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10 CFR 50.54(q)

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Point Beach Nuclear Plant, Units 1 and 2
Dockets 50-266 and 50-301
License Nos: DPR-24 and DPR-27

Emergency Plan and Emergency Plan Implementing Procedure Changes

In accordance with the requirements of 10 CFR 50.54(q), Nuclear Management Company, LLC, (NMC) is submitting the enclosed proposed changes to the Point Beach Nuclear Plant (PBNP) emergency preparedness program. The proposed changes to the Emergency Plan Implementing Procedure (EPIP) 1.2 and Emergency Plan Section 5.0 are submitted for prior Nuclear Regulatory Commission (NRC) review.

Enclosure 1 contains proposed changes to Emergency Plan Implementing Procedure (EPIP) 1.2, Emergency Classification. The proposed changes are being made to realign some EALs with the original PBNP emergency preparedness commitments, insofar as possible and without compromising the existing EAL scheme. The proposed changes have been concurred with by the affected State and County agencies.

The following changes are being submitted:

- EALs 4.1.1.3 and 4.1.1.4 are revised to declare the appropriate emergency classification to reflect a measured dose, in addition to a projected dose, for TEDE or CDE.
- EAL 5.3.1.1 is revised to declare the appropriate emergency classification from "explosion near or in the protected area" to "explosion near or in the exclusion area" as reported to the control room.
- EAL 5.3.1.2 is revised to declare the appropriate emergency classification from "an explosion affecting one train of safety systems" to "an explosion affecting plant operations".

- EAL 6.1.2.1 is revised to declare the appropriate emergency classification from "a tornado within the protected area or switchyard" to "any tornado visible from the site."
- EAL 6.1.2.2 is revised to declare the appropriate emergency classification from "damage to a vital structure or sustained winds >90 mph" to "a tornado striking the facility or any wind reading of >100 mph."
- EAL 6.3.1.1 is revised from "a toxic or flammable gas release in the protected area" to "a toxic or flammable gas release in or near the exclusion area".

Enclosure 2 contains proposed changes to Emergency Plan (EP) 5.0, Organizational Control of Emergencies. The proposed change replaces the currently approved 30-minute responders identified in NUREG-0654 Table B-1 with on-shift personnel.

Enclosure 3 provides a comparison of the original PBNP commitments, the guidance provided in NUREG-0654, Table B-1, and proposed changes to EP 5.0. This comparison is intended to assist in NRC review of the proposed change.

NMC plans to upgrade the PBNP Emergency Action Level (EAL) scheme to the Nuclear Energy Institute (NEI) 99-01, "Methodology for Development of Emergency Action Levels", Revision 4. NMC intends to submit these revised EALs for NRC approval in June 2004. The NMC plan to upgrade of the PBNP EALs to the NEI 99-01 scheme was discussed with the NRC inspection team during the Inspection Procedure (IP) 95003 inspection conducted at PBNP in August 2003.

In accordance with discussions held between representatives of NMC and NRC, it is requested these changes be approved by March 1, 2004.

Summary of Commitments:

There are no new commitments in this letter.



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Site Vice-President, Point Beach Nuclear Plant
Nuclear Management Company, LLC

Enclosures

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector - Point Beach Nuclear Plant, USNRC

ENCLOSURE 1

EPIP 1.2
Emergency Action Levels

EMERGENCY CLASSIFICATION

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: Radiological Conditions

EAL 4.1.1.3

Sub-Category: Off-site Radiological Release

Emergency Classification: **SITE EMERGENCY**

Emergency Action Level:

Release of airborne radioactive material resulting in a dose projection at or beyond the site boundary (by any means) of either:

Greater than or equal to 100 mRem Total Effective Dose Equivalent (TEDE)

OR

Greater than or equal to 500 mRem Committed Dose Equivalent (CDE) [thyroid]

OR

Either of the above doses measured in environs.

Basis:

The 100 mR integrated dose is based on the 10 CFR 20 annual average population exposure. This value also provides a desirable gradient (one order of magnitude) between the Site Emergency and General Emergency classes. It is deemed that exposures less than this limit are not consistent with the Site Emergency class description. The 500 mR CDE thyroid dose was established in consideration of the 1:5 ratio of the EPA Protective Action Guidelines for whole body to thyroid.

Integrated doses are not monitored in real-time but are projected. In establishing the duration used for the projection, care should be exercised to ensure the time estimates are realistic. If no educated guess can be made regarding estimated duration, the default (4 hours) shall be used.

References:

NUREG 0654, Appendix 1 Initiating Condition: Site Emergency 13c

EPA 400 Manual of Protective Action Guides And Protective Actions For Nuclear Incidents

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: Radiological Conditions

EAL 4.1.1.4

Sub-Category: Off-site Radiological Release

Emergency Classification: **GENERAL EMERGENCY**

Emergency Action Level:

Release of airborne radioactive material resulting in a dose projection at or beyond the site boundary (by any means) of either:

Greater than or equal to 1 Rem Total Effective Dose Equivalent (TEDE)

OR

Greater than or equal to 5 Rem Committed Dose Equivalent (CDE) [thyroid]

OR

Either of the above doses measured in environs.

Basis:

The 1 REM TEDE and the 5 REM CDE thyroid integrated doses are based on the EPA protective action guidance which indicates that public protective actions are indicated. This is consistent with the emergency class description for a General Emergency.

Integrated doses are not monitored in real-time but are projected. In establishing the duration used for the projection, care should be exercised to ensure the time estimates are realistic. If no educated guess can be made regarding estimated duration, the default (4 hours) shall be used.

References:

NUREG 0654, Appendix 1 Initiating Condition: General Emergency 1a

EPA 400 Manual of Protective Action Guides And Protective Actions For Nuclear Incidents

EMERGENCY CLASSIFICATION

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: Internal Events

EAL 5.3.1.1

Sub-Category: Fire / Explosion

Emergency Classification: **UNUSUAL EVENT**

Emergency Action Level:

Explosion near or in the Exclusion Area as reported to the control room

Basis:

Only those explosions of sufficient force to damage plant structures or equipment meet the threshold of this EAL. Other minor explosions should be evaluated for reportability 10 CFR 50.72. No attempt is made in this EAL to assess the magnitude of damage. Reports of any damage to structures or equipment is sufficient for declaration.

The Exclusion Area is defined in the Emergency Plan as the area within the site boundary surrounding PBNP in which the plant personnel have the authority to determine all activities including exclusion or removal of personnel and property from the area. At PBNP, the outer boundary of the exclusion area is coincident with the site boundary.

As used here, an explosion is a rapid, violent, unconfined combustion or a catastrophic failure of pressurized equipment imparting significant energy to nearby structures and materials. If the explosion affects plant operation the event escalates to an Alert or Site Emergency.

The security aspects of the explosion should be considered.

References:

NUREG 0654, Appendix 1 Initiating Condition: Unusual Event 14c

SSCP - Security and Safeguards Contingency Plan

Emergency Plan, EP 2.0, Acronyms & Definitions

EMERGENCY CLASSIFICATION

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: Internal Events

EAL 5.3.1.2

Sub-Category: Fire / Explosion

Emergency Classification: **ALERT**

Emergency Action Level:

Explosion affecting plant operations.

Basis:

Explosions that actually cause damage to equipment required for safe operation meet the threshold of this EAL. A lengthy damage assessment should not be performed. The occurrence of the explosion with evidence of damage likely to prevent equipment from performing its intended function is sufficient for declaration.

As used here, an explosion is a rapid, violent, unconfined combustion, or catastrophic failure of pressurized equipment that imparts significant energy to nearby structures and equipment.

If the explosion damages more than one train of a Safety System the event escalates to a Site Emergency.

The security aspects of the explosion should be considered.

References:

NUREG 0654, Appendix 1 Initiating Condition: Alert 18c

EMERGENCY CLASSIFICATION

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: External Events

EAL 6.1.2.1

Sub-Category: Natural Destructive Phenomena

Emergency Classification: **UNUSUAL EVENT**

Emergency Action Level:

Any tornado visible from site as verified by an SRO.

Basis:

This EAL is based on the assumption that a tornado may potentially damage plant structures containing functions or systems required for the safe shutdown of the plant. Due to the rapid transient nature of tornadoes only those which are visible from site are considered, as these have the potential of actually damaging plant structures. An Unusual Event classification is warranted.

If damage to safety-related equipment is confirmed (either by observation or plant instrumentation) the event may be escalated to an Alert. Other EALs should also be considered such as loss of electrical power.

References:

AOP-13C, Severe Weather Conditions

Probabilistic Safety Assessment -- High Winds, and Others Sec 9, Rev 0, Dated July 1995

NUREG 0654, Appendix 1 Initiating Condition: Unusual Event 13c

SSCP - Security and Safeguards Contingency Plan

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: External Events

EAL 6.1.2.2

Sub-Category: Natural Destructive Phenomena

Emergency Classification: **ALERT**

Emergency Action Level:

Indications or observations that a tornado has struck the facility.

