Radiological Nuclear Annex

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Part 1 – *Non-Nuclear Power Plant Incidents*

Table 1: Coordinating and Support Agencies

Lead Coordinating Agency	Department of Military Affairs/Wisconsin Emergency Management (DMA/WEM)
Wisconsin Governmental Support Agencies	Department of Health Services (WI DHS) Department of Agriculture, Trade & Consumer Protection (DATCP) Department of Natural Resources (DNR) Department of Transportation (WisDOT) Department of Military Affairs (DMA) Department of Justice (WI DOJ)
Non-Governmental Support Organizations	American Red Cross (ARC)
Federal ESF Coordinating Agencies	Department of Energy (DOE) Department of Homeland Security (US DHS) Environmental Protection Agency (EPA) Federal Bureau of Investigation (FBI) National Aeronautics and Space Administration (NASA) Nuclear Regulatory Commission (NRC) Department of Agriculture (USDA) Department of Commerce (US DOC) Department of Defense (DOD) Department of Health and Human Services (HHS) Department of Housing and Urban Development (HUD) Department of the Interior (DOI) Department of Justice (US DOJ) Department of Labor (US DOL) Department of State (DOS) Department of Transportation (US DOT) Department of Veterans Affairs (USDVA) General Services Administration (GSA) National Weather Service (NSW)

1. Introduction

1.1. Purpose

The Nuclear/Radiological Incident Annex provides an organized and integrated capability for a timely, coordinated response by the State of Wisconsin to incidents involving nuclear or radioactive materials that are not covered in the State of Wisconsin's emergency support function (ESF) 10. **Nuclear power plant incidents are covered in Part 2 of this Annex** which is updated annually and complies with the planning standards set forth in 44 CFR 350 and NUREG-0654/FEMA-REP-1, Rev 2. The Annex is approved annually by FEMA and kept on file in the SEOC.

The US DHS is responsible for the overall federal coordination of all actual and potential terrorist incidents, major disasters, and other emergencies involving nuclear materials. The DOE and DOD are responsible for coordinating the federal response to nuclear incidents involving transportation of materials they own in accordance with their respective plans. Part 1 of this annex describes how WEM coordinates the overall response to a nuclear/radiological transportation accidents, radiological dispersal devices (RDDs), or improvised nuclear devices (INDs). Note: Part 2 of this annex addresses nuclear power plant incidents.

This annex's objectives are to ensure that the state's response to a radiological incident will, (a) mitigate or reduce, to the extent practical, any radiological risk or consequence as early as possible, (b) prevent or reduce both short and long-term adverse health effects to the general public, (c) guide and monitor the actions of emergency responders to minimize radiation exposure, and (d) operate in concert with any simultaneous local, state, or federal response that may be in progress.

1.2. Scope

Part 1 applies to nuclear/radiological incidents, including sabotage and terrorist incidents, involving the release or potential release of radioactive material that poses an actual or perceived hazard to public health, safety, national security, or the environment. This includes terrorist use of RDDs or INDs, lost radioactive material sources, and transportation accidents involving nuclear/radioactive material. The level of the state's response to a specific incident is based on numerous factors including: the ability of local and tribal officials to respond; the type and/or amount of radioactive material involved; the extent of the impact or potential impact on the public and environment; and the size of the affected area.

This annex:

1.2.1. Describes the response and operational concepts for the state's response to a nuclear/radiological incident, including a terrorist incident that has actual, potential, or perceived radiological consequences within the State of Wisconsin.

1.2.2. Acknowledges the unique nature of a variety of nuclear/radiological incidents and the responsibilities of state, local, and tribal governments to respond to them.

1.2.3. Specifies the roles and responsibilities of state, local, and tribal agencies for preventing, preparing for, responding to, and recovering from nuclear/radiological incidents.

1.2.4. Includes guidelines for notifying the public and state officials of the state's response efforts and activities, coordination of public information, and congressional relations.

1.2.5. Provides protocols for requesting state and federal government resources and expertise to respond to radiological incidents. These resources and expertise include, but are not limited to:

1.2.5.1 Wisconsin Department of Health Services/Radiation Protection Section (WI DHS/RPS), which provides the technical expertise to WEM on radiological matters;

1.2.5.2 The Federal Radiological Monitoring and Assessment Center (FRMAC), established at or near the scene of an incident to coordinate radiological assessment and monitoring; and

1.2.5.3 The Federal Advisory Team for Environment, Food, and Health (known as "the Advisory Team"), which provides expert recommendations on protective action guidance.

1.3. Policies

1.3.1. WEM coordinates the overall state response to radiological incidents with WI DHS and FEMA, and terrorist incidents with WI DHS, WI DOJ and US DHS.

1.3.2. Support agencies are responsible for supporting the state's response to nuclear/radiological incidents as requested by WEM and outlined in their respective ESFs.

1.3.3. The State of Wisconsin uses the Multi-Agency Coordination System to coordinate its response. WEM will have at least one representative as part of the Unified Command System (if one is established) to coordinate the overall response to the incident or any other structure consistent with the National Incident Management System (NIMS) that is capable of providing the required support to work with the federal government and the affected local or tribal governments.

1.3.4. The Federal Bureau of Investigation (FBI) has lead responsibility for criminal investigations of terrorist acts or terrorist threats, and for coordinating activities of other members of the law enforcement community to detect, prevent, preempt, investigate, and disrupt terrorist attacks against the United States, including incidents involving nuclear/radioactive materials.

1.3.5. When the concept of operations in this annex is implemented, state agency plans that address nuclear/radiological incident management are incorporated into this annex as supporting plans and/or operational supplements.

1.3.6. State agencies are authorized to respond directly to certain incidents affecting public health and safety which are consistent with their legal obligations and authorities, and consistent with their roles in the respective ESFs.

1.3.7. State, local, and tribal governments are responsible for determining and implementing measures to protect life, property, and the environment at the incident location. This does not relieve the nuclear/radiological facility or material owners/operators from any applicable legal obligations.

1.3.8. State, local, and tribal governments and owners/operators of nuclear/radiological facilities or activities may request assistance directly from the appropriate federal agency and/or state governments with which they have pre-existing arrangements or relationships (e.g. the Emergency Management Assistance Compact (EMAC)).

1.3.9. Response to nuclear/radiological incidents affecting land owned by the federal government is coordinated with the agency responsible for managing that land to ensure that incident management activities are consistent with federal statutes governing use and occupancy. Tribal lands are sovereign nations; therefore federal, state, and local governments may have limited or no authority on these lands. Participating state and federal agencies may take appropriate independent emergency actions within the limits of their statutory authority to protect the public, mitigate immediate hazards, and gather information concerning the emergency.

1.3.10. The state, local, and tribal organizations provide their own logistical support consistent with interagency plans. State, local, and tribal governments are encouraged to coordinate their efforts with the federal government but maintain their own logistical support, consistent with applicable authorities and requirements.

1.3.11. For radiological incidents involving a nuclear weapon, special nuclear material, or classified components, the agency with custody of the material (DOD, DOE, or NASA) may establish a National Defense Area (NDA) or National Security Area (NSA). NDAs and NSAs are established to

safeguard classified information or restricted data, or equipment and material, and place non-federal lands under federal control for the duration of the incident. In the event that radioactive contamination occurs, federal officials coordinate with state and local officials to ensure appropriate public health and safety actions are taken outside of these designated areas.

1.4. Planning Assumptions

1.4.1. Radiological incidents may not be immediately recognized as such until the radioactive material is detected, or the effects of radiation exposure are manifested in the population.

1.4.2. Acts of terrorism may occur with or without warning and attacks may occur simultaneously at multiple locations. These attacks may not be immediately recognizable as terrorism by emergency responders.

1.4.3. An act of radiological terrorism, particularly an act directed against a large population center within the United States, will have major consequences that can overwhelm the capabilities of the state, local, or tribal governments to respond and may seriously challenge existing federal response capabilities.

1.4.4. A radiological incident may include chemical or biological contaminants, which may require concurrent implementation of the National Contingency Plan (NCP) or other state plans and procedures.

1.4.5. An incident involving the potential release of radioactivity may require implementation of protective measures for the public and emergency workers.

1.4.6. An expeditious state and federal response is required to mitigate the consequences of the nuclear/radiological incident. Significant radiological incidents will likely trigger implementation of the WERP and National Response Framework (NRF) Nuclear/Radiological Incident Annex.

2. Concept of Operations

2.1. General

2.1.1. This concept of operations is applicable to potential and actual radiological incidents requiring state coordination with local and tribal governments as well as federal agencies.

2.1.2. This annex identifies resources and responsibilities for agencies that will respond to incidents involving radioactive materials.

2.2. Types of Incidents and Events

2.2.1. Non-Nuclear Power Plant Incidents and Events

2.2.1.1 Non-nuclear power plant incidents that involve radiological materials will, as required by Wis. Stat. § 254.31 – 254.45, primarily be handled by local responders acting with direction from the RPS staff.

- *RPS will ensure that the Wisconsin Emergency Hotline is notified of any transportation incidents involving radiological materials.*
- *If the Wisconsin Emergency Hotline receives the first notification from the local responders, it will immediately notify RPS using the standard operating guidelines (SOG)*

found in the Wisconsin Emergency Hotline procedures, Hazardous Materials and Spills SOG 2-30.

- *If the incident response escalates to a level that additional state resources are required, the Wisconsin Emergency Hotline will be advised by RPS or WEM management to elevate the state emergency operations center (SEOC) and make appropriate notifications.*
- *The Wisconsin Emergency Hotline will work with the WEM Administrator to meet requests via procedures outlined in this appendix and elsewhere in the State Emergency Operations Plan (SEOP).*

2.2.1.2 Radiological Transportation

- *WEM is the Governor's designated point of contact for notification of radioactive waste and spent fuel shipments that travel through the state.*
  (1) The initial shipment notification is received by the WEM Administrator and then forwarded to the REP Program Manager and REP Planners.
  (2) The REP Program Manager and REP Planners will then be advised to follow the Wisconsin Radiological Transportation Notification Process.
  (3) As part of the Wis. Stat. § 348.015, if a radiological shipment is classified as a Highway Route Controlled Quantity (HRCQ) then it must obtain a radiological transportation permit from WisDOT and a state traffic patrol escort.
- *In the event of a transportation accident involving one of these shipments, local responders would be the first to respond.*
  (1) Local responders are trained to recognize placards and labels indicating hazardous or radiological materials.
  (2) When these warnings are recognized, local responders will contact their Regional Hazardous Material Response System Team or the Wisconsin Emergency Hotline.
  (3) The Wisconsin Emergency Hotline will contact the RPS SRC.
    - *The RPS may deploy a team to the incident site to survey the shipment to determine if the package was compromised in the incident.*
    - *They will also survey the people, vehicles, and environment to determine if there has been any contamination.*

2.2.2. Hostile Actions

Terrorist incidents are any violent acts dangerous to human life, in violation of the criminal laws of the United States or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. Terrorist activities addressed in this annex are specific to deliberate attacks, such as the detonation of an RDD.

2.2.2.1 Notifications of these incidents would occur through the communication systems already in place, as described in ESF 2.

2.2.2.2 All appropriate ESFs would be activated in the SEOC, and the WI Homeland Security Council (HSC) and Joint Terrorism Task Force (JTTF) would convene.

2.2.2.3 WEM would deploy regional staff to the affected county EOCs

2.2.2.4 Response to a radiological terrorist incident would differ from the response to other radiological incidents in the following ways:

- *Wisconsin Department of Justice/Wisconsin Statewide Intelligence Center (WI DOJ/WSIC) would have a more prominent role as they would serve as the state liaison with federal investigative and intelligence agencies. WSIC analyzes suspicious incidents relating to homeland security issues and shares related information with state, local, and tribal governments.*
- *The site of any terrorist attack becomes a crime scene as well as an incident site. Law enforcement agencies will need to preserve and collect evidence while emergency responders perform the same types of duties that they would perform in other emergency situations.*
- *A Joint Information Center (JIC) would be established but with a local and federal law enforcement presence in addition to state and local Public Information staff.*
- *Protective actions for radiological incidents are usually formulated and recommended by the state to the counties. For terrorist incidents, situational information from local law enforcement would be required before any protective actions could be implemented.*

3. Responsibilities and Tasks-Response

3.1. Emergency Public Information

3.1.1. During an emergency, priority information is released to the public via media advisories and Emergency Alert System (EAS) messages in coordination with the counties.

3.1.2. Joint Information Center (JIC)

3.1.2.1 Public information and JIC operations are detailed in ESF 15 – External Affairs.

3.1.3. The public will be provided via press release with a public inquiry "hotline" phone number operated by United Way 211, at a time deemed appropriate, and will be instructed to use this number for all questions regarding nuclear/radiological incidents.

3.1.3.1 Identified rumors will be logged and passed onto the appropriate agency for response.

- *Rumors may be addressed through media releases, briefings, or by individual contact.*
- *Rumors will not be addressed through EAS broadcasts unless the rumor(s) interferes with protective actions.*

3.2. Radiation Control and Sampling

3.2.1. Radiation Control

3.2.1.1 RPS/SRC will:

- *Direct and coordinate the assessment of the radiological impact of the incident, perform dose assessment calculations and recommend initial or revised protective actions to the Governor or designee and counties.*
- *Advise county decision makers regarding stay times, turn back values, ingestion of KI, and monitoring the exposure of emergency workers.*
- *Receive and give periodic status updates, coordinate activities or negotiate protective action recommendations with the Forward Operating Center/Mobile Radiological*

Laboratory, other state agencies (e.g. WEM, DATCP, and DNR), federal agencies, neighboring states, and county radiological officer (if available).

