information to the public and the media concerning public protective action recommendations and state emergency response activities during radiological emergencies.

2.0 PUBLIC INFORMATION OFFICER DUTIES

The SEMO PIO shall be responsible for the following activities:

2.1 Identification, Recruitment and Training of Public Information Staff

The SEMO PIO will identify interested and capable individuals from other State agencies to serve as assistant PIOs for radiological emergency preparedness. The SEMO PIO will provide training and orientation sessions for the assistant PIOs at least once each year, and will provide them with complete copies of necessary State and local public information and education procedures, related maps, and educational materials on radiological emergency planning.

2.2 Exercises and Drills

The SEMO PIO and assistant PIOs shall participate in all preparedness exercises and shall be responsible for ensuring that State public information policies and procedures are carried out appropriately and accurately.

2.3 Liaison with County and Licensee Public Information Officers

The SEMO PIO shall be the State contact point for all county and licensee PIOs on matters relating to emergency preparedness information. The SEMO PIO will ensure county and licensee PIOs are kept informed of SEMO PIO activities, will participate in determination of site and equipment for all near-site information centers, and will seek to ensure consistency and cooperation among the related public information programs.

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2.4 Training

The SEMO PIO shall provide to county PIOs, as necessary, training in radiological emergency public information. Training sessions shall include overview of plans, PIO responsibilities during exercises and emergencies, coordination of news releases, Emergency Alert System (EAS) messages, equipment and staffing needs, and ongoing public education responsibilities and projects.

2.5 Public Education

Working with county and licensee PIOs, the SEMO PIO shall develop and implement programs to raise public consciousness of radiological emergency preparedness. These activities include, but are not limited to briefings for news editors and reporters; development and dissemination of germane booklets, brochures, and news releases; participation in "town meetings;" development of radio and TV public service announcements.

Information shall be disseminated to the public at least once annually. Such information shall include educational information on radiation, contact number or place for additional information, evacuation routes and corresponding reception and/or congregate care centers, sheltering, respiratory protection, the special needs of the handicapped, and a transient emergency information program.

2.6 Annual Media Outreach

The SEMO PIO, in coordination with county and licensee PIOs, will ensure that a Radiological Emergency Preparedness Plan (REPP) briefing is conducted for the media at least annually. This may be a briefing session at the Joint Information Center (JIC) or through visits to the major media and providing them with updated materials.

2.7 Plan Development

The SEMO PIO shall review the public information portions of the State REP Plan at least annually and make any necessary revisions and/or additions.

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3.0 SHARING OF PUBLIC INFORMATION

To ensure the prompt dissemination of pertinent, credible and reliable information to the media and the public during a radiological emergency, State, county and licensee spokespersons shall share information and releases.

3.1 Designation of Near-Site Information Centers

To facilitate coordination of information release, each site shall have a designated near-site JIC. The JIC shall be the sole site from which emergency information shall be issued to the media and public by designated spokespersons for the State, the affected county (ies) and the affected licensee.

Each JIC must be capable of performing the following functions:

1. Issue EAS messages
2. Conduct media briefings
3. Conduct Public Inquiry operations

Each near-site JIC shall be equipped with adequate communications equipment and production equipment to allow timely collection of the writing and distribution of informational materials, and regular media briefings.

3.2 Information Release

The SEMO PIO shall release, on behalf of and with the approval of the State Disaster Preparedness Commission (DPC) Chair, the following general types of information during an emergency:

- Announcement of State receipt of emergency notification by the affected licensee;
- Announcement of activities of State Emergency Operations Center (EOC);
- Regular and timely updates of State activities, determinations and policies related to the emergency;
- State assessment of projected doses and/or dose rates related to any release of radiation;
- State determination of any protective action, including the recommendation to ingest KI (Potassium Iodide) and the basis for these determinations; and
- Regular and timely updates of State recovery and re-entry activities.

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3.3 Sharing of Information Release

The State PIO shall share information release with county and licensee PIOs. The State PIO shall keep records of information released to the media and public during an exercise or emergency, and shall maintain a record of telephone inquiries related to any exercise or emergency.

3.4 Public Inquiry

The SEMO PIO, in conjunction with county and licensee PIOS, shall maintain a Public Inquiry system capable of responding to factual inquiries, and providing input to those subsequent news releases and/or press statements that can be addressed, in order to ensure that misinformation and rumors in a radiological emergency are kept to a minimum. Information that is broadcast over electronic media or printed in the print media shall be monitored to intercept any inaccurate information and provide corrective material.

3.5 State Declaration of Emergency

There is no change in the SEMO PIO's role following a declaration of a State Disaster Emergency by the Governor.