OR

Wind speed indicated as >100 mph.

Basis:

This EAL addresses events that may have resulted in a plant area being subjected to forces approaching or beyond design limits. It is assumed that damage may have occurred to plant safety systems. Therefore an Alert classification is warranted. Classification should occur prior to a detailed damage assessment.

The 100 MPH indicated wind speed was chosen as a value approaching the design basis for non-Class 1 metal structures at the plant. Although no damage to permanent plant structures should occur at this level, non-permanent structures (trailers, work shacks, temporary storage, etc.) could have significant damage and impact plant operations. Winds at this level would also impact personnel movement within and to the plant.

References:

AOP-13C, Severe Weather Conditions

FSAR 5.1, Containment System Structure

Probabilistic Safety Assessment -- High Winds, and Others Sec 9, Rev 0, Dated July 1995

Bechtel Corporation, "Westinghouse Electric Corporation--Wisconsin Michigan Power Company--Point Beach Atomic Power Station--Design Criteria for Nuclear Power Plants Against Tornadoes," March 12, 1970, B-TOP-3.

NUREG 0654, Appendix 1 Initiating Condition: Alert 17c

EMERGENCY CLASSIFICATION

ATTACHMENT B
EMERGENCY ACTION LEVELS (EALs)

Category: External Events

EAL 6.3.1.1

Sub-Category: Toxic/Flammable Gas Intrusion

Emergency Classification: UNUSUAL EVENT

Emergency Action Level:

A toxic or flammable gas release in or near the Exclusion Area as reported to the control room.

Basis:

The release of toxic or flammable gas in or near the Exclusion Area may pose a potential threat to reactor plant and personnel safety. It is the potential threat to normal operation or hazard to personnel which must be evaluated. If no such threat exists, the EAL is not met. If, however, personnel safety or plant operation is threatened, an Unusual Event is warranted.

For the purpose of this EAL, 'in or near' is considered to include those areas immediately surrounding the Exclusion Area and all areas within the Exclusion Area.

Flammable gases are typically more limiting than toxic gases. Although an SCBA could protect from toxicity, detonation of a flammable gas could be immediately hazardous to personnel.

The Exclusion Area is defined in the Emergency Plan as the area within the site boundary surrounding PBNP in which the plant personnel have the authority to determine all activities including exclusion or removal of personnel and property from the area. At PBNP, the outer boundary of the exclusion area is coincident with the site boundary.

References:

NUREG 0654, Appendix 1 Initiating Condition: Unusual Event 14d

SSCP Security and Safeguards Contingency Plan

Emergency Plan, EP 2.0, Acronyms & Definitions

ENCLOSURE 2

**EP 5.0
Organizational Control of Emergencies**

ORGANIZATIONAL CONTROL OF EMERGENCIES

1.0 DISCUSSION

This section of the Emergency Plan describes the organizational controls available to respond to an emergency. Authorities and responsibilities of key individuals and groups are delineated. Communication links for notifying, alerting, and mobilizing emergency personnel are described.

2.0 NORMAL PLANT ORGANIZATION

If both units are in a condition other than cold shutdown or refueling shutdown, each operating shift consists of 15 qualified individuals as shown in Figure 5-1. (Ref. 8.1, 8.2)(B-1)

- 2.1 The Shift Manager, who holds a Senior Reactor Operator (SRO) license, is in direct charge of all plant operations during his assigned shift and is directly responsible for actions of the crew.
- 2.2 Two Operating Supervisors hold Senior Reactor Operator (SRO) licenses.
- 2.3 Four Control Operators (COs) hold reactor operator licenses. (COs can also serve as AOs, if required.)
- 2.4 Three Auxiliary Operators (AOs) with no license required.
- 2.5 One Auxiliary Operator (AO) or Auxiliary Operator Trainee (AOT) for fire brigade staffing.
- 2.6 There is at least one qualified Radiation Protection Technologist on each shift.
- 2.7 There is at least one qualified Radiochemical Technician on each shift.
- 2.8 One Shift Technical Advisor (STA) is available (within 10 minutes of the Control Room) to assist the Shift Manager in evaluation and assessment.
- 2.9 A Security Shift Commander is available to serve as a communicator.

If the Shift Manager determines that an Alert or higher emergency exists, the on-shift staff will assume an emergency mode of operation and the remaining Emergency Response Organization shall be activated. Initially, the on-shift staff will be augmented by providing additional personnel for critical positions that are designated in Figure 5-4. The goal is to accomplish this augmentation within 30 minutes. A security event may delay the ERO activation to ensure the safety of personnel.

Additional ERO personnel will be in place such that activation of TSC and EOF will be completed within one hour.

ORGANIZATIONAL CONTROL OF EMERGENCIES

The Shift Manager will direct plant response, assess and control the emergency, and initiate the required plant and offsite notifications in accordance with Figures 5-5 and 5-6. The Shift Manager shall assume the responsibility for the Emergency Director until relieved. If the Shift Manager is incapacitated, the Operating Supervisor will assume the responsibility and authority of the Shift Manager (until relieved by a qualified individual) and coordinate the plant response, including the initiation of offsite notifications. A third Senior Reactor Operator in the control room supports the Shift Manager with emergency response duties until the EOF is activated. (Ref.8.3)

3.0 ONSITE EMERGENCY RESPONSE ORGANIZATION (ERO)

This section of the Emergency Plan describes the responsibilities of the onsite personnel during an event classified to be an Unusual Event or higher. (Ref. 8.1)

3.1 Direction and Coordination

The Shift Manager will be in the Control Room and maintain responsibility for operation of plant equipment and controls during emergency conditions. The Shift Manager will use the EALs to determine the emergency classification. The Shift Manager will assume the responsibility of the Emergency Director (ED) and continue to assess the emergency until relieved of this responsibility by a qualified Emergency Director. If the incident is classified as an Alert or higher, the appropriate emergency response facilities as shown in Figure 5-4 will be activated.

Upon activation of the TSC, the TSC Manager will assume responsibility for all onsite activities and personnel not directly related to plant operation. The TSC Manager will coordinate activities involving the Control Room, TSC, OSC, and Security. The TSC will assume parallel emergency assessment responsibility with the Control Room and will evaluate plant conditions and onsite radiological conditions. Based upon this evaluation, the TSC Manager may recommend classification changes to the Emergency Director.

3.2 Plant Staff Emergency Assignments

Personnel are selected and assigned to fill ERO positions based on background training and experience. The organization for each emergency classification is shown in Figures 5-3 and 5-4. Appendix A lists a general summary of the emergency assignments, by title, responsibilities, and principle, working relationships. Table 5-1 provides a matrix of Emergency Organization position titles compared to normal organization titles. Following is a brief description of the emergency organization at different emergency classes:

ORGANIZATIONAL CONTROL OF EMERGENCIES

3.2.1 Unusual Event (Figure 5-3)

This emergency organization consists of normal shift personnel. Additional communications may be assigned as required. Appropriate procedures assigned to the Control Room will be accomplished under the direction of the Shift Manager. Staff augmentation for additional support will take place on a case-by-case basis.

3.2.2 Alert and Site Emergency (Figure 5-4)

Upon activation of the emergency response facilities, responsibility for classification, assessment, evaluation, and recovery will be transferred from the Shift Manager to the Emergency Director. The Operations Coordinator will assume support responsibility for assessment and evaluation of the plant condition. Onsite radiation surveys and monitoring will be conducted under the direction of the Rad/Chem Coordinator. The Operations Support Center Coordinator will assume responsibilities for maintenance and repair coordination and search and rescue. Management personnel will coordinate any evacuation and ensure accountability of their personnel. The TSC, OSC and EOF will be activated in one hour. Offsite radiation surveys will be initiated as necessary from the OSRPF under the coordination of the Offsite Radiation Protection Coordinator. These surveys will be under the direction of the Dose/PAR Coordinator in the EOF. Upon activation of the EOF, the Emergency Director will assume overall responsibility for the emergency response and recovery. A liaison will be provided to state and county EOCs to assist in communications.

At an Alert or higher classification, non-essential personnel may be assembled and or evacuated from the exclusion area, and Emergency Response Organization (ERO) members will report to their Emergency Response Facilities given acceptable environmental and security related conditions.

Other personnel also report to the TSC and EOF to assist in the emergency response operations. Additional personnel will provide logistic, administrative, and scheduling support. The Resource Coordinator will ensure 24-hour continuity for minimum staff positions. In addition, the JPIC will activate to provide periodic updates to the media and public.

ORGANIZATIONAL CONTROL OF EMERGENCIES

3.2.3 General Emergency (Figure 5-4)

In addition to actions taken for an Alert or Site Emergency, a General Emergency may require additional external resources. To ensure this, the NMC headquarters may be contacted to provide or assist with offsite technical support.