- *Identify the need for additional field monitoring, sample collection, and sample analysis resources and establish liaisons with federal response centers. Coordinate requests for federal or other state assistance with WEM.*
- *Assist with the public information effort by providing technical information to the JIC, assisting PIOs with resolving incorrect information or rumors, working with WEM to provide technical information to elected officials and developing information regarding long-term response efforts.*

3.2.1.2 WI DHS has lead responsibility for 24-hr/day capability for monitoring and assessing individuals contaminated with radioactive material, emergency workers, and vehicles that arrive at reception centers.

- *WI DHS health monitoring personnel at the reception centers are supplemented by trained local Auxiliary Health Monitors who operate under WI DHS supervision.*
- *WI DHS has a roster of trained state and local government personnel who serve on state radiological emergency response teams that perform both field and health monitoring.*
- *State team members are responsible for supervising health monitoring activities at the reception center.*
- *WI DHS will maintain and calibrate the designated equipment quarterly.*
- *The county ensures that the appropriate equipment is at the reception center at the time of activation.*
- *WI DHS is responsible for all radiological monitoring equipment.*
- *The type, number and locations of equipment can be found in the RIRP.*

3.2.1.3 The oversight of care and treatment of radioactively contaminated, injured, or exposed emergency workers and the general public is a state responsibility.

3.2.1.4 The transportation of radioactively contaminated, injured or exposed emergency workers and the general public is a county responsibility.

3.2.2. Food, Animal and Plant Services

3.2.2.1 State government has the primary responsibility for protecting the general public from ingesting contaminated food and water resulting from a nuclear/radiological incident. This responsibility is shared by four state agencies:

- *WEM*
- *RPS*
- *DNR*
- *DATCP*

3.2.2.2 Other state and federal agencies that may assist include:

- *The Cooperative Extension Service*
- *State and County Food and Agriculture Councils (FACs)*

Note: These agencies may serve as coordinators for the USDA local-level response. DATCP is also responsible for keeping these agencies informed of the situation status and for coordinating all agencies' resources.

3.2.2.3 The State Radiological Coordinator (SRC) manages all field monitoring and sampling activities in Wisconsin using staff from:

- *RPS*
- *The University of Wisconsin*
- *Local health departments, and*
- *Federal sampling teams*
- *Staff from DATCP is used to collect food-related and water samples in areas outside the restricted area.*

3.2.2.4 In coordination with local officials, actions to protect the public from the ingestion of radioactively contaminated food or water (e.g. agricultural holds, disposal of contaminated food or animals, shutting down surface water intakes for public water supply systems, curtailment of hunting or fishing) will be reviewed and determined jointly by WEM, WI DHS, DATCP and DNR staff in the SEOC. They are implemented through state agency rules by state agency personnel and are announced to the public through the media.

3.3. Request for Federal Assistance

3.3.1. Local resources will provide the primary response for incidents within their jurisdiction.

3.3.1.1 The state provides additional resources upon local request, to include requesting federal assistance resources.

3.3.1.2 The Governor of Wisconsin or designee is authorized to request federal assistance.

3.3.1.3 When requesting federal resources, the state will identify the type and quantity of resources needed from federal agencies.

3.3.2. Coordination with the federal government for the direction of offsite emergency response is secured under the provisions of the appropriate federal plans (e.g. NRF and the Nuclear/Radiological Incident Annex).

3.3.3. Federal assets, such as the Consequence Management Home Team (FRMAC support), are available via phone and computer to provide support until the first Consequence Management Response Team (CMRT) arrives and becomes operational.

Table 2: Federal Assets Response Time

Resource	Anticipated Arrival Time After Notification	Source
Advisory Team (via phone bridge)	< 2 hours	FRMAC Operations Manual 2010 Pp 38 Section 4.6.5
RAP Team	4-8 hours	FRMAC Operations Manual 2010 Pp 20 Section 3.5.3
Consequence Management Response Team (CMRT) Phase 1	10-18 hours	FRMAC Operations Manual 2010 Pp 22 Section 3.5.5; Pp G-2, G.5

Consequence Management Response Team (CMRT) Phase 2	18-36 hours	FRMAC Operations Manual 2010 Pp G-3 Section G.6

4. Responsibilities and Tasks-Recovery

4.1. Wisconsin Recovery Task Force

4.1.1. The State Recovery Task Force will consist of the WEM Administrator (or designee) and representatives from the following agencies/organizations, as needed:

- 4.1.1.1 WI DHS – Divisions of Public Health, Disability and Elderly Services, and Health Care Financing
- 4.1.1.2 WI Department of Children & Families (DCF)
- 4.1.1.3 WisDOT – Divisions of Transportation System Development and Wisconsin State Patrol
- 4.1.1.4 DNR – Divisions of Enforcement, Environmental Quality & Resource Management
- 4.1.1.5 DATCP – Divisions of Food, Animal Health and Agricultural Resource Management
- 4.1.1.6 DMA – The Adjutant General
- 4.1.1.7 PSC Chairperson
- 4.1.1.8 ARC Director of Disaster Services
- 4.1.1.9 Other state agencies as deemed appropriate based on the circumstances of the incident.

4.1.2. Federal representation should include liaisons from the Federal Advisory Team for Environment, Food and Health and may include some or all of the agencies identified in the NRF and the Nuclear/Radiological Incident Annex.

4.2. Recovery Operations

State recovery operations are a natural extension of the Governor's responsibilities as delegated to WEM under Chapter 323 Wis. Stats.

4.2.1. When the administrator determines that the response phase has been completed:

- 4.2.1.1 The WEM Administrator, after consultation with other federal, state, local, and tribal officials and agencies, coordinates with the Governor to transition from the response phase to the recovery phase.
- 4.2.1.2 The transition to the recovery phase is announced to all responders at the federal, state, local levels and that a State Recovery Task Force has been established.

4.2.2. The Task Force will manage the recovery efforts for offsite areas affected by an incident at an NPP.

- 4.2.2.1 The WEM Administrator, acting on behalf of the Governor, will create and chair the State Recovery Task Force, identifying which agencies and organizations will compose it.
- 4.2.2.2 The Task Force will guide recovery efforts in those areas affected and shall create a recovery plan to address responsibilities including, but not limited to:

- *Developing a long-term radiological monitoring and assessment plan.*
- *Developing a plan for the decontamination and restoration activities of both ingestion areas and restricted zones as closely as possible to their pre-incident condition.*
- *Determining priorities for and scheduling restoration activities.*
- *Determining which agencies and organizations can provide the personnel, equipment, and resources necessary to complete restoration activities and securing this assistance.*
- *Determining which areas must remain restricted on a long-term or permanent basis due to radiological or economic considerations.*
- *Arranging for services to the evacuated population.*
- *Assisting evacuated individuals, businesses, and industries with resettlement activities.*
- *Creating a process for identifying losses caused by or resulting from the incident and for negotiating reimbursement of those losses if there is a responsible party.*
- *Provide continuing public information about recovery actions, activities, and timetables through the media.*

5. Supporting Documents

5.1. Supporting Plans

5.1.1. Wisconsin Emergency Management
- 5.1.1.1 JOC SOG 2-20
- 5.1.1.2 SEOC Manual

5.1.2. Department of Health Services
- 5.1.2.1 Administrative Directive 38, Assignment of Emergency Human Services (EHS) Responsibility to Division and Department Personnel
- 5.1.2.2 WI DHS Radiation Protection Section, Radiological Incident Response Plan

5.1.3. Division of Highways (WisDOT)
- 5.1.3.1 The National Plan for Emergency Preparedness Emergency Stand-by Order: Establishment of Emergency Highway Traffic Regulation Plan (EHTR)
- 5.1.3.2 The Federal Highway Administration Program Manual (6-101)

5.1.4. Department of Agriculture, Trade & Consumer Protection
- 5.1.4.1 Computer lists of milk and other food producers, processors, and distributors, by county

5.1.5. Department of Military Affairs
- 5.1.5.1 Wisconsin National Guard, Vol. II, OPLAN BADGER Military Support to Civil Authorities
- 5.1.5.2 HQDA Operation Plan GARDEN PLOT
- 5.1.5.3 NGR 500-1 Military Support to Civil Authorities
- 5.1.5.4 WI Code of Military Justice (WCMJ)
- 5.1.5.5 Vol. I Wisconsin Defense and Emergency Plan (WI DEP)

5.1.6. Public Service Commission

5.1.6.1 Wisconsin Administrative Code, Chapters PSC 104 (Recording and Reporting Utility Accidents) and PSC 115 (Radiological Emergency Preparedness Expenses)

5.1.7. American Red Cross

5.1.8. Federal Agencies

5.1.8.1 Federal Radiological Emergency Response Plan

5.1.8.2 National Response Framework

5.1.8.3 Nuclear/Radiological Incident Annex

Part 2 – *Nuclear Plant Incidents*

Formatting Note: To align with established federal guidance, Part 2 *Nuclear Plant Incidents* uses the numbering format outlined in the REP Program Manual.

ii. Introduction

ii.1 Purpose

Part 2 of the Radiological Nuclear Annex provides specific details on how the state and counties would respond to a nuclear power plant incident in accordance with the guidance set forth in NUREG-0654/FEMA-REP-1, Revision 2.

ii.2 Overview of Nuclear Power Plant Incidents, Planning Zones, and Incident Phases

Nuclear power plants are designed with multiple safety systems to help ensure their safe operation. However, equipment failures, human error, or intentional hostile acts may cause a plume of radioactive materials to be released into the environment surrounding the plant. This plume of radioactive materials is expected to impact the surrounding area in two zones.

The first zone is a circular area with a radius of 10-miles around the plant, known as the emergency planning zone (EPZ), where radiation levels may exceed protective levels set by the Environmental Protection Agency (EPA) depending on the type of incident, the composition of the radioactive release, and weather conditions. This is the zone where extensive planning has been conducted at the state and county level to ensure the public can be protected from the possible acute hazards posed by the release of radiation from the plant through temporary evacuations or shelter-in-place recommendations, controlling access to areas around the plant, administering Potassium Iodide (KI) to emergency workers and those who cannot evacuate, and relocating populations from areas where radiation levels are found to exceed guidelines through sampling efforts. Counties within the 10-mile EPZ are known as "risk counties."

The second zone is a circular area with a radius of 50-miles around the plant, known as the ingestion pathway EPZ, where deposited radioactive materials may be accumulated in food and water, potentially posing a hazard when ingested using thresholds set by the EPA. This is the zone where extensive planning has been conducted at the state and county level to ensure the public can be protected through sampling of agricultural products, wildlife, foods, and drinking water to determine any potential impacts and take appropriate action to prevent those products from entering into the food and drinking water supply. Additionally, residents in isolated areas within the ingestion pathway EPZ may need to be relocated as sampling efforts may reveal pockets of deposited radiation that may be found to pose a long-term health threat. Counties within the 50-miles ingestion pathway EPZ are known as "ingestion counties."

The timeline of any nuclear power plant incident would be broken up into several phases as follows:

- Early/Plume Phase – The plant has a release in progress and the plume is in the air. Protective actions in the EPZ are initially based on computer models and subsequently confirmed by field sampling data.
- Intermediate/Ingestion Phase – The release has stopped. Protective actions in the EPZ and ingestion pathway EPZ are based primarily on field sampling data that may lead to revisions in initial protective actions, including the possible temporary re-entry or permanent return of some individuals to previously evacuated areas, and additional measures to prevent the ingestion of radioactive substances through food and water supplies.
- Late/Recovery Phase – The focus is on long-term recovery, remediation of contamination, and permanent relocation of individuals from contaminated areas to avoid chronic radiation exposure.

These phases often overlap and could extend from days to years.

Hostile action based (HAB) incidents involve intentional hostile acts towards the plant intended to cause damage or restrict critical access to the plant, possibly resulting in a release of radiation into the environment. HAB incidents require enhanced support from law enforcement and additional coordination between the plant and local responders. Wisconsin Emergency Management (WEM) coordinates with the Point Beach Nuclear Plant (PBNP) and local law enforcement in Manitowoc and Kewaunee Counties on the development and maintenance of an Integrated Response Plan (IRP) for HAB incidents at PBNP. This is a law enforcement sensitive document and not part of this plan. The State of Minnesota would have primary responsibility for a law enforcement response at the Prairie Island Nuclear Generating Plant (PINGP), since it is physically located in the State of Minnesota.

ii.3 Nuclear Power Plant and Spent Fuel Storage Installation Locations

There are three operating commercial nuclear power plants in or near the State of Wisconsin.

PBNP is operating in the Town of Two Creeks in northeast Manitowoc County, Wisconsin. Both Manitowoc and Kewaunee County, Wisconsin are located within the 10-mile Emergency Planning Zone (EPZ) for the PBNP. A total of 10 additional Wisconsin counties are located within the 50-mile ingestion pathway EPZ.

PINGP is operating in the Town of Welch in Goodhue County, Minnesota. Pierce County, Wisconsin is located within the 10-mile EPZ for the PINGP. A total of 7 additional Wisconsin counties are located within the 50-mile ingestion pathway EPZ.