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ATTACHMENT 1: EMERGENCY ALERT SYSTEM

1.0 Objectives

The Emergency Alert System (EAS) is the vehicle through which public officials from the counties and the State of New York can advise the public directly of:

- The status of emergencies involving any of New York's nuclear power plants
- Any protective actions that the public should take to ensure minimum risk of danger or radiation exposure

2.0 Concept of Operations

Transmission of messages to the public via EAS must be coordinated to ensure the following:

2.1 The EAS message is ready for broadcast when the prompt notification system is first activated

2.2 The EAS message content has been cleared with county officials and the State decision makers prior to release

2.3 EAS messages are concise, cohesive and comprehensible to the public

2.4 The State and counties do not clutter the airwaves with individual messages, but compile them into single messages that meet the requirements stated in 2.3 above

2.5 EAS messages are verifiable and verified before release

3.0 Existing Procedures

The lead county will access EAS in accordance with locally developed plans.

3.1 Immediate Declaration of a General Emergency

In the event that that a General Emergency has been declared (i.e., a fast-breaking incident), the county (ies) will activate their siren system and release a prearranged EAS message to the public prior to coordination with the State. In the case of multiple county involvement, a lead county has been selected to activate the EAS system, as well as authorization and procedures to activate the siren system immediately. Procedures are contained in each county's plan.

3.2 Routine EAS Message Preparation

Should EAS activation be required due to an emergency at a nuclear power plant site, the affected county (ies) and the State will participate in and coordinate EAS message development in accordance with JIC procedures for the specific site.

4.0 EAS MESSAGE CONTENT

4.1 Required EAS Message Content

- Location
- Governing authority (State or county)
- Plant
- Protective actions
- Affected areas

5.0 State Declaration of Emergency

There is no change in the above listed procedures following a Declaration of Emergency by the Governor.

ATTACHMENT 2: JOINT INFORMATION CENTER

1.0 Purpose

The purpose of a Joint Information Center (JIC) is to provide a single location for the dissemination of information to the public and media concerning an emergency at a nuclear power plant, and to enhance coordination and prompt release of accurate information by officials from the State, affected county (ies) and licensee.

2.0 Operation

A JIC will be established near each nuclear power plant site in New York State. This information center will be the single location for the dissemination of information to the media and public concerning all State, local, and licensee emergency response activities and recommended public protective actions.

To ensure coordinated and accurate information release, all information proposed for release, either in the form of EAS messages, press releases or through media briefings, will be shared by all lead PIOs from the State, county(ies) and licensee.

Sufficient equipment and space will be provided for use by the State, county, and licensee public information staff and media representatives to ensure effective operation of the information center.

Specific operational procedures are outlined in each site's specific JIC plans.

3.0 JIC Locations

- Indian Point
  200 Broadhurst Avenue, Hawthorne, New York 10532

- Ginna
  1255 Research Forest, Macedon, NY 14502

- Nine Mile Point / Fitzpatrick
  10 Airport Road, Fulton, New York 13069

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ATTACHMENT 3: PUBLIC INQUIRY

1.0 Public Inquiry Procedures

During a radiological emergency at a nuclear power plant, a JIC will be activated to serve as the single, central facility for the coordinated release of information regarding the emergency from the State, county (ies) and licensee. Public Inquiry functions carried out at the JIC consist of the following three elements: Public Inquiry, Media Monitoring and Media Response. Details regarding each of these elements can be located at each site's specific JIC procedures.

Each part of the Public Inquiry System will function as a complement to the rest of the program. Inaccurate information from media coverage may be addressed by the Public Inquiry team members or by the appropriate PIO. Media briefings and/or press releases can be used to address specific rumors that have become apparent through calls to the Public Inquiry team or from off-air monitoring reports.

The minimum staffing requirements for drills and exercises are as follows

- Ginna: 7 (seven)
- Nine Mile Point: 7 (seven)
- Indian Point: The New York State Tax & Finance Call Center will provide as many as telephones as required based on demand

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PROCEDURE D

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(NOT USED)

NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
PROCEDURE D - STATE EMERGENCY OPERATIONS CENTER

1.0 PURPOSE

State operations in response to a radiological emergency will be directed from the New York State Emergency Operations Center (EOC). This procedure is to provide instruction to the preassigned emergency staff concerning their movement to the EOC and the initial actions to be taken upon arrival.

2.0 LOCATION

The State EOC (SEOC) is located in the substructure of the Public Security Building, 1220 Washington Avenue, Bldg 22, Suite 101, Albany, New York 12226-2251.

3.0 NOTIFICATION

Notification will be conducted in accordance with SOPs established for the SEOC (see Communication/Warning Procedure - B and will be based upon the four emergency classes adopted for use by nuclear power plants by the NRC. Should initial notification occur at an Alert ECL or higher, activities of all lower levels will also be accomplished as required. These levels, and the basic activity taken for each, are:

3.1 Notification of Unusual Event

Unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No release of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs. Notification procedures are identified in Procedure B.