4.0 OFFSITE EMERGENCY RESPONSE

This section describes offsite supporting assistance available to the onsite staff emergency response organization. (Ref. 8.1)

4.1 We Energies (We-Owner Company) and Nuclear Management Company (NMC-Operating Company) Relationship and Support

Most emergency response organization (ERO) positions are filled by personnel assigned to the Point Beach Nuclear Plant (PBNP). The PBNP normal operations staffing, as shown in Figure 5-2, has available the technical and administrative support services of the NMC and We-Energies management and support organizations as outlined in the Nuclear Power Plant Operating Services Agreement (NPPOSA). The Emergency Director will identify situations where additional assistance is needed and will relay the emergency assistance information to NMC management for evaluation.

The NMC will provide to, or obtain assistance for, the onsite emergency organization as required. These responsibilities include, but are not limited to:

- 4.1.1 Providing senior company management support to the plant emergency organization.
- 4.1.2 Providing funds necessary to implement the PBNP Emergency Plan.
- 4.1.3 Providing contract security management direction and support for offsite facilitates.
- 4.1.4 Coordinating the restoration and/or operation of all generation, transmission, and distribution facilities.
- 4.1.5 Monitoring reentry and/or recovery operations, post-accident planning, and assisting as requested.
- 4.1.6 Assisting with post-accident investigation and review responsibilities.
- 4.1.7 Providing general assistance for environmental radiological monitoring.

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4.2 Local Services Support

During the operation of PBNP, it may become necessary to request and use assistance provided by local organizations and agencies. Since it is essential that support from these organizations and agencies be available, the following agreements and understandings have been made. (Letters of Agreement are referenced in Appendix D.)

4.2.1 Two Creeks Volunteer Fire Department

When requested, the Two Creeks Volunteer Fire Department will provide fire fighting assistance at PBNP.

4.2.2 Town of Two Creeks

The Township of Two Creeks will make available to PBNP, the Two Creeks Town Hall to be used as required during an emergency at PBNP.

4.2.3 Aurora Medical Center - Manitowoc County

The Aurora Medical Center - Manitowoc County will provide medical assistance to PBNP personnel. The agreement provides for the treatment of personnel who suffer injuries complicated by radioactive contamination or radiation. Individuals may be transferred to the University Hospital and Clinics in Madison, Wisconsin, should the treatment required extend beyond the capabilities of the Aurora Medical Center - Manitowoc County. The Aurora Medical Center - Manitowoc County will maintain the capability and facilities to provide decontamination, first aid, and emergency stabilization medical treatment to injured personnel from PBNP. These services and facilities are available 24 hours a day.

4.2.4 City of Two Rivers

The City of Two Rivers will provide ambulance service to transport injured persons from PBNP.

4.2.5 University of Wisconsin Hospital and Clinics

The University of Wisconsin Hospital and Clinics will accept and provide treatment to personnel with injuries beyond the capabilities of the Aurora Medical Center - Manitowoc County, even if complicated by radioactive contamination. The University of Wisconsin Hospital and Clinics are available 24 hours a day for treatment or consultation.

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4.2.6 Aurora - Two Rivers Clinic

At least two licensed physicians of the Aurora Health Care Affiliation in Manitowoc County, Wisconsin, will provide medical supervision and care for employees of PBNP who have medical conditions complicated by exposure to radiation. Both doctors have received training qualifying them to care for this type of patient. These affiliations consist of Aurora Medical Center, Manitowoc County Aurora - Two Rivers Clinic and Aurora - Manitowoc Clinic.

4.2.7 Manitowoc County Sheriff's Department

When alerted, the Manitowoc County Sheriff's Department will respond within 10-20 minutes and will:

- a. Assist in controlling traffic for the duration of the emergency.
- b. Assist the PBNP staff in keeping members of the general public from entering the PBNP exclusion area.
- c. Provide assistance in security-related matters.
- d. Implement protective actions as directed by Wisconsin Emergency Management (WEM).
- e. Provide augmented notification capability.
- f. Provide for dispatch of ambulance services.

4.2.8 Wisconsin Public Service Corporation

The Kewaunee Nuclear Power Plant (KNPP) laboratory facility will provide assistance for radiological and chemical sample analysis for air, water and other needed samples during a radiological emergency at PBNP. KNPP will provide the use of their site boundary facility (SBF) located about one mile west of KNPP if the PBNP SBCC is unavailable.

NMC/We-Energies and WPS have an agreement to jointly use the facilities located at the WPS Green Bay Division Office, 700 North Adams Street, Green Bay, WI, as a Joint Public Information Center and as an alternate location for the PBNP Emergency Operations Facility.

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4.2.9 Kewaunee County Sheriff's Department

When alerted, the Kewaunee County Sheriff's Department will respond within 10-20 minutes, and will:

- a. Assist in controlling traffic for the duration of the emergency.
- b. Assist the PBNP staff in keeping members of the general public from entering the PBNP exclusion area.
- c. Provide assistance in security-related matters.
- d. Implement protective actions as directed by Wisconsin Emergency Management (WEM).
- e. Provide augmented notification capability.

4.2.10 Mishicot Area Ambulance Service

Mishicot Area Ambulance Service will provide ambulance service to transport injured persons from PBNP.

4.2.11 National Weather Service

The National Weather Service will provide backup meteorological data for PBNP should our meteorological instrumentation become inaccessible or inoperable.

4.2.12 Westinghouse Electric Corporation

Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of PBNP in the unlikely event of an emergency.

4.2.13 INPO

In the event of an emergency, INPO will provide resources to assist in acquiring the help of other industry organizations.

4.2.14 Bechtel Power Corporation

Upon request, Bechtel will provide technical assistance to PBNP.

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5.0 COORDINATION WITH PARTICIPATING AGENCIES

This section identifies the principal state agency (designated state authority) and other governmental agencies (local, state, and federal) having planning and/or implementation responsibilities for emergencies in the PBNP emergency planning zone. (Ref. 8.1)

5.1 State and Local Agencies

5.1.1 Wisconsin Department of Military Affairs, Wisconsin Emergency Management (WEM)

The Administrator of WEM, Department of Military Affairs, has been designated by the Governor of the State of Wisconsin as the state officer to assume the primary responsibility and authority for radiological emergency response planning. WEM is to exercise principal supportive roles, in addition to other state agencies, whose involvement will be coordinated by WEM. WEM will brief the governor as to the situation and actions taken by the federal, state, and local agencies and activate the state emergency operating center (EOC) in the Department of Military Affairs Office Building in Madison, if necessary.

5.1.2 Wisconsin Department of Health and Family Services, Radiation Protection Section (RPS)

The Radiation Protection Section (RPS), Department of Health and Family Services, under the Radiation Protection Act, WIS STATS 140.50 to 140.60, is responsible for preventing exposure to ionizing radiation in amounts which are detrimental to health according to nationally accepted standards. The state designates a State Radiological Coordinator (SRC) of the State Radiological Response Team for peacetime radiological emergencies. The SRC is experienced in the area of radiological health and is a staff member of the Radiation Protection Section. Team members are personnel of the Section as designated by the SRC, augmented by selected personnel from the WEM and other state agencies trained specifically for radiological incidents. They will do the following: conduct an initial survey to determine direct radiation levels and/or the severity and extent of the contaminated area, including soil, food and crop samples by taking readings and samples for analysis and making food chain dose estimates; advise how decontamination of the area should be accomplished; and assist in checking the evacuees of an involved area for contamination or exposure.

ORGANIZATIONAL CONTROL OF EMERGENCIES

5.1.3 Wisconsin Department of Transportation, Division of State Patrol (SP)

The Wisconsin State Patrol supports the Division of Highways and local law enforcement services directing vehicular and pedestrian movement out of and around the area of the incident, controlling access into the area and providing security at the site. Besides mobile radios in all Division of Enforcement and Inspection vehicles, the Office of Transportation Safety has a communication van which can serve as a forward command post at the site. Each district has a supply of mobile radios on a dedicated frequency that is available through emergency police services for local and state emergency communications at the site of an incident. The SP is available for courier service, by motor vehicle, for taking the state radiological response team to the site, and delivering samples to the State Laboratory of Hygiene for analysis, if necessary, to expedite the response.

5.1.4 Wisconsin Department of Natural Resources, Division of Enforcement

The conservation wardens of the Division of Enforcement, Department of Natural Resources, can support the local law enforcement services as does the SP. Selected department personnel receive training in ingestion sampling procedures. The wardens have mobile radios in their cars on the SP frequency. The Department can provide courier service, by motor vehicles and plane, to take the State Radiological Response Team to the site if necessary to expedite the response.

5.1.5 Wisconsin Department of Transportation, Division of Highways

The Division of Highways, Department of Transportation, is responsible, when so ordered by the Administrator of WEM, for implementing the Emergency Highway Traffic Regulation Plan when, as a result of a radiological incident, a large area is cordoned off by the law enforcement services and vehicular traffic is directed to other roads.