The Byron Nuclear Generating Station is operating in the Town of Rockvale in Ogle County, Illinois. There are no Wisconsin counties located within the 10-mile EPZ. A total of 4 Wisconsin counties are located within the 50-mile ingestion pathway EPZ.

There are also three Independent Spent Fuel Storage Installation (ISFSI) sites in or near the State of Wisconsin where spent nuclear fuel from previously operational nuclear power plants is stored in dry casks.

The Kewaunee Power Station (KPS) ISFSI is located in the Town of Carlton in Kewaunee County, Wisconsin. There are no EPZ or ingestion pathway EPZ established for the KPS ISFSI.

The La Crosse Boiling Water Reactor (LACBWR) ISFSI is located in the Town of Genoa in Vernon County, Wisconsin. There are no EPZ or ingestion pathway EPZ established for the LACBWR ISFSI.

The Zion Generating Plant ISFSI is located in the City of Zion in Lake County, Illinois. Kenosha County, Wisconsin is located approximately 3.5 miles north of the Zion Generating Plant ISFSI. There are no EPZ or ingestion pathway EPZ established for the Zion ISFSI.

A map of the three operating nuclear plants and three ISFSI sites can be found in Attachment 1.

A. Assignment of Responsibility

A.1 Organizations

Radiological incidents at nuclear power plants are primarily managed at the county level. The counties manage radiological incidents in coordination with their respective emergency management agency and its director. The chief elected official in each county makes protective action decisions (PADs) in both the plume and post-plume phases with advisement from the plant and the State Radiological Coordinator (SRC) on protective action recommendations (PAR). PADs are then implemented by the emergency management agency director with the support of local agencies. Counties also open reception centers for radiological monitoring and decontamination of evacuees and emergency workers along with their vehicles, possessions, and equipment, open congregate care centers or shelters for evacuees, provide information to the public through a joint information center (JIC), coordinate with state officials to determine which residents can re-enter or return and where longer term relocation is necessary, and coordinate with state officials on recovery.

State agencies support counties in responding to radiological incidents at nuclear power plants. WEM is the lead state agency in coordinating the state and federal support to counties. WEM is a division of the Department of Military Affairs (DMA). DMA is led by The Adjutant General (TAG). The TAG oversees the WEM Administrator. The WEM Administrator has overall responsibility for the state's response as a Governor's Appointed Representative (GAR).

The following state level organizations provide support to counties during nuclear power plant incidents:

- Wisconsin Emergency Management (WEM) – Provides the following:
    - Serves as the lead state coordinating agency for the state’s response to a nuclear power plant incident.

  - Receives notification from the plants and notifies the SRC and mobilizes the State Emergency Operations Center (SEOC) as appropriate through the Wisconsin Emergency Hotline at the Joint Operations Center (JOC).
  - Facilitates the PAR/PAD call with the utility, counties, and the SRC.
  - Receives, tracks, and fills resource requests from the counties and other state agencies in the SEOC.
  - Maintains situational awareness from the utilities, counties, and the SRC and briefs officials as appropriate.
  - Provides public information through public information officers (PIO) at the SEOC and JIC.
  - Leads the recovery effort through the Wisconsin Recovery Task Force.
- Wisconsin Department of Health Services (DHS) – Provides the following:
  - Provides overall leadership, coordination, assessment, and technical assistance for mass care, emergency assistance, housing, and human services.
  - Establishes medical orders to provide mass prophylaxis and treatment, including the use of KI.
  - Establishes procedures for receipt, inventory control, and distribution of Strategic National Stockpile (SNS) materials, including radiological medical countermeasures.
  - Through the DHS Radiation Protection Section (RPS):
    - Provides accident assessment, dose assessment, protective action recommendations (PAR), advisement on exposure control, advisement on re-entry, relocation, and return, and recovery through the SRC with support staff from the SEOC when it is activated.
    - Supports counties with the management of radiological functions at county radiological reception centers and the incident command post (ICP).
    - Supports public information officers (PIO) on the interpretation of technical radiological information at the JIC.
    - Provides radiological sampling through Field Monitoring Teams (FMT).
    - Provides laboratory capabilities to analyze radiological samples.
    - Advises the Department of Agriculture Trade & Consumer Protection (DATCP) and the DNR on radiological considerations for sampling and controlling agricultural products, food products, wild game, and drinking water in the ingestion pathway EPZ.
- Wisconsin Department of Agriculture Trade & Consumer Protection (DATCP) – Provides sampling, protection, and control of agricultural products and food products in the ingestion pathway EPZ.
- Wisconsin Department of Natural Resources (DNR) – Provides sampling, protection, and control of wild game and drinking water in the ingestion pathway EPZ.
- Wisconsin Department of Justice (DOJ) – Provides the following:

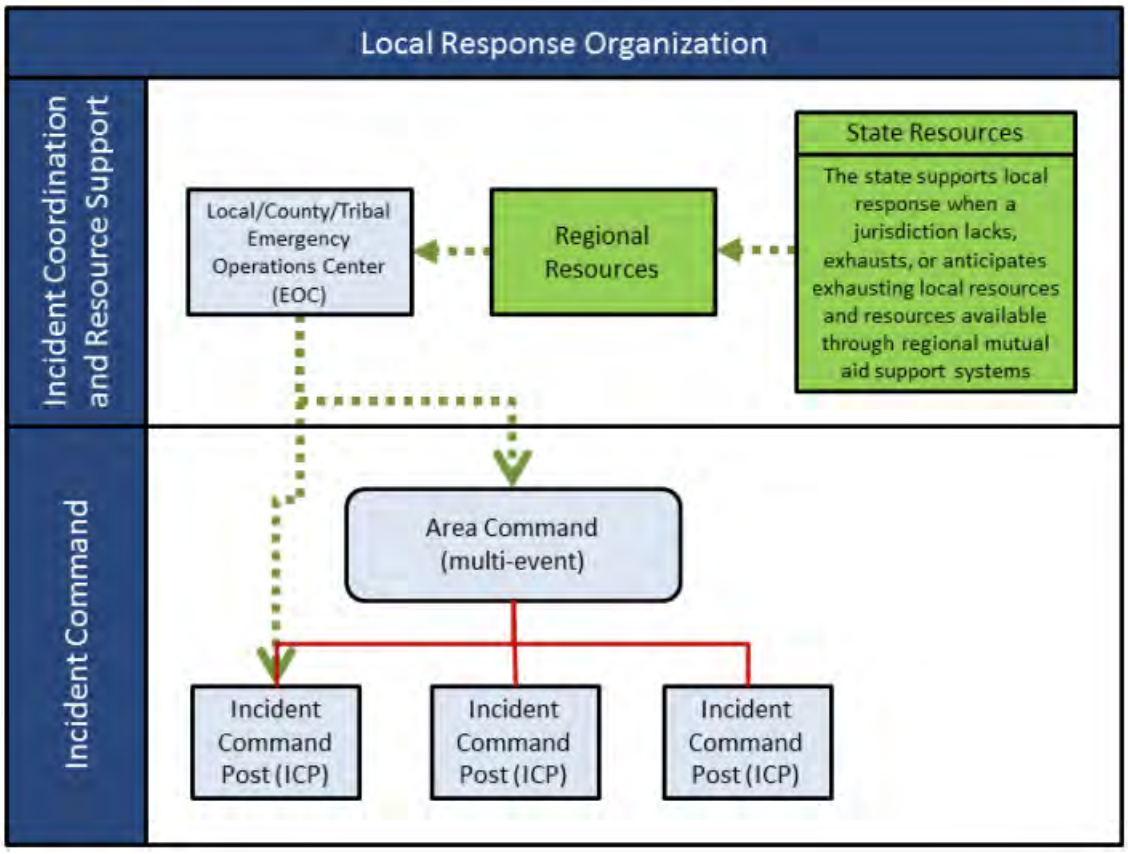
  - Provides intelligence relative to possible HAB threats to the plant via coordination between the Wisconsin Statewide Intelligence Center (WSIC), Southeastern Wisconsin Threat Analysis Center (STAC), and Joint Terrorism Task Force (JTTF).
  - Provides Division of Criminal Investigation (DCI) investigative personnel and staff to assist in investigative matters.
  - Provides DCI tactical teams.
  - Provides State Fire Marshals.
  - Provides criminal analysts to assist investigators, managers, and command staff on scene or remotely with information and intelligence analysis and dissemination.
- Wisconsin Department of Children and Families (DCF) – Provides support to populations with access and functional needs as well as support for mass care and human services.
- Wisconsin Department of Transportation (WisDOT) – Provides the following:
  - Assists in promptly identifying impediments on evacuation routes on the state highway system and contacting responsible parties to remove the impediment.
  - Provide highway routing information necessary to redirect traffic from affected areas, provide road signs, and coordinate provision of barricades.
  - Direct the removal of debris on roadways, railroads, airstrips, etc., critical for emergency vehicle passage
- Wisconsin Division of State Patrol (DSP) – Provides the following:
  - Assist local law enforcement and local authorities with highway traffic operations, access control, security, and emergency response.
  - Work with Division of Transportation Systems Development (DTSD) and local law enforcement in traffic directions and evacuation efforts.
  - Direct the removal of debris on roadways, railroads, airstrips, etc., critical for emergency vehicle passage.
- Wisconsin National Guard (WING) – Provides the following:
  - Provide requested resources to support state and local emergency response efforts for the protection of life and property.
  - Provides support to evacuation, reception center, and mass care operations through the use of WING armories and transport support with buses or heavy trucks.
  - Support to supply and commodity distribution.
  - Provides the Civil Support Team (CST) for radiological monitoring.
  - Provides the Chemical Biological Radiological Nuclear (CBRN) Enhanced Response Force Package (CERFP) for command and control, radiological decontamination, and medical services.

- Wisconsin Amateur Radio Emergency Service (ARES)/Radios Amateur Civil Emergency Services (RACES) – Provides backup communications personnel and equipment between county EOCs, the SEOC, JIC, and other locations as requested.
- American Red Cross – Provides personnel, equipment, and facilities for mass care efforts, including evacuee registration, congregate care centers / shelters, feeding, health, and mental health services.
- United Way 211 – Provides a public inquiry hotline through a network of virtual call agents who are trained to answer questions from the public regarding nuclear power plant incidents.

The following federal agencies provide support to the state and counties during nuclear power plant incidents:

- Aerial Measuring System (AMS) – Provides rapid response to radiological emergency with helicopters and fixed-wing aircraft equipment to detect and measure radioactive material deposited on the ground.
- Federal Emergency Management Agency (FEMA) – Coordinates federal response activities in accordance with the National Response Framework (NRF) and federal recovery assistance.
- Federal Radiological Monitoring and Assessment Center (FRMAC) – Coordinates and manages all federal radiological monitoring and assessment activities during major radiological emergencies.
- National Atmospheric Release Advisory Center (NARAC) – Provides timely and accurate real-time assessment advisories from actual or potential hazardous nuclear releases into the atmosphere.
- National Weather Service (NWS) – Provides weather forecasting to support radiological plume modeling and other operations in the SEOC.
- Nuclear Regulatory Commission (NRC) - Regulates commercial nuclear power plants through licensing, inspection, and enforcement of its requirements.
- Radiological Assistance Program (RAP) – Provides Department of Energy (DOE) resources and expertise for incidents involving radioactive materials.
- Radiological Emergency Assistance Center/Training Site (REAC/TS) – Provides emergency medical services at incidents involving radiation as well as advice and consultation on radiation emergency medicine.
- United States Coast Guard (USCG) – Evacuates and enforces a restricted area on Lake Michigan around PBNP and to restrict traffic on the Mississippi River near PINGP.

The block diagram below outlines how local and state agencies coordinate resources:



Source: WERP, Basic Plan

A.2 Legal Basis

Emergency management activities in the State of Wisconsin are governed by Wisconsin State Statute 323. County emergency management activities are additionally governed by local county codes, ordinances, and resolutions as described in local plans and procedures.

The legal authority to declare a state of emergency at the county and state level is outlined in the WERP, Basic Plan, Section 7.4.