3.2 Alert

Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of EPA PAG exposure level. (See Procedure B)

3.3 Site Area Emergency

Events are in process or have occurred which involve actual or likely major failures of plant functions needed for protection of the public. Any releases are not expected to exceed EPA PAG exposure levels except near site boundary. (See Procedure B)

3.4 General Emergency

Events are in process or have occurred which involve actual or imminent substantial core

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degradation or melting with potential for loss of containment integrity. Release can be reasonably expected to exceed EPA PAG exposure levels offsite for more than immediate site area. (See Procedure B)

4.0 EMERGENCY STAFF

Depending upon the emergency classification level, the staff on duty at the EOC may include:

4.1 The Governor and/or designated members of his staff.

4.2 The Chairman of the DPC

4.3 The Commissioner of Health and key staff including the Director of the BERP.

4.4 The Director and members of the staff of the SEMO.

4.5 Key personnel and support staff of the State Departments of Agriculture and Markets, NYS Energy Research & Development Authority, Environmental Conservation, Health, Public Service, Transportation, the Division of State Police, Division of Military & Naval Affairs, and other members of the DPC and other State agencies as determined by the Commission Chairman.

4.6 Liaison personnel from the NFO and other public utilities, the American National Red Cross and other volunteer organizations, and designated Federal agencies including FEMA.

5.0 VEHICLE AND TRAFFIC CONTROL

Traffic control and vehicle parking will be supervised by the State Police. Vehicles will be parked in an orderly manner in the adjacent parking lots. License numbers of parked vehicles not bearing the correct parking sticker should be reported to the Security personnel at the entrance.

6.0 ENTRANCE AND IDENTIFICATION

6.1 Entrance

Unless otherwise directed during a period of emergency operations the only entrance to the EOC will be through the main lobby of the Public Security Building. All other entrances will be secured.

6.2 Identification

The State Police will provide full-time security at the entrance to the EOC. Identification satisfactory to the Security personnel will be required to gain admittance. Every effort will be made to expedite the admittance of required staff personnel, however, personal identification by

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a senior staff member may be required if the Security personnel is not otherwise satisfied.

7.0 ACTIVATION

7.1 A DPC agency representative will check in at the State EOC and staff its agency's desk in the Operations Room.

7.2 The Director of SEMO/ Chairman of the DPC will verify the activation of the appropriate field locations and local government EOCs.

7.3 The Department of Environmental Conservation and/or the Division of State Police may be requested to maintain a helicopter on standby in the vicinity of the Public Security Building.

7.4 Each agency will prepare a list giving the name, title, and work shift of available personnel and provide a copy to the Planning Section Chief for the State EOC.

8.0 RESOURCES AVAILABLE AT THE EOC

8.1 Communications

8.1.1 Radiological Emergency Communications System

8.1.2 Radio to SEMO Regional Offices.

8.1.3 State Fire Radio

8.1.4 NAWAS

8.1.5 New York Statewide Police Information Network (NYSPIN)

8.1.6 FEMA National Radio System (FEMA NARS)

8.1.7 FEMA National Teletype System (FEMA NATS)

8.1.8 Commercial Telephone including cell phone.

8.1.9 Internal Mobile Radios

8.1.10 Direct Access to Selected Commercial Broadcast Stations

8.1.11 Direct Access to the EAS

8.1.12 SEMO SAT (direct satellite uplink/downlink communication to SEMO field sites and/or

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other mobile sites)

8.1.13 NY-Alert

8.2 Operations

8.2.1 DisasterLan

8.2.2 Plotting boards

8.2.3 Situation boards

8.2.4 Detail maps of power plant areas, including Geographic Information System (GIS)

8.2.5 Message forms and other clerical supplies

8.2.6 Library of State agency plans and procedures, Federal and State regulations, directories, etc.

8.3 Full-load emergency power generating capability with 2 week fuel supply

8.3.1 NYS Division of State Police Academy Dorms adjacent to the Public Security Building may be available to house emergency staff

8.3.2 Miscellaneous

9.0 PROHIBITED POSSESSIONS

Articles of the following types are forbidden and will be confiscated when found:

Firearms and other weapons (except those of State Police and uniformed security forces).

Narcotic drugs (except those prescribed by a doctor for medical treatment).

Alcoholic beverages.

10.0 SECURITY

10.1 Access to the EOC will be strictly limited to personnel required for emergency operations and their support (clerical, housekeeping, etc.).

10.2 Public information staff will be restricted to personnel of the DPC. All other public information and media personnel will be accommodated in space provided.

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10.3 When the Governor is present in the EOC, the ranking State Police official will ensure that a proper security guard is furnished at all times.

10.4 Additional security personnel, as required, will be provided by the State Police to provide security and maintain order.

11.0 OPERATIONS

11.1 The Chairman of the DPC will direct State agency personnel present to carry out such functions as are necessary to accomplish the Commissioner of Health's directions or recommendations.

11.2 The Director of SEMO to ensure coordination of activities among these agencies will:

11.2.1 Provide staff and support services.

11.2.2 Ensure the dissemination of direction, advice and information to the involved agencies, appropriate Regional office, and to the affected local jurisdictions.

11.2.3 Receive periodic situation reports from these agencies and local jurisdictions on a schedule established by the Chairman.

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(NOT USED)