5.1.6 Wisconsin Department of Agriculture, Trade and Consumer Protection

Under the Hazardous Substances Act, 100.37, the Department can ban the sale of foods which have harmful levels of radioactivity. The Department can advise the use, sale, or disposal of animal feeds containing harmful levels of radioactive contamination. Selected department personnel receive training in ingestion sampling procedures. The Department can gather samples of milk and crops to determine radionuclide and related stable element concentrations, and can advise dairies as to the disposition of milk, farmers as to the feeding of their cows, and growers as to restoring land to productivity. Arrangements can be made by the Department with respect to handling of animals exposed to radioactive contamination.

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5.1.7 Wisconsin Department of Military Affairs

Section 21.11 of the Wisconsin Statutes contains the authority for the governor to order all or any part of the Wisconsin National Guard personnel and/or equipment into active State service for public emergencies, disturbances or disasters. Because of the relatively short duration and reaction time needed in a radiological incident, the National Guard, under the Department of Military Affairs, will be involved in such incidents only if the size of the area involved requires their support. The National Guard could provide additional traffic control, communications, emergency provisions of food, radiological monitoring and decontamination services. The Army National Guard has helicopters stationed in Madison and West Bend. If so ordered by the governor, these can provide aerial reconnaissance and surveillance, insertion of personnel and equipment, aerial evacuation, aerial supply, illumination, communications, and command and control. The Air National Guard has fixed wing aircraft at Madison and Milwaukee and, if so ordered by the governor, could provide services similar to the helicopters with the exception of take-off and landing capabilities and providing illumination. Additional radiation monitoring equipment maintained and operated by the U.S. Army is available at armories throughout the state. Nearly every one of the 72 company-sized units has a 2-5 man team trained in chemical-radiological procedures. In addition, the Two Rivers National Guard Armory is available, if needed, for use as an alternate offsite assembly area for plant and support personnel.

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5.1.8 Manitowoc and Kewaunee County

Under the provisions of the Wisconsin Statutes 22.16 and the Manitowoc and Kewaunee County Emergency Government Ordinances, authorities of both counties have the responsibility and authority to coordinate offsite emergency activities in the event of a radiological incident. Each county has prepared a County Emergency Operations Plan to carry out this responsibility which is applicable to emergencies at PBNP. These plans are referenced in Appendices F and G.

Upon notification of an emergency at PBNP which requires participation of local or county agencies, each county will activate its emergency organization. Each emergency organization is under the direction of the county board chairman and is composed of representatives from various participating agencies which include, but are not limited to, the county sheriff, county emergency government director, county highway commissioner, fire fighting organizations, and school administrators. The Manitowoc and Kewaunee County Emergency Organization will provide or assist the emergency response activities by the following:

- a. Provide notification to county and support agencies and local area residents that an incident has occurred at PBNP, if necessary.
- b. Provide liaison and communication capabilities with the plant facility and appropriate federal, state and local organizations.
- c. Assist in providing release of accurate public information concerning the offsite consequences of the emergency through all available media. In addition, advise and instruct area residents on what protective actions should be taken.
- d. Assist in providing for medical treatment, health and sanitation services, and mass care for members of the general public.
- e. Assist in the evacuation of affected offsite locations, if such an action should be required.

5.1.9 Local Water Supply Utilities

In the unlikely event that an accidental discharge of liquid radioactive material occurs into Lake Michigan which exceeds prescribed limits, notification that the event has occurred will be made to the municipal water utilities of Two Rivers, Manitowoc and Green Bay, as well as the State of Wisconsin Emergency Management. These notifications will be made as soon as possible, but no later than 12 hours after the initial start of the release.

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5.2 Federal Government

Should an emergency situation or accident occur at PBNP, notification, reports, or requests for assistance may be made to various federal agencies and organizations. Details for notifying and making reports to these agencies, as well as for requesting and obtaining assistance, are provided in the EPIPs. The following agencies may, as the situation warrants, require notification or reports, or provide assistance if required:

5.2.1 NRC Operations Center, Rockville, Maryland

The NRC requires notification as stated in Section 6.0 below.

5.2.2 Nuclear Regulatory Commission (NRC)

Region III Office

5.2.3 Department of Energy (DOE)

The DOE Chicago Operations Office has agreed to provide radiological assistance upon request. This request can be made by the Wisconsin Emergency Management. The Radiological Assistance Team can be expected to respond within 6 hours as directed by the Chicago Operations Office of DOE.

5.2.4 United States Coast Guard

The U.S. Coast Guard can supply local weather information, if necessary.

The U.S. Coast Guard, when requested by the cognizant state or local emergency response agency, will make a marine broadcast and issue a Notice to Mariners, warning all craft of the danger in the area. (Contents of the broadcast to be supplied by the cognizant emergency response agency.)

The U.S. Coast Guard, if requested by the Federal Emergency Management Agency or its designated representative will consider additional assistance on a case-by-case basis. The decision to commit Coast Guard resources will be made by the Commander, Ninth Coast Guard District.

6.0 NUCLEAR REGULATORY COMMISSION (NRC) NOTIFICATION

Telephone notification of the NRC Operations Center shall be made as soon as possible, for any significant event as listed in 10 CFR 50.72 and 10 CFR 73. Notification of the NRC under this section does not necessarily mean the Emergency Plan has been implemented. (Ref. 8.1)

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7.0 METHODS OF NOTIFICATION (Ref. 8.1)

7.1 Notification of Offsite Agencies

The methods used for notification of offsite agencies are described in the EPIPs. The EPIPs provide for an established message authentication scheme for each emergency classification, guidance on assuring and verifying that each agency is notified, and an incident report form for each emergency classification. The incident report form provides for message verification and information for the initial and follow-up messages. The format for this form is designed with the concurrence of the State of Wisconsin and Manitowoc and Kewaunee County emergency management organizations. The initial messages contain information about the location of incident, name of caller, date/time of incident, class of emergency, whether a release is taking place potentially affected population and areas, and whether protective actions may be necessary. The follow-up messages contain the basic information from the initial message with the following additional information if it is known and appropriate: the type and form of any actual or projected radiological release; meteorological conditions; estimate of quantity of radioactive material released or being released; actual or projected doses in the affected sector(s); surface contamination measurements; emergency response actions in progress; recommended emergency actions, including protective measures; request for any needed onsite support by offsite organizations; and prognosis for worsening or termination of the emergency.

State and County Emergency Management agencies shall be contacted within 15 minutes of the classification and notified of any of the four emergency classes. Figure 5-6 describes the primary notification and coordination of offsite agencies during emergencies. Communications capabilities are discussed in EP 7.0 of this Emergency Plan. Recovery information and organization change information occurring during response to an emergency will be relayed to offsite agencies using the same communications capabilities.

7.2 Notification of the General Public

The general public will be notified through normal methods including press releases and news conferences of the lesser emergency classifications where protective actions are not required of the general public. In emergencies which may require some protective actions to be taken by the general public, notification will be accomplished by the Manitowoc and Kewaunee County Sheriff's Departments and the State of Wisconsin Emergency Management. The primary method of notifying residents in the affected area would be by a siren system as described in EP 7.0, Section 10.0, and police and emergency vehicles driving in the area with high power or "yelp" sirens on, mobile public address systems, and door-to-door personal contact. This notification procedure will commence with the population within the area of greatest risk, including the transient population in areas such as Point Beach State Forest, and continue with the balance of the population within the plume exposure EPZ as required. The actual notification and protective action message will be transmitted over local emergency alerting system. A siren based alert and notification system has been installed and is maintained by procedure. The responsibility for activation of the alert and notification system rests with Manitowoc and Kewaunee Counties.