A.3 Key Individuals

The following table identifies the key individuals with emergency response roles during a nuclear power plant incident:

	County Chief Elected Official	County Emergency Management Director	County Law Enforcement Personnel	County Fire/EMS Personnel	County Highway/Public Works Personnel	County Public Health & Human Services Personnel	Count Agricultural Agent	County Public Information Officer	County ARES/RACES Personnel	County Dispatch Center Personnel	Hospital Personnel	Regional Hazmat Team Personnel	Wisconsin Emergency Management Personnel	Wisconsin Department of Health Services Personnel	Wisconsin Department of Agriculture Trade & Consumer Protection Personnel	Wisconsin Department of Natural Resources Personnel	Wisconsin Department of Children & Families Personnel	Wisconsin Department of Transportation Personnel	Wisconsin Division of State Patrol Personnel	Wisconsin National Guard Personnel	Wisconsin ARES/RACES Personnel	American Red Cross Personnel	United Way 211 Personnel	Nuclear Power Plant Personnel
Mobilization		P								S			P											
Direction and Control	P	C								S			P											
Communications		P							S	S			P								S			
Protective Action Recommendations														P										C
Plume Phase Protective Action Decisions	P	C																						
Plume Phase Protective Action Decision Implementation		P	S	S	S					S			S					S	S	S				
Alert & Notification of the Public		P						S		S			S											
Emergency Information for the Public	P							C					C										S	C
Traffic and Access Control			P	S	S													S	S	S				
Emergency Worker Exposure Control	C					P								P										
Monitoring, Decontamination, Sheltering, and Registration of Evacuees		P	S	S		S						S		C						S		S		
Monitoring and Decontamination of Emergency Workers, Equipment, & Vehicles		P	S	S		S						S		C						S				
Transportation and Treatment of Contaminated, Injured Individuals				P							P													
Field Monitoring Team Management														P										C
Plume Phase Measurements & Sampling														P						S				C
Plume Phase Analysis and Dose Assessment														P						S				C
Laboratory Operations														P										
Post Plume Phase Sampling Plan Development & Analysis														P	C	C				S				
Post Plume Phase Measurements & Sampling														P	C	C				S				
Post Plume Phase Protective Action Decisions	P	C												S	P	P								
Post Plume Phase Protective Action Decision Implementation		P	S	S	S					S			S					S	S	S				
P=Principle, S=Support, C=Coordinating																								

A.4 Written Agreements

WEM maintains the following written agreements for the response to a nuclear power plant incident:

- City of Appleton Fire Department – Provides FMT and evacuee decontamination services at county reception centers.
- Minnesota Department of Public Safety Division of Homeland Security and Emergency Management – Ensures cooperation between Wisconsin and Minnesota while preparing for and responding to incidents at PINGP.
- City of La Crosse Fire Department – Provides FMT and evacuee decontamination services at county reception centers.
- United Way 211 – Provides public inquire hotline services.
- Northern States Power Company – Minnesota (Excel Energy) – Ensures cooperation between the state and PINGP while preparing for and responding to incidents.
- Next Era Energy Point Beach, LLC – Ensures cooperation between the state and PBNP while preparing for and responding to incidents.
- Exelon – Byron Generating Station - Ensures cooperation between the state and Byron Generating Station while preparing for and responding to incidents.

- Austin Straubel International Airport – Provides for landing aircraft and staging resources from federal response teams responding to an incident at PBNP.
- State of Wisconsin Department of Health Services (DHS) Radiation Protection Section (RPS) – Provides for the services of the DHS RPS as outlined in Section A.1. and the support of planning efforts for nuclear power plant incidents.

A.5. Continuous Operations

The plants are responsible for maintaining 24-hour staffing capabilities in accordance with their plans and procedures.

Counties are responsible for maintaining 24-hour staffing capabilities in their EOCs in accordance with local plans and procedures.

The SEOC is staffed by WEM staff divided into three teams (Red, Blue, and Green) for level 1-2 elevations. Each team is further sub-divided into two teams (A and B) for level 3-4 elevations. One team is always designated as primary to fill the day shift, secondary to fill the night shift, and reserve to rotate in after 72 hours. This designation rotates on a two-week schedule over a six-week period, as illustrated below:

Week	Primary	Alternate	Reserve
1	A	A	A
2	B	B	B
3	A	A	A
4	B	B	B
5	A	A	A
6	B	B	B

Staffing rosters and schedules are stored on WebEOC and maintained by the Operations & Planning Support Bureau.

During elevations, the Planning Section in the SEOC is responsible for completing shift rosters on the IAP and identifying vacancies.

The SRC is staffed by DHS RPS staff who serve in an on-call capacity 24-hours a day. A schedule of the on-call SRC is maintained by DHS RPS.

B. Emergency Response Organization

B.1 Plant Emergency Response Organization (ERO)

The plants are responsible for maintaining an ERO that is composed of personnel with defined responsibilities that is adequate to perform an initial accident response to key functional areas at all times using on-duty staff and can augment on-duty staff for onsite response activities and offsite support activities in a timely manner. A description of the ERO is contained in plant plans and procedures.

B.2 Plant Shift Manager

The plants are responsible for designating a Shift Manager who has the authority and responsibility to immediately and unilaterally initiate any emergency response measures, including approving PARs to be disseminated to authorities responsible for implementing offsite emergency response measures. A description of the Shift Manager position is contained in plant plans and procedures.

B.3 Plant Staffing Plan

The plants are responsible for maintaining an on-shift staffing plan and ERO augmentation plan. A description of staffing plans is contained in plant plans and procedures.

B.4 Plant Local Interface

The plants are responsible for identifying interfaces between their functional areas of emergency activity and state and risk counties. A description of these interfaces is contained in plant plans and procedures.

B.5 Plant Outside Support

The plants are responsible for identifying external organization, including contractors, state, and risk counties that may be requested to provide technical assistance to and augmentation of the ERO. A description of these organizations is contained in plant plans and procedures.

C. Emergency Response Support and Resources

C.1 EOF Liaison

DHS RPS may send a liaison to the plant EOFs. WEM and the counties do not generally send liaisons to the EOFs unless requested.

The plants will send liaisons to the SEOC and risk county EOCs.

C.2 Emergency Response Support and Resources

County emergency management agency directors with approval from their chief local elected official are responsible for supporting the local response to a nuclear power plant emergency using local or mutual aid resources from neighboring jurisdictions. If local or mutual aid resources are not sufficient to meet local needs, the emergency management agency director is responsible for requesting support from the state.

Counties utilize processes outlined in local plans and procedures for identifying shortfalls in capabilities and resources that may require state support. Once a shortfall is identified, requests to the state should be entered into the Resource Request board within WebEOC. Counties may also contact the SEOC directly via any available means, such as email, phone, radio, etc., to make resource requests.

The SEOC Manager, with approval from the WEM Administrator, is responsible for ensuring the SEOC fulfills requests from the counties utilizing state assets, non-governmental organizations, and private businesses partnerships. The SEOC Manager is also responsible for requesting federal assets or assets from other states to fulfill resource requests from the counties that cannot be met with in-state assets.

The state has a wide range of resources available to support the counties during nuclear power plant incidents with a wide range of response times. See Section A.1 for a list of primary supporting state agencies. Resources from the state generally take 4-6 hours to arrive in the state's risk counties around either plant.

The plants are responsible for maintaining agreements with local fire, EMS, hospitals, and law enforcement agencies and conduct joint training to ensure these agencies have access to the site and are specially trained to provide care for plant personnel. Lists of these agreements are included in plant plans and procedures.

C.3 Principal Organization Coordination

The plants send liaisons to county EOCs and the SEOC to provide coordination between the offsite response organizations and the plant.

Principle organizations at the county coordinate with each other at the county EOC. County EOCs coordinate with organizations conducting field operations in accordance with the Incident Command System (ICS). Field operations include, but are not limited to, providing traffic and access control points (TACP), operating county reception centers, operating congregate care centers/shelters, etc. County EOCs are operated in accordance with local plans and procedures.

County EOCs coordinate closely with each other and with the SEOC via their emergency management agency director and/or the WEM Liaison at each county EOC.

Principle organizations at the state coordinate with each other at the SEOC. The SEOC coordinates directly with certain field operations. For example, the SRC at the SEOC coordinates directly with the Forward Operations Center (FOC)/Mobile Radiological Laboratory (MRL), Health Team Leads (HTL) at county reception centers, and Radiation Science Officers (RSO) at the IPC, etc.

Liaison with federal agencies will be maintained through the SEOC. However, certain federal assets may be embedded within local EOCs/ICPs or the FOC/MRL depending on their specific mission.

PIOs from the utility, county, state, and other organizations supporting the response will coordinate with one another using the Joint Information System (JIS) outlined in Section G.2.

C.4 Radiological Laboratory Capabilities and Availability

DHS RPS maintains a MRL that would be deployed near a nuclear power plant incident to process samples. Additional laboratory capabilities would be provided primarily by the Wisconsin State Lab of Hygiene with additional support from the State of Minnesota Division of Public Health Laboratories Radiation Chemistry Unit, the State of Illinois Division

of Nuclear Safety Mobile Nuclear Laboratory, and the University of Iowa Hygienic Laboratory. The capabilities and contact information for each of these laboratories can be found in the DHS Radiological Incident Response Plan (RIRP) Vol 1.

D. Emergency Classification System

D.1 Emergency Classification Level (ECL) System

The plants, counties, and state utilize a standardized Emergency Classification Level (ECL) system that forms the basis for determining the level of response to an incident. Each plant or ISFSI has a set of detailed Emergency Action Levels (EAL) that contain observable thresholds for an initiating condition that, when met or exceeded, place the plant in a given ECL. The plants, counties, and sate review the ECLs and corresponding EALs annually. The following ECL system is used:

- Notification of Unusual Event (NOUE): The NOUE is an ECL indicating that events are in progress 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. This term is sometimes shortened to Notice of Unusual Event (NUE) or Unusual Event (UE).
- Alert: The Alert is an ECL indicating that events are in progress 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 hostile action. Any releases are expected to be limited to small fractions of the EPA protective action guideline (PAG) exposure levels.
- Site Area Emergency (SAE): The SAE is an ECL indicating that events are in progress or have occurred which involve an actual or likely major failure of plant functions needed for the protection of the public or hostile action that results in intentional damage or malicious acts toward site personnel or equipment that could lead to the likely failure of or prevents effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the site boundary.
- General Emergency (GE): The GE is an ECL indicating 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 or hostile action that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA PAG exposure levels offsite for more than the immediate site area.

D.2 Timely Classification of Emergencies

The plants must assess, classify, and declare the ECL within 15 minutes after the availability of indications to plant operators that an EAL has been met or exceeded. Plans and procedures for timely assessment, classification, and declaration of an ECL can be found in plant plans and procedures.

D.3 Plant Emergency Response Measures by ECL

The plants have specific emergency response measures to be taken for each ECL as detailed in plant plans and procedures.

D.4 State and County Emergency Response Measures by ECL

Specific emergency response measures taken at each ECL are outlined in risk county plans and procedures, the SEOC Manual, the DHS RIRP, and the JOC SOG 2-20. However, in general, the following high level actions are taken at each of the following ECLs:

- NOUE
    - The JOC activates SOG 2-20 and makes required notifications.
    - The SRC assesses the situation and briefs WEM leadership.
    - A coordination call is held between WEM leadership, the SRC, the risk counties, plant Emergency Preparedness (EP) staff, and the State of Minnesota (for PINGP only).
    - The SRC and WEM leadership continue to monitor the situation and re-assess as needed. Follow up coordination calls with additional stakeholders may be held if necessary.
- Alert
    - The JOC activates or continues SOG 2-20 and makes required notifications.
    - The SRC assesses the situation and briefs WEM leadership.
    - The SEOC is elevated to a level determined by WEM leadership.
    - Risk county EOC's activate.
    - The JIC activates and first notice media advisories are sent.
    - The 211 public inquiry hotline is activated.
- Site Area Emergency
    - All previous actions from the Alert ECL are implemented if not already completed.
    - The JOC activates or continues SOG 2-20 and makes required notifications.
    - The SEOC is elevated to a level 1 if not already operating at a level 1.
    - The SRC assesses the situation and briefs WEM leadership.
    - Risk county reception centers are opened.
    - If directed by risk counties, schools and daycares are evacuated. If incident is a HAB, schools are placed under an administrative hold.
    - Risk county congregate care centers are opened or placed on standby.
    - JIC media briefings are held and livestock advisories are sent.

- General Emergency
    - All previous actions from the Alert and Site Area Emergency ECL are implemented if not already completed.
    - The JOC activates or continues SOG 2-20 and makes required notifications.
    - A PAR is received from the plant.
    - The SRC assesses the situation and develops a PAR.
    - For PBNP, the SEOC initiates a PAR/PAD call with the risk counties and plant where risk counties make a PAD. For PINGP, the State of Minnesota initiates the PAR/PAD call.
    - Risk counties send Wireless Emergency Alerts (WEA) / activate sirens and activate the Emergency Alert System (EAS).
    - Special news broadcasts are sent with specific instructions.
    - JIC media briefings are held.

E. Notification Methods and Procedures

E.1 Notification to the Counties and State

The State of Wisconsin and each risk county maintain independent 24/7 initial warning points (IWP). All IWPs are notified directly by the plant within 15 minutes of declaring an emergency. These notifications are aligned with the Emergency Classification Levels (ECL) described in Section D.1.

County IWPs are located within their respective public safety answering points (PSAP). County IWPs perform subsequent notifications to county officials in accordance with local plans and procedures.

The state IWP is the JOC, located adjacent to the SEOC, 2400 Wright St, Madison, WI and is staffed 24/7 by the WING. The state IWP performs subsequent notifications to WEM leadership and the SRC in accordance with SOG 2-20.

PBNP uses a notification system called the Emergency Response Notifications of Incidents & Events (ERNIE) to simultaneously notify each IWP. The system transmits a Nuclear Accident Reporting System (NARS) form via email and/or the Everbridge app with a follow up short message system (SMS) text and/or telephone notifications to alert the IWP that a NARS form has been emailed. Verification of receipt is obtained by the IWP acknowledging on the app, clicking a button in the email, replying to the SMS text, or dialing a specified digit during the phone call.

PINGP uses a notification system called Vaporstream to simultaneously notify each IWP. The system transmits a NARS form to a specialized tablet within each IWP followed by an email and phone call to alert the IWP that a NARS form has been sent to the tablet. Verification of receipt is obtained by the IWP opening the NARS form on the tablet.

The Byron Generating Station uses a notification system called Everbridge to notify the State of Illinois IWP. The State of Illinois IWP will then call via phone and email a copy of the NARS

form to the State of Wisconsin IWP. Additionally, WEM staff and the SRC receive a notification from the Byron Generating Station that an incident has occurred that may impact ingestion counties in the state.