ORGANIZATIONAL CONTROL OF EMERGENCIES

8.0 REFERENCES

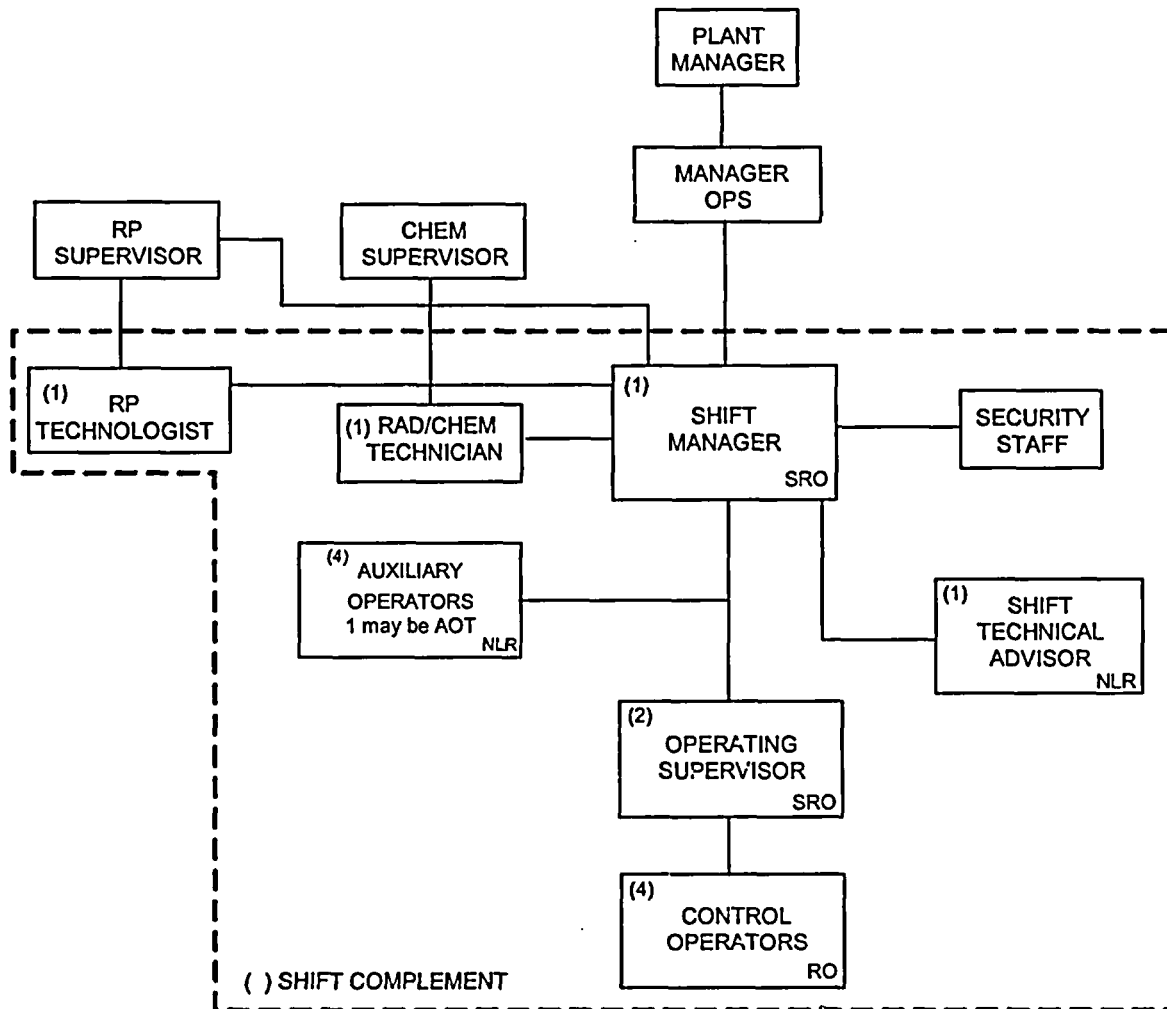
- 8.1 NUREG-0654 FEMA-REP-1 Rev.1, "Criteria for Preparation and evaluation of radiological Emergency Response Plans and Preparedness in Support of Nuclear Plants," November 1980.
- 8.2 NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.
- 8.3 Operation Manual (OM) 3.1, "Operations Shift Staffing Requirements," Rev. 12, April 24, 2003.

9.0 BASES

- B-1 NRC to Wisconsin Electric Power Co., Safety Evaluation Report on NUREG-0737 Section III.A.1.2, Minimum Shift Staffing Levels for Emergency Situations., June 10, 1983.

ORGANIZATIONAL CONTROL OF EMERGENCIES

FIGURE 5-1
NORMAL PLANT OPERATING ORGANIZATION



SRO - SENIOR REACTOR OPERATOR
RO - REACTOR OPERATOR
NLR - NO LICENSE REQUIRED

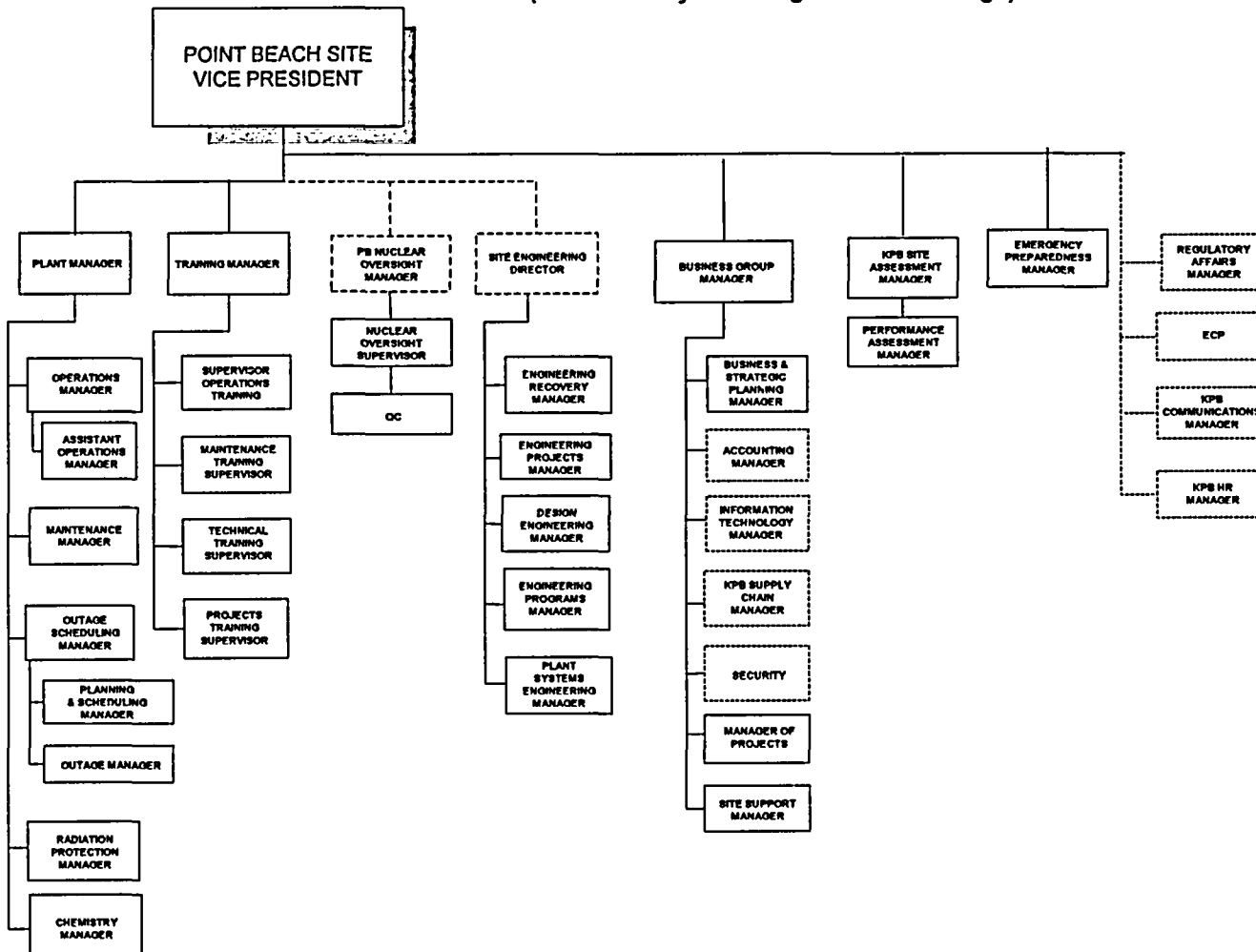
NOTES:

1. THE OPERATIONS GROUP SHIFT MAKEUP IS THE MINIMUM SIZE FOR OPERATION IN ALL MODES EXCEPT WITH A UNIT DEFUELED. THE OPERATIONS GROUP SHIFT MAKEUP MAY BE LESS THAN THE REQUIREMENTS FOR A PERIOD OF TIME NOT TO EXCEED 2 HOURS IN ORDER TO ACCOMMODATE UNEXPECTED ABSENCE OF ON-DUTY SHIFT CREW MEMBERS, PROVIDED IMMEDIATE ACTION IS TAKEN TO RESTORE THE SHIFT MAKEUP TO WITHIN THE MINIMUM REQUIREMENTS.
2. AN UNEXPECTED ABSENCE OF A SHIFT TECHNICAL ADVISOR SHALL BE TREATED SIMILARLY TO NOTE 1. THE SHIFT TECHNICAL ADVISOR IS LOCATED ONSITE ON TEN MINUTE CALL TO THE CONTROL ROOM.