The Kewaunee Power Station (KPS) ISFSI notifies each IWP via phone and verbally relays the NARS form information. KPS is an ISFSI only.

The La Crosse Boiling Water Reactor (LACBWR) ISFSI notifies each IWP via phone and verbally relays the NARS form information. LACBWR is an ISFSI only.

The Zion ISFSI is outside the State of Wisconsin and is not required to notify the state IWP. The State of Illinois may notify the State of Wisconsin for situational awareness or to request resources if needed.

Subsequent notifications will be sent in the same manner as the initial notification using the systems outlined above. However, once a county Emergency Operations Center (EOC) or State Emergency Operations Center (SEOC) is activated, subsequent notifications are received directly in those EOCs and/or SEOC and disseminated by the county EOC manager and SEOC Manager.

In certain circumstances, such as a HAB event or medical emergency, the initial notification may be received via a 911 call or other call to local first responders. The county IWP receiving the call will dispatch appropriate resources in accordance with local plans and procedures. If the incident meets the criteria for an ECL, the plant will make the classification and notify all IWPs within 15 minutes of declaring an emergency.

In the event the initial notification originates from an entity other than the plant, such as a call from a member of the public, the state or risk county IWP may be contacted directly via 911, a non-emergency phone number, or the Wisconsin Emergency Hotline. If a county IWP receives this type of notification, they will respond according to local plans and procedures. If the state IWP receives this type of notification, they will notify the SRC who will investigate and provide appropriate guidance to WEM leadership.

E.2 Public Alert and Notification Systems (ANS)

The risk counties have the primary authority and responsibility to activate the alert and notification system (ANS) within their jurisdictions. The state does not activate ANS unless requested to do so by the counties as a backup to their primary methods of activation.

The primary alerting system for Kewaunee and Manitowoc counties are Wireless Emergency Alerts (WEA) sent to cellular phones and activated via the Integrated Public Alert and Warning System (IPAWS) originating software. WEA meets the 15-minute design objective. The state can send a WEA via IPAWS originating software to either Kewaunee or Manitowoc counties at the request of the counties in the event of a failure of their IPAWS originating software.

For PBNP, the risk counties have agreed that Manitowoc County will send the WEA for the entire 10-mile EPZ, including those areas inside Kewaunee County.

The primary alerting system for Pierce County is outdoor warning sirens. Sirens meet the 15-minute design objective.

Backup route alerting is used as a backup to WEA and outdoor warning sirens.

The primary notification system is local AM/FM broadcasters participating in the Emergency Alert System (EAS) and cooperating with risk counties for the broadcast of special news broadcasts. For PBNP, the following AM/FM broadcast stations are located in or near Kewaunee and Manitowoc Counties:

- Cleveland:
  - WLKN 98.1 FM
- Manitowoc/Two Rivers:
  - WCUB 980 AM
  - WLTU 92.1 FM
  - WOMT 1240 AM
  - WQTC 102.3 FM
- Denmark:
  - WGBW 1590 AM
- Sturgeon Bay:
  - WDOR 910 AM
  - WDOR 93.9 FM
  - WAUN 92.7 FM
  - WBDK 96.7 FM
  - WRKU 102.1 FM
  - WRLU 104.1 FM
  - WQDC 97.7 FM

For the PINGP, the following AM/FM broadcast stations are located near Pierce County:

- Red Wing
  - KCUE 1250 AM
  - KWNG 105.9 FM
- Minneapolis/St Paul
  - WCCO 830 AM
  - KNOW 91.1 FM
- Hastings
  - KDWA 1460 AM

E.3 Nuclear Accident Reporting System (NARS)

The plants have developed a NARS form to communicate the ECL, release status, type of release, meteorological conditions, PAR, and relevant additional information. These forms are communicated with the state and risk counties via the notification methods outlined in Section E.1.

The risk counties and state coordinate with the plants to develop and make changes to the information contained in the NARS form.

E.4 Initial and Follow Up Notifications to the Public

The risk counties have developed pre-scripted WEA, EAS, and special news broadcasts to be used at each ECL and PAD. Risk counties select the pre-scripted messages based on the PAD and at a time and broadcast frequency based on local plans and procedures.

If conditions warrant, pre-scripted messages may be changed by the risk counties to accommodate unique circumstances. Risk counties should closely coordinate changes with one another using the JIS outlined in Section G.2.

E.5 Supplemental Information to the Public

The risk counties and state will develop supplemental information for release via PIOs participating in the JIS throughout the duration of the event as outlined in Section G.2. Supplemental information will be provided in the form of emailed press releases and media briefings at the JIC. Social media may also be used to disseminate information.

Supplemental information may include but is not limited to, updates on plant conditions, changes to evacuation routes or areas, changes to school evacuations or schedules, locations of reception centers or congregate care centers / shelters, agricultural or food distributor considerations, drinking water considerations, information on return or relocation, information on recovery resources, etc.

F. Emergency Communications

F.1 Redundant Communications

PBNP utilizes the following redundant communications system to communicate with the risk counties and state. These systems include the Everbridge app and/or email and landline phone and/or cellular phone. The plant also has a two-way radio communications link with the Manitowoc County Initial Warning Point (IWP) and has placed satellite phones at the state and risk counties as additional tertiary communications systems.

PINGP utilizes the following redundant communications systems to communicate with the state and risk county. These systems include the Vaporstream app and/or email and landline phone and/or cellular phone. The plant also has a dedicated National Warning System (NAWAS) circuit between the plant and the risk county and state as an additional tertiary communications system.

The Byron Generating Station utilizes the Everbridge system notify the State of Illinois IWP. The State of Wisconsin IWP will be subsequently notified via phone and email.

The risk counties utilize a variety of phone and radio communication systems to notify personnel to respond to their EOCs and dispatch responders according to local plans and procedures. The state utilizes the RAVE mass notification system to notify personnel via email, landline phone, SMS text, and cellular phones to respond to the SEOC.

The risk county EOCs and SEOC communicate with each other by utilizing email, phone, and the WebEOC system. Additionally, the risk county EOCs and SEOC are equipped with

amateur radio stations, NAWAS, and Wisconsin Interoperable System for Communications (WISCOM) as additional tertiary communications systems.

FMTs, risk county EOCs, and the SEOC communicate with each other by utilizing cellular phones and WISCOM radios.

F.2 Communication Methods for Medical Support Facilities

Ambulances transporting and treating contaminated, injured individuals communicate with hospitals according to local plans and procedures. The state maintains communications with hospitals via phone and WISCOM radios.

F.3 Communications Testing

PBNP tests the Everbridge system, including the associated Everbridge app, email, landline phone, and cellular phone at least monthly. These tests include a message content check as the NARS form is received in a complete digital format and receipt is verified by the system. The plant's radio link to the Manitowoc County IWP is tested in accordance with local plans/procedures. See Section N.4 for additional information on Communications Drills.

PINGP tests the Vaporstream system, including the associated Everbridge app, email, and landline phone at least monthly. These tests include a message content check as the NARS form is received in a complete digital format and receipt is verified by the system. The backup NAWAS line is tested daily. See Section N.4 for additional information on Communications Drills.

The State of Illinois tests phone and email systems used to notify the State of Wisconsin of an incident at the Byron Generating Station at least quarterly. These tests include a message content check as the NARS form is received in a complete digital format via email. See Section N.4 for additional information on Communications Drills.

Communications between the risk county EOCs and the SEOC, including email, landline phone, the internet based WebEOC system, amateur radio stations, and Wisconsin Interoperable System for Communications (WISCOM) radios are tested through the course of normal day to day operations, but no less frequently than on an annual basis. See Section N.4 for additional information on Communications Drills.

Communications between Field Monitoring Teams, risk county EOCs, and the SEOC, including phone and WISCOM radios are tested on an annual basis. See Section N.4 for additional information on Communications Drills.

G. Public Education and Information

G.1 Annual Dissemination of Information to the Public

PBNP mails a printed postcard to all residents residing within the 10-mile EPZ on an annual basis. These printed postcards are also made available at locations targeting transient populations, such as hotels, campgrounds, visitor centers, public buildings, etc. The postcard

includes information on how residents who would need assistance evacuating or receiving alerts can register with the risk counties. The post cards also contain internet links to obtain additional information, including information in Spanish and Hmong languages and the ability to access internet based information using web accessibility tools for those with access and functional needs.

PINGP mails a printed brochure to all residents residing within the 10-mile EPZ on an annual basis. These printed brochures are also made available at locations targeting transient populations, such as hotels, campgrounds, visitor centers, public buildings, etc. The brochures include information on how residents who would need assistance evacuating or receiving alerts can register with the plant and risk counties. The post cards also contain internet links to obtain additional information, which can be translated using web-based translators, and the ability to access internet based information using web accessibility tools for those with access and functional needs.

WEM produces a brochure entitled Wisconsin Radiological Emergency Information for Farmers, Food Processors, and Distributors that contains information for the ingestion exposure pathway zone. The brochure is reviewed annually and published on the WEM website. Printed copies would be made available via the Department of Administration (DOA) print shop and distributed to ingestion county emergency management offices following an incident.

G.2 Joint Information Center (JIC)

PBNP maintains a JIC at 3060 Voyager Drive, Green Bay, WI. During an incident at PBNP, media would be directed to the JIC where utility, risk county, and state PIOs would conduct joint briefings. The facility contains works spaces for PIOs, a conference room, and a large media briefing room. A Media Hotline is also answered by state PIO staff in the state PIO workspace. The Media Hotline number is 920-406-7036.

The State of Minnesota Homeland Security and Emergency Management (HSEM) maintains a JIC at 445 Minnesota Street, St. Paul, MN. During incidents at the PINGP, media would be directed to the JIC where utility, risk county, and state PIOs would conduct joint briefings. The facility contains works spaces for PIOs adjacent to the State of Minnesota EOC and a media briefing room. A Media Hotline is also answered by the state PIO staff in the PIO workspace. The Media Hotline is 615-539-3192 or 615-539-3193.

G.3 Public Information Officers (PIO)

PIOs in each respective risk county EOC and the SEOC prepare press releases and obtain approval for release to the public. Once approved for release, press releases are emailed, faxed, or uploaded to WebEOC, where PIOs from risk counties and the state collaborate and brief the media with a unified message based on the releases produced in the risk county EOCs and SEOC.

G.4 Public Inquiry Hotline and Rumor Identification

WEM contracts with United Way 211 to provide a public inquiry hotline for nuclear power plant incidents. United Way 211 maintains a robust network of virtual call agents who can

handle a large surge of calls from the public following an incident. These operators are trained annually on how to answer common questions, provided with an informational document, and United Way 211 leadership are located in the SEOC, which allows them to communicate updated information to the call agents and answer questions that are not covered in their annual training.

Local pre-scripted messages and media briefings will be used to readily share the 211 number during an incident.

United Way 211 agents have a mechanism for flagging calls regarding potential rumors or inaccurate information in their system. A report of these calls is automatically imported into the WebEOC system where PIOs can review these trends and address them at the JIC media briefings or in press releases.

G.5 Annual Media Outreach

The WEM PIO issues an annual press release informing all media contacts how they will be notified of a nuclear power plant incident and the locations of the JIC for both PBNP and PINGP. The press release also contains links to radiological emergency preparedness materials for their reference. The annual press release is issued via standard GovDelivery email distribution lists.

H. Emergency Facilities and Equipment

H.1 Plant Technical Support Center (TSC)

The plants maintain separate TSCs from which plant conditions are evaluated and mitigative actions are developed in accordance with plant plans and procedures. These facilities are outlined in plant plans and procedures.

H.2 Plant Operations Support Center (OSC)

The plants maintain separate OSCs from which repair team activities are planned and teams are dispatched to implement actions in accordance with plant plans and procedures. These facilities are outlined in plant plans and procedures.

H.3 Plant Emergency Operation Facility (EOF)

The plants maintain separate EOFs from which the plant can manage and coordinate the overall emergency response, including sharing information with federal, state, and risk counties, in accordance with plant plans and procedures. These facilities are outlined in PBNP and PINGP plans and procedures.

H.4 Plant Alternative Plant Facilities

The plants maintain alternative facilities which would be accessible even if the plant is under threat, including a hostile action. These facilities are outlined in plant plans and procedures.

H.5 Plant Joint Information Center (JIC)

The plants utilize the same JIC facilities as the state and risk counties as outlined in Section G.2.

H.6 Emergency Operations Centers (EOC)

Risk counties maintain EOCs according to local plans and procedures. None of the risk county EOCs are located within the 10-mile EPZ. The following is a list of risk county EOC locations:

- Kewaunee County - 625 3rd St, Luxemburg, WI
- Manitowoc County - 1024 S 9th St, Manitowoc, WI
- Pierce County - 555 Overlook Dr, Ellsworth, WI

The SEOC is located at DMA Joint Force Headquarters (JFHQ), 2400 Wright St, Madison, WI. The SEOC is not located within any 10-mile EPZ. The SEOC is organized in accordance with the National Incident Management System (NIMS) and contains approximately 55 workstations with access to computers, phones, printers/copiers, fax machines, a variety of situational awareness displays, and multiple backup communications systems. The SEOC uses WebEOC, which is a secure online incident management system through which all state emergency operations are managed. The facility is located within a gated area with 24/7 security and has a backup generator on-site. The SEOC is maintained by WEM under the Operations & Planning Support Bureau Director.