ORGANIZATIONAL CONTROL OF EMERGENCIES

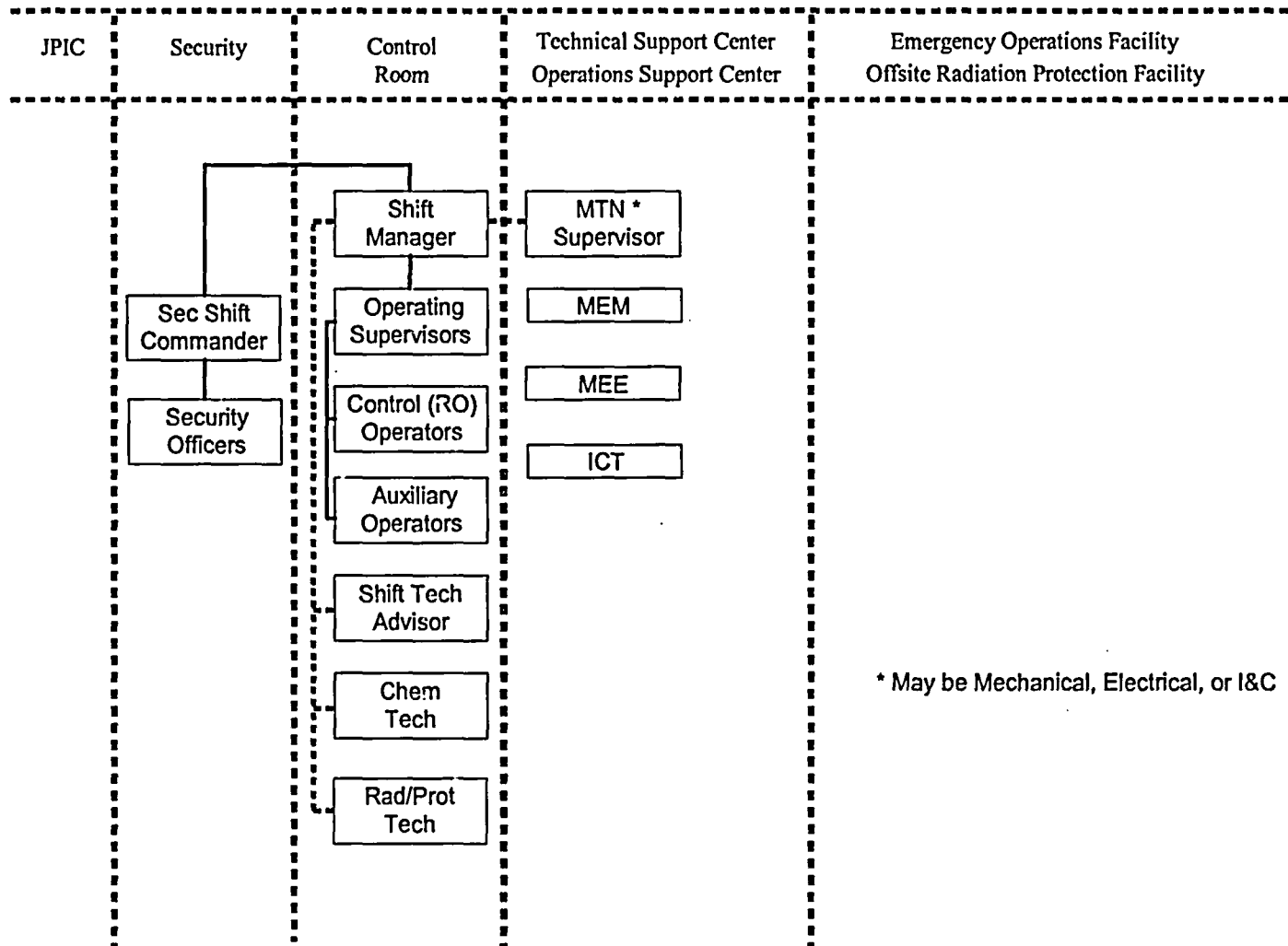
FIGURE 5-2
PBNP ORGANIZATION - NORMAL OPERATIONS

POINT BEACH NUCLEAR ORGANIZATION
(Post January 2003 Organization Change)



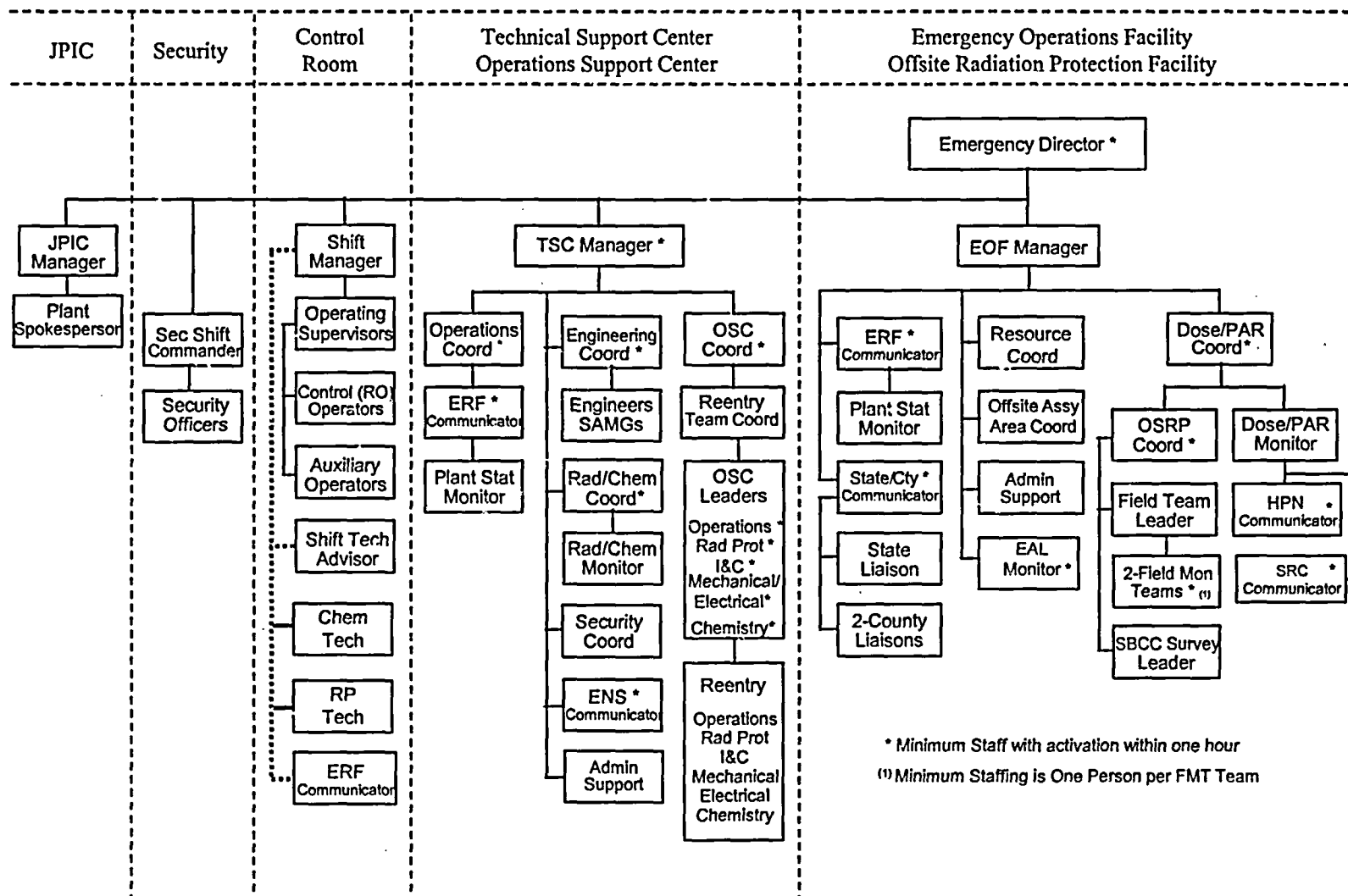
ORGANIZATIONAL CONTROL OF EMERGENCIES

FIGURE 5-3
EMERGENCY ORGANIZATION - UNUSUAL EVENT



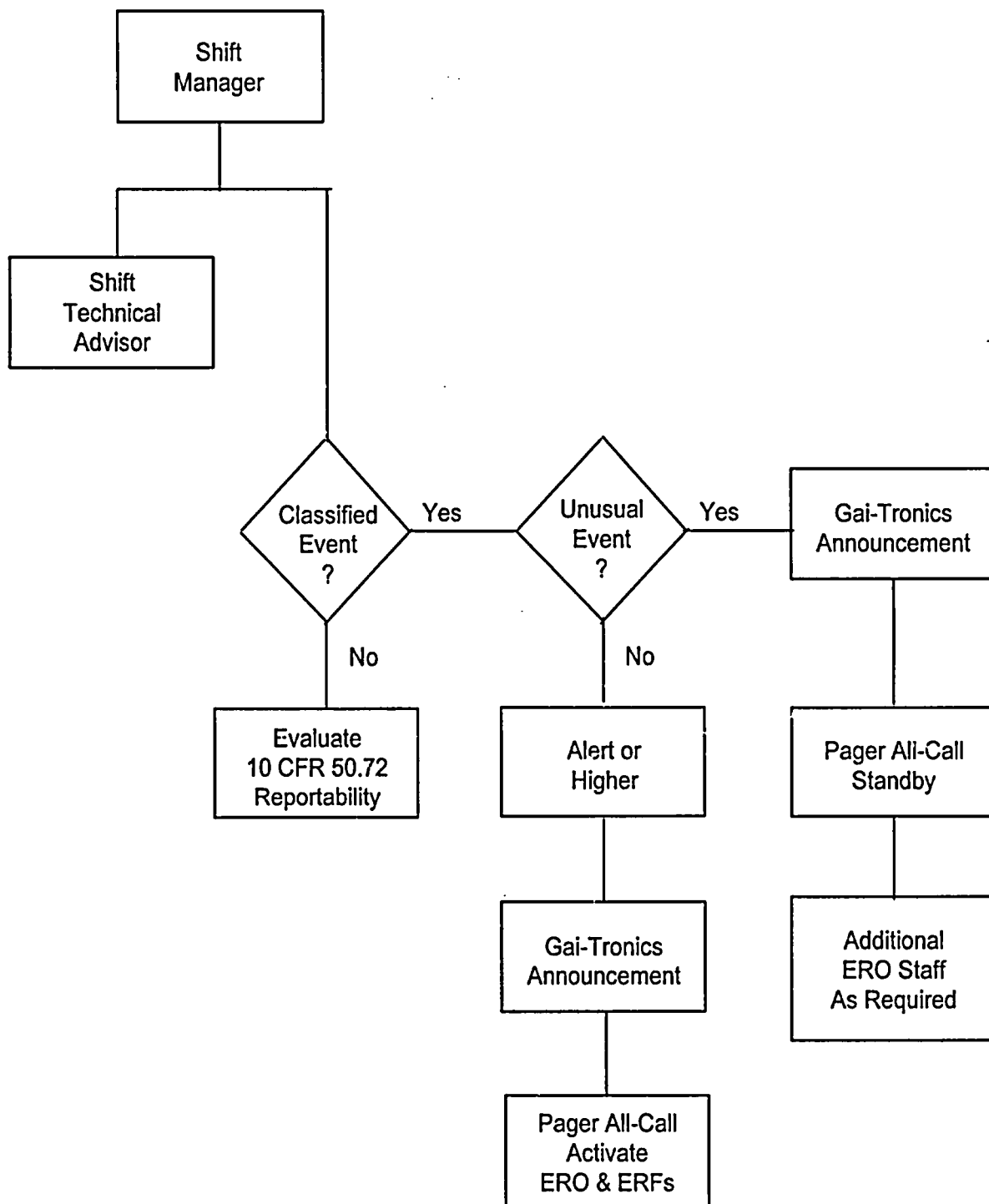
ORGANIZATIONAL CONTROL OF EMERGENCIES

FIGURE 5-4
EMERGENCY ORGANIZATION - ALERT, SITE EMERGENCY AND GENERAL EMERGENCY



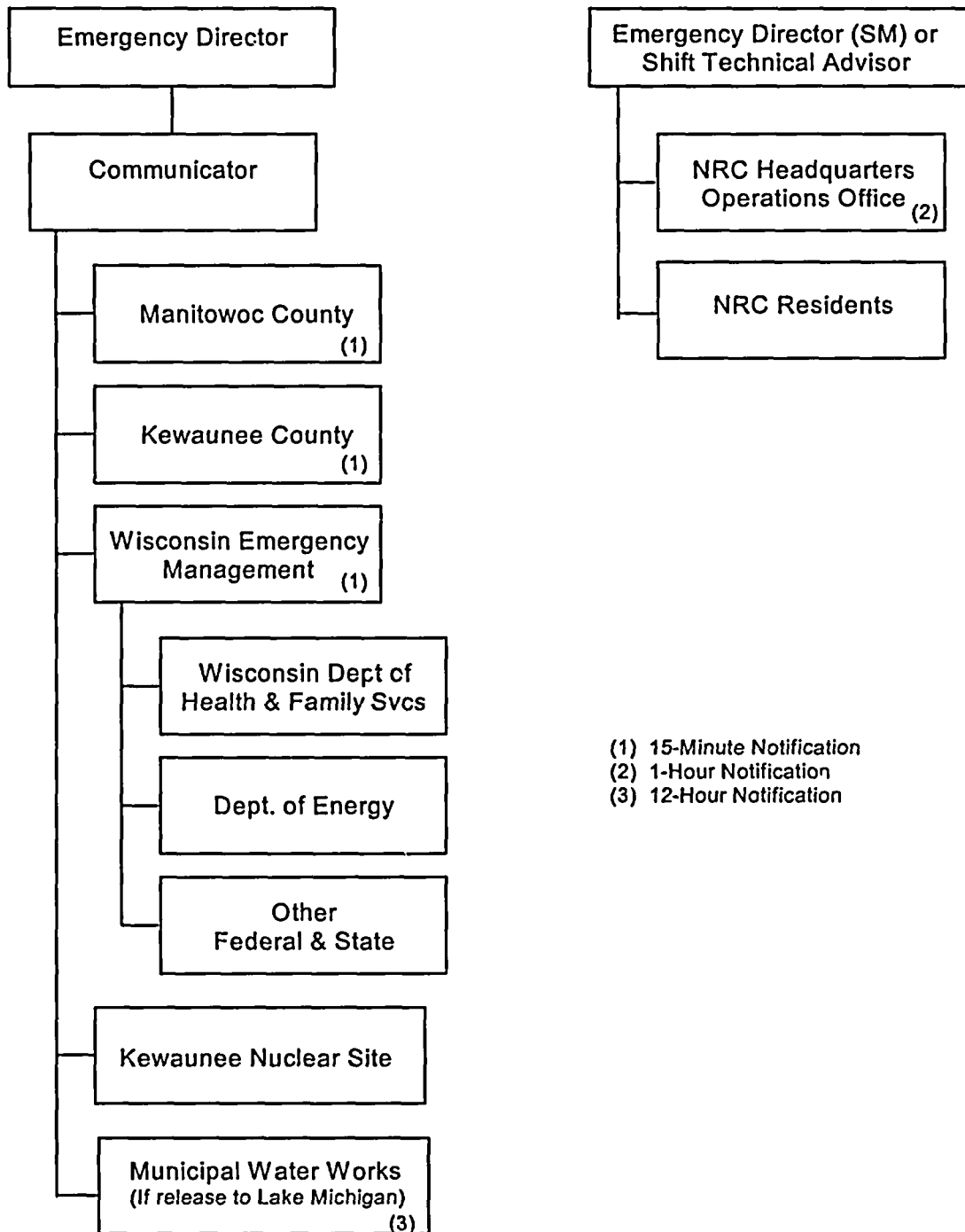
ORGANIZATIONAL CONTROL OF EMERGENCIES

FIGURE 5-5
EMERGENCY NOTIFICATION SEQUENCE



ORGANIZATIONAL CONTROL OF EMERGENCIES

FIGURE 5-6
PBNP OFFSITE NOTIFICATIONS



ORGANIZATIONAL CONTROL OF EMERGENCIES

TABLE 5-1
CORRELATION BETWEEN EMERGENCY AND NORMAL ORGANIZATION TITLES

| Emergency Organization | Normal Organization | |
|--|---|--|
| <u>Title</u> | <u>Title</u> | <u>Possible Alternate Title</u> |
| <u>Emergency Director</u> | <u>Site Vice President</u> | <u>Plant Manager</u> |
| <u>EOF manager</u> | <u>Manager Engineering</u> | <u>Manager Performance Assessment</u> |
| <u>TSC Manager</u> | <u>Operations Manager</u> | <u>Sr. Technical Advisor</u> |
| <u>Shift Manager</u> | <u>Shift Manager</u> | <u>Operating Supervisor</u> |
| <u>JPIC Manager</u> | <u>Communications Manager</u> | <u>Energy Center Supervisor</u> |
| <u>Plant Spokesperson</u> | <u>JPIC Manager</u> | <u>Emergency Director</u> |
| <u>Security Shift Commander</u> | <u>Security Shift Commander</u> | <u>Security Shift Commander</u> |
| <u>Security Officers</u> | <u>Security Officers</u> | <u>Security Officers</u> |
| <u>Operating Supervisor</u> | <u>Operating Supervisor</u> | <u>Operating Supervisor</u> |
| <u>Control Operator</u> | <u>Control Operator</u> | <u>Control Operator</u> |
| <u>Auxiliary Operator</u> | <u>Auxiliary Operator</u> | <u>Auxiliary Operator</u> |
| <u>Shift Technical Advisor</u> | <u>Shift Technical Advisor</u> | <u>Shift Technical Advisor</u> |
| <u>ERF Communicator</u> | <u>Senior Engineer</u> | <u>Training Instructor</u> |
| <u>Operations Coordinator</u> | <u>Present or Former Former Licensed Operator</u> | <u>Present or Former License Certification</u> |
| <u>Plant Status Monitor</u> | <u>Sr. Engineer</u> | <u>Engineer</u> |
| <u>Engineering Coordinator</u> | <u>Engineering Supervisor</u> | <u>Sr. Engineer</u> |
| <u>SAMG Engineer</u> | <u>Engineering Supervisor</u> | <u>Sr. Engineer</u> |
| <u>Rad/Chem Coordinator</u> | <u>Rad Protection Manager</u> | <u>Chemistry Supervisor</u> |
| <u>Rad/Chem Monitor</u> | <u>Operations Planner</u> | <u>Chemistry Instructor</u> |
| <u>Security Coordinator</u> | <u>Security Specialist</u> | <u>Security Specialist</u> |
| <u>ENS Communicator</u> | <u>Licensing Manager</u> | <u>Sr. Reg. Compliance Specialist</u> |
| <u>Administrative Support</u> | <u>Document Control Supervisor</u> | <u>Supervisor-Records Management</u> |
| <u>OSC Coordinator</u> | <u>Maintenance Manager</u> | <u>Maintenance General Supervisor</u> |
| <u>Reentry Team Coordinator</u> | <u>Shift Manager</u> | <u>Operation Supervisor</u> |
| <u>OSC Leader - Operations</u> | <u>Operations Supervisor</u> | <u>Operations Supervisor</u> |
| <u>OSC Leader - Radiation Protection</u> | <u>General Supervisor Radiation Protection</u> | <u>Radiation Protection Supervisor</u> |