Two alternate SEOC facilities are located at the nearby Armed Forces Reserve Center (AFRC), 6001 Manufacturers Drive, Madison, WI and approximately 80 miles northwest at Volk Field Air National Guard Base, Building 540, Camp Douglas, WI. Neither of the two alternate SEOC locations are within any 10-mile EPZ.

H.7 Plant Onsite Monitoring Systems

The plants maintain various onsite monitoring systems including meteorological monitors, hydrological monitors, seismic monitors, radiation monitors and sampling equipment, plant process monitors, and fire, toxic gas, and combustible products detectors. These monitors are used to initiate emergency response measures in accordance with the ECL scheme in Section D.1. These methods are outlined in plant plans and procedures.

H.8 Plant Offsite Monitoring Systems

The plants have made provisions to acquire data from offsite monitoring and analysis equipment, including meteorological and radiological data. These methods are outlined in plant plans and procedures.

H.9 Radiological Monitoring Equipment

Risk counties and the state maintain a variety of radiological monitoring equipment for use at reception centers, medical facilities, and FMTs.

Reception center radiological equipment is maintained by the risk counties and includes portal monitors, survey meters, and dosimeters. Inventories of this equipment are included in risk county plans and procedures.

FMT radiological equipment is maintained by the DHS RPS and includes survey meters, air sampling equipment, laboratory analysis equipment, and dosimeters. Inventories of this equipment are included in the WI RIRP Vol 2 & 3.

Additional radiological sampling equipment is maintained by DHS RPS for use by sampling teams within the ingestion planning EPZ. Inventories of this equipment are included in the WI RIRP Vol 2 & 3.

Backup emergency equipment would be obtained through Emergency Management Assistance Compact (EMAC) requests from other states or through various federal agencies.

H.10 Meteorological Monitoring

The plants maintain meteorological monitoring equipment and provisions have been made to obtain additional meteorological data from other sources. This data is used by the plant's and DHS RPS's radiological assessment models for plume modeling and is provide to various plant facilities. These methods are outlined in plant plans and procedures.

DHS RPS also uses data from the National Weather Service and other sources.

H.11Radiological Monitoring Equipment Testing and Maintenance

The plants, risk counties, and DHS RPS regularly test and maintain their radiological monitoring equipment according to their individual plans and procedures. All calibrations and operational checks are performed per national standards or the manufacturer's instructions, whichever is more frequent. DHS RPS testing and maintenance procedures are included in RIRP Vol 2 & 3. All testing and maintenance schedules are performed to ensure that a sufficient supply of equipment is available if needed for an incident.

H.12 Radiological Monitoring Equipment Inventories

The plants, risk counties, hospitals, and DHS RPS maintain inventories of their radiological monitoring equipment according to their individual plans and procedures. DHS RPS inventories are included in RIRP Vol 2 & 3.

H.13 Field Monitoring Teams (FMT) Sample Collection Sites

DHS RPS is responsible for assessing radiological data. The following location are initially used by DHS for the receipt and analysis of field monitoring data and coordination of sample media:

- For PBNP – Manitowoc County Highway Department, 3500 Highway 310, Manitowoc, WI
- For PINGP – Pierce County Emergency Management, 555 Overlook Dr, Ellsworth, WI

DHS RPS uses a mobile FOC/MRL that can be set up at any location with adequate space, lighting, bathroom facilities, etc. in the event the above location are unavailable.

Pre-designated sample collection points have been established within each risk county EPZ. A map of these sites can be found in Attachment 2. Additional ad-hoc sites may be established if needed.

Procedures for sample collection, including procedures for transporting samples and transferring data from the laboratory, are outlined in RIRP Vol 2 & 3.

I. Accident Assessment

I.1 Plant Accident Assessment

The plants have methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of an incident. This includes the ability to assess the core and spent fuel, determining the magnitude and isotopic composition of waterborne or airborne release pathways, modeling airborne releases to estimate exposure and contamination levels, and the ability to conduct field radiological assessments by FMT. These methods are outlined in plant plans and procedures.

I.2 Assessing Contamination of Drinking Water

DHS RPS and DNR are responsible for assessing contamination of drinking water, including methods for locating sample locations and detecting radioisotopes at derived response levels for the most sensitive populations. Plans and procedures for assessing the contamination of drinking water are outlined in RIRP Vol 1 & 3.

I.3 Plant Monitoring of Key Radiological Assessment Perimeters

The plants have the capability and responsibility for monitoring the status of the reactor fuel, the status of containment integrity, leakage of radioactive material from plant systems, structures, or components, the status of engineered safety features, and monitoring or estimating the onset and duration of an actual or potential release of radioactive material to the environment. These methods are outlined in plant plans and procedures. The plant provides this analysis to the SRC.

I.4 Plant Monitoring of Source Term Present in Coolant, Containment Atmosphere, and Spent Fuel Pool Atmosphere

The plants have the methods and responsibility for determining the source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere as well as contingency arrangements for obtaining highly radioactive samples from these areas. These methods are outlined in plant plans and procedures. The plant provides this analysis to the SRC.

I.5 Field Monitoring Teams Organization

The plants and the state DHS RPS are responsible for FMTs. The organization and capabilities of plant FMTs are outlined in plant plans and procedures. The organization and capabilities of the state DHS RPS FMTs are outlined in RIRP Vol 2 & 3.

I.6 Field Monitoring Teams Mobilization

The plants and the state DHS RPS are responsible for mobilizing their own FMTs. The mobilization of plant FMTs are outlined in plant plans and procedures. The mobilization of the state DHS RPS FMTs is outlined in RIRP Vol 2 & 3.

I.7 Radioiodine in Air Sampling

The plants and the state DHS RPS are responsible for collecting and analyzing air samples to detect the presence of radioiodine. Processes and procedures for collecting and analyzing air samples for the presence of radioiodine by the plants are outlined in plant plans and procedures. Processes and procedures for collecting and analyzing air samples for the presence of radioiodine by the state DHS RPS are outlined in RIRP Vol 2 & 3.

I.8 Dose Assessment & Validation

The plants and the state DHS RPS are responsible for conducting dose assessment and independently validating dose projections with field data. Processes and procedures for conducting dose assessment and validation by the plants are outlined in plant plans and procedures. Processes and procedures for conducting dose assessment and validation by the state DHS RPS are outlined in RIRP Vol 2 & 3.

I.9 Support Requirements for Complete Plume FMT Sampling

The state DHS RPS procedures support finding both the outer edges of the plume and taking measurements and samples from near the plume's peak concentration. Therefore, outside assistance is not required to do so, but would be integrated as needed according to Section I.10.

I.10 Support for Radiological Monitoring, Analysis, and Data Management

DHS RPS plans and procedures integrate assistance from numerous federal, state, and private resources for radiological monitoring, analysis, and data management. These plans and procedures are outlined in RIRP Vol 2 & 3.

J. Protective Response

J.1 Plant Protection of On-Site Plant Personnel

The plants are responsible for maintaining plans and procedures to alert, notify, and protect on-site individuals during an incident, including procedures to evacuate non-essential personnel at a SAE or GE.

J.2 Plant Emergency Response Support and Resources Provided for Personnel Evacuation

County plans and procedures describe any local assistance that would be provided to the plants in evacuating on-site personnel. The plants are responsible for designating primary and alternate evacuation locations.

J.3 Plant Monitoring and Decontamination of Evacuated Personnel

The plants are responsible for maintaining plans and procedures for the monitoring and decontamination of plant personnel evacuated from the site.

J.4 Plant Accounting of Personnel

The plants are responsible for accounting for all individuals inside the protected area following an SAE or GE within 30 minutes and maintaining such accountability for the duration of the incident.

J.5 Plant Radiological Protection for Personnel Arriving or Remaining On-Site

The plants are responsible for providing radiological protection for personnel arriving or remaining on site during the incident.

J.6 Protective Action Recommendations (PAR)

The plants are responsible for making an initial PAR when a GE is declared and subsequent PARs if circumstances warrant. Procedures and methodology for developing PARs are outlined in plant plans and procedures.

DHS RPS is responsible for making an independent initial PAR when a GE is declared and independent subsequent PARs if circumstances warrant. PARs would be developed in accordance with the EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (EPA-400, Version 2017). DHS RPS PARs include whether the public should evacuate or shelter-in-place in a certain area and whether pharmaceutical interventions KI should be administered to the general public (Pierce County only), immobile populations, and/or emergency workers. Procedures and methodology for developing PARs are included in DHS RIRP Vol 1.

J.7 Protective Action Recommendation (PAR) Strategies

Evacuation or shelter-in-place are the two non-pharmaceutical protective action strategies recommended. Evacuation Time Estimates (ETE) do not indicate evacuation time as a significant factor in considering whether to recommend evacuation or shelter-in-place in the State of Wisconsin due to relatively low population densities and sufficient road networks. However, shelter-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 hostile activities, source term characteristics (duration, composition, etc.), or other site-specific conditions (road conditions, weather, etc.).

J.8 Evacuation Time Estimates (ETE)

The plants are responsible for providing ETE studies at least every 10 years to align with the latest US Census data or when significant changes occur within the EPZ. The latest ETE studies are kept on file at the counties and SEOC.

J.9 Communicating Protective Action Recommendations (PARs)

The plant communicates PARs to the counties and state on the NARS form, see Section E.1.

The SRC communicates PARs to the counties via a conference call facilitated by the SEOC. See Section J.11 for more information on the PAR/PAD facilitation process.

J.10 Maps

Maps showing municipalities, evacuation areas, evacuation routes, reception centers, congregate care centers/shelters, TACPs, and radiological sampling points around the PBNP and PINGP plants can be found in Attachment 2. These maps support the PAR/PAD strategies and implementation.

J.11 Protective Action Decision Making Process and Implementation

PADs are made by the chief elected official at the counties based on the PARs from the plant and DHS RPS following a GE declared by the plant. For PBNP, to facilitate this decision making, the SEOC Manager coordinates a conference call between the counties, plant, and DHS RPS. For PINGP, to facilitate this decision making process the State of Minnesota coordinates a conference call between the counties, plant, DHS RPS, and the SEOC Manager. During the call, the plant and/or DHS RPS present their respective PARs to the counties. For PINGP only, the State of Minnesota provides an additional PAR to Pierce County. The counties are given an opportunity to ask questions regarding the PARs, discuss the PAR with each other, and make a PAD. The county PAD is not required to follow either the plant or DHS RPS PAR, but is a local decision. Counties are encouraged to come to a consensus for uniform PADs across jurisdictional lines; however, counties have the authority to decide upon independent PADs under Wisconsin's home rule system.

The recommendation to administer KI to emergency workers and/or the general public is made by the SRC and a decision to administer and/or distribute KI at the county level is

made in accordance with local plans and procedures. The decision to administer KI to DHS personnel engaged in FMT or reception center activities is made by the SRC. Procedures and methodology for developing KI recommendations are included in DHS RIRP Vol 1.

If a subsequent PAR is made by the plant and/or DHS RPS, the SEOC Manager will coordinate a conference call with the plant, counties, and DHS RPS to make a subsequent PAD using the same procedure as the initial PAD.

Counties are responsible for maintaining lists of individuals who may need assistance taking the actions recommended in the PAD, notifying those individuals, and providing the required assistance. Post cards are mailed annually to individuals living within 10-miles of the PBNP and PINGP plants requesting that they register with the county if they would need assistance evacuating or being alerted, see Section G.1 for more information on the post-cards.

Counties are responsible for designating evacuation routes based on considerations from the ETE as well as maintaining resources for controlling traffic during an evacuation. Maps of evacuation routes and traffic and access control points can be found in Attachment 2.

Counties are responsible for designating and operating reception centers with the support of DHS RPS for radiological monitoring and decontamination in accordance with local plans and procedures and the DHS RIRP Vol 4 that details the staffing requirements and arrangements for monitoring of evacuees, service animals, pets, and evacuee vehicles. Reception centers are normally activated at the SAE as a precautionary measure. See Section J.13 for more information on evacuee monitoring, decontamination, and registration at reception centers. The following reception centers have been designated in the state:

- Manitowoc County
  - Manitowoc County Highway Shop, 3500 State Hwy 310, Manitowoc, WI
- Kewaunee County
  - Luxemburg-Casco Intermediate School, 318 N. Main Street, Luxemburg, WI
- Pierce County
  - Elmwood High School, 213 South Scott Street, Elmwood, WI 54740

Counties and local school districts are responsible for determining the need to evacuate schools within 10-miles of the plant in accordance with local plans and procedures. Schools are normally evacuated at the SAE as a precautionary measure to pre-designed host schools. The following host schools have been pre-designated in the state:

- Manitowoc County
  - The Mishicot School District relocates to the Valders High School, 201 E Wilson St, Valders, WI.
  - The Two Rivers School District relocates to the UWGB Manitowoc Campus, 705 Viebahn St, Manitowoc, WI
- Kewaunee County
  - No schools within the 10-mile EPZ.
- Pierce County
  - No schools within the 10-mile EPZ.