POINT BEACH NUCLEAR PLANT
EMERGENCY PLAN MANUAL

EP 5.0
Revision 49 DRAFT
November 6, 2003

ORGANIZATIONAL CONTROL OF EMERGENCIES

| Emergency Organization | Normal Organization | |
|--|--|---|
| <u>Title</u> | <u>Title</u> | <u>Possible Alternate Title</u> |
| <u>OSC Leader - Instrument and Control</u> | <u>I&C Supervisor</u> | <u>Maintenance Supervisor</u> |
| <u>OSC Leader - Mechanical</u> | <u>Mechanical Maintenance Supervisor</u> | <u>Maintenance Supervisor</u> |
| <u>OSC Leader - Electrical</u> | <u>Electrical Maintenance Supervisor</u> | <u>Maintenance Supervisor</u> |
| <u>OSC Leader - Chemistry</u> | <u>Chemistry Supervisor</u> | <u>Chemistry Specialist</u> |
| <u>State and County Communicator</u> | <u>System Engineer</u> | <u>Engineering Coordinator</u> |
| <u>State Liaison</u> | <u>Engineer</u> | <u>Planner</u> |
| <u>County Liaison</u> | <u>Engineer</u> | <u>Planner</u> |
| <u>Resource Coordinator</u> | <u>Supply Chain Manager</u> | <u>Senior Sourcing Specialist</u> |
| <u>Offsite Assembly Area Coordinator</u> | <u>Supervisor</u> | <u>Supervisor</u> |
| <u>Dose/PAR Coordinator</u> | <u>General Supervisor - Radiation Protection</u> | <u>Radiological Engineer</u> |
| <u>OSRP Coordinator</u> | <u>Radiation Protection Supervisor</u> | <u>Radiation Protection Coordinator</u> |
| <u>Field Team Leader</u> | <u>Radiation Protection Supervisor</u> | <u>Respiratory Protection Coordinator</u> |
| <u>Field Monitor Team Member</u> | <u>Health Physics Technologists</u> | <u>Health Physics Technologists</u> |
| <u>SBCC Survey Leader</u> | <u>Health Physics Technologists</u> | <u>Health Physics Technologists</u> |
| <u>Dose/PAR Monitor</u> | <u>Radiological Engineer</u> | <u>Engineering Programs Manager</u> |
| <u>HPN Communicator</u> | <u>General Supervisor</u> | <u>Engineer</u> |
| <u>SRC Communicator</u> | <u>General Supervisor</u> | <u>Engineer</u> |
| <u>EAL Monitor</u> | <u>Present or Former Licensed Certification</u> | <u>Present or Former License Operator</u> |

ENCLOSURE 3

**Comparison of NUREG-0654 Table B-1
And PBNP Commitments**

| Major Functional Area | Major Tasks | Position Title or Expertise | Table B-1 | | | Original Commitment | | | New Commitment | | |
|---|--|--|-----------|--------|--------|-------------------------|--------|--------|------------------|--------|-------------------------|
| | | | On Shift* | 30 Min | 60 Min | On Shift* | 30 Min | 60 Min | On Shift* | 30 Min | 60 Min |
| Plant Operations and Assessment of Operational aspects | | Shift Supervisor (SRO) | 1 | 0 | 0 | 1 | 0 | 0 | 1 SM | 0 | 0 |
| | | Shift Foreman (SRO) | 1 | 0 | 0 | 1 | 0 | 0 | 1 DOS | 0 | 0 |
| | | Control Room Operators | 2 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 |
| | | Auxiliary Operators | 2 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 |
| | | | | | | | | | | | |
| Emergency Direction and Control (Emergency Coordinator) *** | | STA, Shift Supervisor or designated facility manager | 1** | 0 | 0 | 1 DTA | 0 | 0 | 1 STA | 0 | 0 |
| | | | | | | | | | | | |
| Notification/ Communication | Notify licensee, state, local and federal personnel and maintain communication | | 1 | 1 | 2 | 1 | 0 | 2 | 1 SEC | 0 | 3 |
| | | | | | | | | | | | |
| Radiological Accident Assessment and Support of Operational Accident Assessment | EOF Director | Senior Manager | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 TSC 1 EOF |
| | Offsite Dose Assessment | Senior HP Expertise | 0 | 1 | 0 | 0 | 1 | 0 | 1 SRO | 0 | 1 Dose/P ar Coord |
| | Offsite Surveys | | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 2 |
| | Onsite (out of plant) | | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1** | 1** |
| | In-plant surveys | | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 2 |
| | Chemistry/ Radiochemistry | Rad/Chem Technicians | 1 | 0 | 1 | 1 - 88 hrs/w k | 1 | 0 | 1 | 0 | 1 |
| | | | | | | | | | | | |
| Plant system engineering, repair and corrective actions | Technical Support | Shift Technical Advisor | 1 | 0 | 0 | 1 DTA* * | 0 | 0 | 1 STA** | 0 | 0 |
| | | Core/Thermal Hydraulics | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 Eng Coord |
| | | Electrical | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 MTN Sup |
| | | Mechanical | 0 | 0 | 1 | 0 | 0 | 0 | 1 MTN Sup (1) | 0 | 1 MTN Sup |
| | Repair and Corrective Actions | Mechanical Maintenance | 1** | 0 | 1 | 1** | 0 | 1** | 1 | 0 | 1 |
| | | Radwaste Operator | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| Major Functional Area | Major Tasks | Position Title or Expertise | Table B-1 | | | Original Commitment | | | New Commitment | | |
|--|--|------------------------------|-----------|---------------|--------|---------------------|---------------|--------|----------------|---------------|--------|
| | | | On Shift* | 30 Min | 60 Min | On Shift* | 30 Min | 60 Min | On Shift* | 30 Min | 60 Min |
| | | Electrical Maintenance | 1** | 1 | 1 | 1** | 0 | 1** | 1 | 0 | 1 |
| | | I&C Technician | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| | | | | | | | I&C Sup | | | | |
| Protective Actions (In-Plant) | Radiation Protection: Access Control, HP Coverage, Personnel Monitoring, Dosimetry | HP Technicians | 2** | 2 | 2 | 2** | 1** | 1** | 2** | 2** | 2** |
| | | | | | | | | | | | |
| Firefighting | | Per Technical Specifications | | | | | | | | | |
| | | | | | | | | | | | |
| Rescue Operations and First Aid | | | 2** | Local Support | | 2** | Local Support | | 2** | Local Support | |
| | | | | | | | | | | | |
| Security | | Per Security Plan | | | | | | | | | |
| | | | | | | | | | | | |
| | Totals | | 10 | 11 | 15 | 8 | 3 | 5 | 19 | 0 | 16 |
| * For each unaffected nuclear unit in operation, maintain at least one shift foreman, one control room operator, and one auxiliary operator except that units sharing a control room may share a shift foreman if all functions are covered. | | | | | | | | | | | |
| | | | | | | | | | | | |
| ** May be provided by shift personnel assigned other functions. | | | | | | | | | | | |
| | | | | | | | | | | | |
| *** Overall direction of facility response to be assumed by EOF director when all centers are fully manned. Director of minute-to-minute facility operations remains with senior manager in the technical support center or control room. | | | | | | | | | | | |
| | | | | | | | | | | | |
| **** May be performed by engineering aide to shift supervisor. | | | | | | | | | | | |
| | | | | | | | | | | | |
| (1) May be mechanical, electrical or I&C supervisor. | | | | | | | | | | | |