Counties are responsible for designating hospitals for receiving potentially contaminated ill or injured evacuated individuals. DHS RPS supports these hospitals with radiological monitoring and decontamination capabilities and training. The following hospitals have been designated in the state:

- Manitowoc County
  - Froedtert Holy Family Memorial Hospital, 2300 Western Ave, Manitowoc, WI
- Kewaunee County
  - Aurora BayCare Medical Center, 2845 Greenbrier Rd, Green Bay, WI
- Pierce County
  - HSHS Sacred Heart Hospital, 900 W Clairemont Ave, Eau Claire, WI

There is one nursing home, Hamilton Care Center in Manitowoc County, within the 10-mile EPZ of the plant. The nursing home will shelter-in-place and may receive KI in accordance with local plans and procedures.

There are no jails or correctional facilities in the state within the 10-mile EPZ of the plant.

Counties are responsible for establishing congregate care centers / shelters for evacuated individuals with support from the American Red Cross in accordance with local plans and procedures. Approximately 10% of the evacuated population is expected to seek shelter in congregate care centers. Support from non-governmental partners and other state agencies may be needed to support counties with the operation of congregate care centers / shelters. A map of pre-designated congregate care centers / shelters can be found in Attachment 2.

Counties are responsible for controlling access to evacuated areas by establishing TACPs in accordance with local plans and procedures and requesting the USCG establish restricted areas on Lake Michigan and the Mississippi River. For PBNP only, see Attachment 2 for maps of marine restricted areas. Support from DSP/DOT, WING, or other state agencies may be needed to support TACPs. A map of pre-designated TACPs can be found in Attachment 2.

Counties are responsible for monitoring evacuation routes for impediments, clearing impediments, and re-routing traffic if necessary. The SRC will advise on any potential re-routes that may put evacuees at a greater risk of driving through any potential plume. Support from DSP/DOT and other state agencies may be needed to support clearing impediments and re-routing traffic.

J.12 Protective Action for the Ingestion Exposure Pathway

Several state agencies have authority to make decisions regarding protective actions within the ingestion pathway EPZ. The SRC has overall authority on dose assessment and PARs. DATCP has authority to make decisions regarding agricultural products and foods in the ingestion pathway EPZ. The DNR has authority to make decisions regarding wild game and drinking water in the ingestion pathway EPZ. The chief elected official in the counties has the authority to establish restricted areas and relocate individuals where isolated areas of radiological contamination have been found to exceed relocation EPA PAGs outside the EPZ.

The SRC, DATCP, and DNR will coordinate on the development of a sampling plan for agricultural products, foods, wild game, and water in the ingestion pathway EPZ to determine the level of contamination in the food and water supply. Geographic Information Systems (GIS) functions at WEM and other state agencies may assist in mapping plume data, sampling points, licensed agricultural facilities or food producers, public hunting lands, municipal water supplies, etc. to assist in the development of the sampling plan and protective action decisions. Cropland use varies from year to year because of crop rotation practices, commonly between soy, wheat, and corn. No up to date databases exist showing which crops are being planted in a particular field on any given year. Considerations for the sampling strategy can be found in the DHS RIRP Vol 1. Agricultural, foods, wild game, and water samples would be collected utilizing the DHS FMT and personnel from DATCP and the DNR. Procedures for field teams can be found in the DHS RIRP Vol 3. Procedures for sample receipt, preparation for the laboratory, and laboratory capabilities can be found in the DHS RIRP Vol 2.

Protective actions to prevent the ingestion of radiological contamination from food and water may include, but are not limited to, imposing restrictions on the export of certain agricultural products or foods, limiting certain hunting or fishing activities, and issuing notices on the safety of drinking water. Decisions on what protective actions to implement must be made by the state agency having jurisdiction, such as DATCP or the DNR, and should be based on data from the sampling strategy outlined above, derived intervention levels (DIL), and applicable legal authorities. Additional information on DILs and the rationale used to develop them can be found in the DHS RIRP Vol 1.

DATCP licenses a wide variety of agricultural and food producers statewide. These databases could be accessed during sampling strategy development and to aid in notifications of protective action decisions. Additional notifications of protective action decisions in the ingestion pathway EPZ would be released to the media through the JIC.

J.13 Evacuee Monitoring, Decontamination, and Registration

Counties are responsible for designating and operating reception centers where evacuees as well as their vehicles, service animals, pets, and possessions are monitored for radiological contamination, decontaminated if necessary, registered, and referred to congregate care centers / shelters or other recovery services. DHS RPS supports county reception centers by providing a HTL to manage radiological functions and provide technical guidance to the local Reception Center Manager (RCM).

Reception centers in the state have the capability to monitor at least 20% of individuals within the 10-miles EPZ within 24 hours. Individuals or property found to have greater than 100 CPM over background radiation are considered to be contaminated and will require decontamination. Reception centers have shower facilities and vehicle wash bays for decontamination. Specific capabilities, procedures, contamination control measures, and physical control measures are found in county plans and procedures and the DHS RIRP Vol 4.

Reception Centers in the state have the capability to register evacuees and refer them to congregate care centers / shelters or other recovery services. Counties with the support of

the American Red Cross register evacuees and re-unite evacuees with their vehicles if they are not contaminated or have been decontaminated and/or provide transportation to congregate care centers / shelters. Recovery services, such as representatives from the American Nuclear Insurers (ANI), may also be available at reception centers. Specific capabilities and procedures for evacuee registration are found in county plans and procedures.

J.14 Revising Restricted Areas and Relocation

As the incident transitions from the early to intermediate phase, FMTs will obtain field data to verify which restricted areas that were evacuated or advised to shelter-in-place based on computer models are actually contaminated and require long-term restriction and relocation of individuals living in those areas. Restricted areas that were evacuated or advised to shelter-in-place based on computer models and are found not to be contaminated may be allowed to return according to plans outlined in Section M.

The chief elected official in the counties is responsible for making decisions on the long-term restriction and relocation of individuals in contaminated areas. The SEOC Manager will coordinate a conference call with the counties and the SRC. The SRC will advise counties on FMT data and EPA PAGs for relocation. The counties will then determine the boundaries of the restricted area, which road intersections require TACPs to restrict access, and determine how individuals living within those areas will be notified in accordance with local plans and procedures.

K. Radiological Exposure Control

K.1 On-Site Emergency Worker Exposure Controls

The plants are responsible for implementing radiation protection controls for on-site emergency workers during emergencies, including procedures for site access and the issuance of dosimetry to offsite emergency workers arriving at the plant to assist. The required radiation protection controls include the ability to provide briefings to emergency workers, the establishment of exposure guidelines consistent with their duties, the capability to evaluate dose at the time of exposure and for the duration of the incident, the capability to implement on-site contamination controls, and the capability to decontaminate emergency workers, equipment, and vehicles.

K.2 Dose Limits

The dose limit for emergency workers is 5 roentgen equivalent man (rem) with an initial administrative limit of 2 Roentgen (R) as read on direct reading dosimeters (DRD) or electronic personal dosimeters (EPD). The lifesaving dose limit for emergency workers is 25 rem. Emergency workers can no longer perform duties in radiologically controlled area once their dose limit has been met.

Emergency workers may voluntarily consent to special doses exceeding occupational limits. The Governor may authorize state emergency workers to voluntarily exceed dose limits. The chief elected official at the counties may authorize local emergency workers to voluntarily exceed dose limits. Authorizations to exceed dose limits will be made in writing. Emergency workers exceeding dose limits will be briefed on the risks associated with exceeding dose. The SRC will advise state and local officials on these decisions and briefings.

Additional information on dose limits can be found in the DHS RIRP Vol 1 and the Emergency Worker Handbook.

K.3 Dosimetry

The plants, state, and counties are responsible for storing and maintaining an adequate supply of direct reading and permanent record dosimeters. The quantity and type of dosimeters stored at the plant are outlined in plant plans and procedures. The quantity and type of dosimeters stored by DHS RPS are outlined in the DHS RIRP Vol 3. The quantity and type of dosimeters stored by the counties are outlined in local plans and procedures.

Dosimeters are issued to emergency workers at county reception centers. FMTs receive dosimetry at the FOC/MRL. During certain circumstances when emergency workers must quickly respond directly to the plant, such as during a HAB, dosimetry may be issued at the plant, staging area, or ICP.

Emergency workers are issued an Emergency Worker Handbook along with their DRD and PRD. The Emergency Worker Handbook contains links to a briefing video as well as processes for how and when to read DRDs, record keeping, exposure controls, reporting, and return of dosimeters and records at the end of each shift.

The plant, counties, and state maintain dose records for their respective personnel over multiple operational periods to track accumulated dose over the entire incident and determine when administrative dose limits have been met.

Additional information on dosimetry can be found in the DHS RIRP Vol 1 & 2 and the Emergency Worker Handbook.

K.4 Emergency Workers Monitoring and Decontamination

Evacuees and emergency workers, equipment, personal possessions, and vehicles are monitored and decontaminated at county reception centers. The following Reception Centers have been designated in the state:

- Manitowoc County
  - Manitowoc County Highway Shop, 3500 State Hwy 310, Manitowoc, WI
- Kewaunee County
  - Luxemburg-Casco Intermediate School, 318 N. Main Street, Luxemburg, WI
- Pierce County
  - Elmwood High School, 213 South Scott Street, Elmwood, WI 54740

Counties are responsible for operating reception centers with the support of DHS RPS for radiological monitoring and decontamination in accordance with local plans and procedures and the DHS RIRP Vol 4 that details the number of people necessary to operate the facility, the survey instruments available, other supplies and equipment needed for monitoring and decontamination, methods for controlling the spread of contamination, processes for handling contaminated waste, and the process for sending individuals with fixed contamination for medical attention.

L. Medical and Public Health Support

L.1 Medical Facilities for the General Public

Counties are responsible for designating hospitals for receiving potentially contaminated ill or injured evacuated individuals. DHS RPS supports these hospitals with radiological exposure control, monitoring, and decontamination capabilities. The following hospitals have been designated in the state:

- Manitowoc County
  - Froedtert Holy Family Memorial Hospital, 2300 Western Ave, Manitowoc, WI
- Kewaunee County
  - Aurora BayCare Medical Center, 2845 Greenbrier Rd, Green Bay, WI
- Pierce County
  - HSHS Sacred Heart Hospital, 900 W Clairemont Ave, Eau Claire, WI

Each of the designated hospitals are located outside of the EPZ.

Details of each facility's capabilities, personnel, and procedures are found in individual hospital radiological response plans. Generalized procedures for radiological responses at hospitals can be found in the DHS RIRP Vol 4.

L.2 Medical Facilities for Plant Personnel

The plants are responsible for designating primary and backup medical facilities as well as on-site first aid capabilities to treat contaminated, injured plant personnel or those plant personnel that have received significant radiation exposure or uptake of radioactive materials. The following hospitals have been designated in the state. Details of each plant's designated medical facilities are found in plant plans and procedures. Details of each facility's capabilities, personnel, and procedures are found in individual hospital radiological response plans.

L.3 Supplemental Medical Facilities

DHS manages hospital surge capabilities across the state through Healthcare Emergency Response Coalition (HERC) Coordinators and the EMResource system. This system would be used to coordinate support to the facilities designated in Sections L.1 and L.2 if needed. The following is a list of additional level I-III trauma centers nearby the plants that are not

already designated as primary or secondary general population receiving facilities for either plant:

- Point Beach Nuclear Plant
  - Bellin Health Hospital, 744 S Webster Ave, Green Bay, WI
  - ThedaCare Regional Medical Center, 1818 N Meade St, Appleton, WI
  - Ascension NEW St. Elizabeth Hospital, 1506 S Oneida St, Appleton, WI
  - Theda Care Regional Medical Center - Neenah, 130 2nd St, Neenah, WI
- Prairie Island Nuclear Generating Plant*
  - Marshfield Medical Center - Eau Claire, 2310 Craig Rd, Eau Claire, WI
  - Mayo Clinic Health System - Eau Claire, 1221 Whipple St, Eau Claire, WI

  **Additional hospitals are located in Minnesota.*

L.4 Medical Transport of Contaminated Individuals

The plants are responsible for designating a medical transport provider to transport contaminated, injured plant personnel or those plant personnel that have received significant radiation exposure or uptake of radioactive materials to designated hospitals outlined in Section L.2. Details of each plant's designated medical transport service is found in plant plans and procedures.

Counties are responsible for designating a medical transport provider to transport contaminated, injured evacuees from the reception center or from within the restricted area. Medical transport personnel would receive dosimetry at the reception center and follow dosimetry, radiological monitoring, contamination control procedures, and standard communications protocols between the medical transport unit and the designated hospital (see Section L.1) as outlined in local plans and procedure and the DHS RIRP Vol 4. If additional medical transport resources are needed, local mutual aid agreements would be implemented according to local plans and procedures.

M. Recovery, Reentry, and Post-Accident Operations

M.1 Reentry and Return Plans

During the early phase, prior to return being authorized, individuals may need to temporarily reenter restricted areas that have been advised to evacuate to perform critical actions to preserve property. This may include, but is not limited to, caring for livestock, stabilizing infrastructure or systems that may result in significant property damage if not addressed, retrieving medications, pets, or other necessary possessions, etc. The counties determine who can reenter, for what reasons, and for what length of time in accordance with local plans and procedures. The SRC will advise local officials on the radiological concerns for reentry. Any individuals authorized to temporarily reenter will be treated as emergency workers, issued dosimetry at their county reception center, and take the same exposure control measures as emergency workers as outlined in Sections K.2-4. If reentry is being authorized in restricted areas in an ingestion county rather than a risk county due to an isolated area of contamination, a temporary reception center will need to be setup to

issue dosimetry, monitor, and decontaminate those entering or leaving the restricted area. Plans and procedures for temporary reception centers can be found in the DHS RIRP Vol 4.

The plants are responsible for maintaining plans and procedures to allow for the reentry of plant personnel to the site following the incident. Coordination with county personnel may be necessary to allow plant personnel to pass TACPs and/or be escorted on-site during HAB incidents.

During the intermediate phase, counties will revise the restricted areas that were previously evacuated or advised to shelter-in-place based on FMT data as outlined in Section J.14. Areas where no radiological contamination is found or where the levels of contamination are below levels determined to be acceptable by the counties with advisement from the SRC may be allowed to return. Counties are responsible for determining how TACPs will be removed, the status of utilities/infrastructure in areas being allowed to return (including the status of drinking water supplies that may be impacted by ingestion concerns outlined in Section J.12), what services may be needed in the areas being allowed to return (such as special garbage pickup for spoiled food, mental health services, ongoing public education on radiological concerns, etc.), and public messaging for which areas are being allowed to return and when the return is authorized. Consideration should also be given to prioritizing return to areas with vital services and critical facilities as outlined in Section M.5.

M.2 Plant Recovery Organization

The plants are responsible for identifying individuals to develop, evaluate, and direct recovery and reentry operations on-site according to plant plans and procedures.

M.3 Plant Termination of the Emergency and Initiation of the Recovery Phase

The plants are responsible for identifying criteria for terminating the emergency phase at the plant and initiating the recovery phase on-site according to plant plans and procedures.

M.4 Transfer of Responsibility from the Intermediate to Recovery Phase

As the intermediate phase transitions to the recovery phase, most PADs will have been implemented, individuals who are able to return will have done so, and sufficient actions will have been taken to limit the movement of contaminated agricultural products, food, wild game, and drinking water into the food supply. At this point, the response will focus on cleanup and the recovery of individuals, businesses, and the environment to pre-incident conditions. The SEOC will reduce operations and the Wisconsin Recovery Task Force will begin coordinating the efforts of local, state, and federal agencies along with various stakeholders engaged in the recovery effort in accordance with State Recovery Plan.

M.5 Prioritizing Return for Access to Vital Services and Key Facilities

The counties determines whether individuals in a restricted area that had previously been evacuated can be allowed to return. This decision should be made with advisement from the SRC who will analyze data from FMT and determine areas where radiological contamination is below the limits set in the EPA PAGs. This decision should prioritize areas that allow access to schools, healthcare facilities, government facilities, utility infrastructure, key transportation routes, etc. See Section M.1 for reentry procedures.

M.6 Clean-up Operations

DHS RPS and the DNR, with support from the EPA, will oversee cleanup operations.

M.7 Ongoing Sampling Plans

Long-term sampling will continue through the DHS RPS ongoing environmental monitoring program. Sampling plans may change in the weeks and years following an incident depending on the needs identified by the DHS RPS. The laboratories identified in Section C.4 would be used to process these samples on an ongoing basis.

M.8 Ongoing Dose Assessment

Long-term dose assessment will continue through the DHS RPS ongoing environmental monitoring program.

N. Exercises and Drills

N.1 Conduct and Evaluation

Periodic exercises will be conducted in accordance with NRC and FEMA regulations and guidance to evaluate major portions of emergency response capabilities and demonstrate that the capabilities described in plans and procedures can be functionally implemented.

Unevaluated drills are conducted approximately 30-45 days prior to an evaluated exercise as a training opportunity for exercise participants.

Functional drills are also conducted as training opportunities and to demonstrate key functional roles, such as Medical Services Drills, Laboratory Drills, Ingestion Pathway and Post-Plume Phase Drills, Communications Drills, etc. At least one drill will be held unannounced between the hours of 6:00pm and 4:00am local time once every 8-year cycle, typically a communications drill, but other drills may also be conducted unannounced outside of normal working hours. Individual site emergency plans dictate required functional drills at the plant.

FEMA evaluators evaluate state and risk county performance during exercises and some functional drills in accordance with FEMA REP assessment methodology outlined in NUREG-0654/FEMA-REP-1, Rev. 2, Part III. The REP Program Manager is responsible for tracking any issues identified by FEMA in the AAR and ensuring they are corrected according to the IP.

WEM self-evaluates state and risk county performance during drills and will prepare an internal AAR/IP to track and correct issues. The REP Program Manager is responsible for tracking any issues identified in the AAR and ensuring they are corrected according to the IP.

N.2 Capability Demonstrations

Drills and exercises will be held biennially to test all major elements of plans and procedures with PBNP in odd years and PINGP in even years to meet a biennial plume phase exercise requirement. The state will fully participate in each of these demonstrations, but will only elect to be evaluated once every two-year cycle. The counties must fully participate and be evaluated for each biennial exercise requirement with their respective plant.

An ingestion exposure pathway drills and exercise will be held once every eight-year cycle with each plant. The ingestion exposure pathway drill and exercise will be in addition to the scheduled plume phase drill and exercise. Ingestion exposure pathway drills and exercises involve expanded roles for several state agencies and participation from additional federal agencies to demonstrate capabilities according to state and local plans and procedures. In addition to the risk counties within 10-miles of the plants, the ingestion counties within 50-miles of the plants are highly encouraged to participate in the ingestion exposure pathway drill and exercise.

N.3 Scenario Development

Plume phase exercise scenarios will be varied at each biennial exercise to make drill/exercise play less predictable and test specific elements of plans and procedures. The following scenario variations are required once every eight-year cycle:

- Hostile Action Based (HAB) – The HAB scenario includes a hostile action directed at the plant and involves the integration of offsite resources, such as law enforcement, fire, and EMS, with on-site personnel at an ICP. The hostile action may be by an insider threat, waterborne, airborne, or a combination of attacks and should vary from between consecutive HAB scenarios. The HAB scenario may be combined with a minimal or no release scenario, but not during consecutive HAB scenarios.
- Rapid Escalation – The rapid escalation scenario includes an initial classification of a SAE or GE or an escalation within 30 minutes to an SAE or GE.
- No or Minimal Release – The no or minimal release scenario includes no radiological release or a minimal release that requires the site to declare a SAE, but not a GE. The plants are required to demonstrate this scenario once every 8-year cycle, but demonstration by the state and counties is not mandatory. If this scenario is used, FEMA may require capabilities to be demonstrated separate from scenario driven exercise play. This scenario may only be used once every 8-year cycle.
- Resource Integration - The resource integration scenario includes demonstrating the integration of offsite resources, such as law enforcement, fire, or EMS, with on-site response efforts. This scenario is frequently combined with a HAB scenario.

N.4 Functional Drills

Functional drills are also conducted as training opportunities and to demonstrate key functional roles. The plant conducts functional drills according to their site emergency plans. The following drills are held at a minimum frequency specified by the state and county:

- Medical Services Drills – Medical services drills are conducted annually at each medical facility designated in Section L.1. Medical services drills are reported annually on the ALC and are evaluated by FEMA biennially, normally in conjunction with the evaluated biennial exercise. These drills demonstrate that procedures for transporting contaminated, injured individuals to the appropriate medical facility can be implemented and to allow medical facility staff to demonstrate proper care of contaminated, injured individuals at appropriately equipped facilities. The focus of these drills is contamination control measures, not medical protocols.
- Laboratory Drills – Laboratory drills are conducted biennially with a laboratory designated in Section C.4. Laboratory drills are reported biennially on the ALC and are evaluated by FEMA once every 8-year cycle. These drills demonstrate the handling, documenting, provisions for record keeping, and analyzing air, soil, and food samples, as well as quality control and quality assurance processes. These drills also assess the laboratory's capacity to handle daily and weekly samples and the volume of samples that can be processed daily or weekly.
- Environmental Monitoring Drills – Environmental monitoring drills (FMT Drills) are conducted annually and reported on the ALC. These drills demonstrate direct radiation measurements in the environment, collection, and analysis of all sample media (e.g., water, vegetation, soil, and air), and provisions for record keeping.
- Ingestion Pathway and Post-Plume Phase Drills – Ingestion pathway and post-plume phase drills are conducted biennially and reported on the ALC. Counties located within 50-miles of the plant are highly encouraged to participate in these drills. These drills demonstrate at least one of the following areas each demonstration and include all of the following every 8-year cycle:
    - Sample plan development.
    - Analysis of lab results from samples.
    - Assessment of the impacts on foods and agricultural products.
    - Protective decisions for reentry, relocation, return, and re-occupancy.
    - Foods or crop restrictions.
    - Dissemination of ingestion exposure pathway EPZ information to pre-determined individuals and businesses.
    - Assessment of emergency worker knowledge of ingestion exposure pathway EPZ procedures.
    - Identification of the individual authorized to make decisions in the ingestion exposure pathway EPZ.

- Communications Drills – Communications drills are conducted either monthly, quarterly, or annually depending on the system being demonstrated and reported on the ALC in accordance with Section F.3. All communications drills include a message content check. These drills demonstrate the following:
    - PBNP ERNIE – Monthly demonstrations of the ERNIE system that is used by PBNP to notify the state and counties.
    - PINGP Vaporstream – Monthly demonstrations of the Vaporstream system that is used by PINGP to notify the state and counties.
    - State of Illinois – Quarterly demonstrations of a phone call and email from the State of Illinois notifying the State of Wisconsin of an incident at the Byron Generating Station.
    - KPS ISFSI – Annual demonstration of a phone call with a verbal NARS form.
    - LACBWR ISFSI - Annual demonstration of a phone call with a verbal NARS form.
    - Mass Notification/Email/Phone/Radio Systems – Annual demonstrations of all mass notification systems, email systems, phone systems, and radio systems used by WEM, DHS RPS, and the counties for radiological incidents.

O. Radiological Emergency Response Training

O.1 Radiological Emergency Response Training for Emergency Responders

The plant provides site specific training to emergency responders who may be required to provide on-site assistance.

Counties are responsible for providing initial and annual training to all emergency responders with a role in a nuclear power plant response in accordance with local plans and procedures. Trainings are reported annually on the ALC. WEM and DHS RPS will support county training efforts upon request.

WEM and DHS RPS is responsible for providing initial, quarterly, and annual training to all state emergency responders with a role in a nuclear power plant response. Trainings are reported annually on the ALC. This is accomplished through the following annual or quarterly trainings:

- Annual SEOC Training – Conducted by WEM and DHS RPS for all individuals who staff positions in the SEOC.
- Annual 211 Training – Conducted by WEM for all operators who staff positions on the United Way 211 public inquiry hotline.
- Annual JOC Training – Conducted by WEM for all individuals in the JOC who staff the state IWP.

- Annual FMT Training – Conducted by DHS RPS for all individuals who staff positions on FMTs or in the FOC/MRL.
- Annual SRC Room Drills – Conducted by DHS RPS for all individuals who staff positions in the SRC Room.
- Quarterly RadResponder – Conducted by DHS RPS for all individuals who utilize RadResponder.
- Annual DHS RIRP Position Specific Training – Conducted by DHS RPS for all individuals who staff positions listed in the RIRP.

Initial training is provided to SEOC staff, 211 operators, JOC staff, FMT members, and SRC Room as part of their job induction/orientation provided by their supervisor.

Just in time training on emergency worker exposure control is available online and via a television at the reception centers. Links to the training video are found in the Emergency Worker Handbook issued to emergency workers with their dosimetry and KI.

O.2 Plant ERO Training Program

The plants are responsible for training their ERO to develop, critique, and maintain skills. The ERO training program must be reviewed annually and revised as necessary.

P. Responsibility for the Planning Effort: Development, Periodic Review, and Distribution of Emergency Plans

P.1 Required Training

Personnel from WEM who require REP specific training include the following:

- REP Program Manager
- REP Planners

The personnel above will complete the minimum required training for all WEM employees in accordance with WEM Policy Directive 5005.3. Additionally, REP staff will complete the following initial REP specific curriculum as soon as practical:

- AWR-923 – Radiological Emergency Management
- AWR-317 - REP Core Concepts Course
- AWR-327 – REP Exercise Controller Course
- AWR-351 – REP Post Plume Awareness Course
- AWR-352 – REP Planning Core Concepts Course
- MGT-445 – REP Plume Plan Review Course
- MGT-453 – REP Post Plume Plan Review Course

Upon completion of the initial training above, recurrent training in at least one emergency management or radiological course per year is required.

County training requirements are documented in local plans and procedures.

DHS RPS training requirements are documented in the DHS RIRP Vol 1.

P.2 Radiological Emergency Preparedness (REP) Organization

The REP Program Manager is directly responsible for overall radiological emergency response planning in the state. The REP Program Manager reports directly to the Response Planning and Support Section Supervisor, who reports to the Operations and Planning Support Bureau Director.

P.3 Plan Maintenance Organization

The REP Program Manager is directly responsible for developing, maintaining, reviewing, updating, and distributing the State of Wisconsin Nuclear Power Plant Response Plan, as well as coordinating the plan with other response organizations.

P.4 Plan Maintenance

The State of Wisconsin Nuclear Power Plant Response Plan is reviewed and/or updated annually in March or 90 days prior to the scheduled exercise for that calendar year, whichever comes earlier.

P.5 Plan Distribution

The State of Wisconsin Nuclear Power Plant Response Plan is kept on file in the SEOC and distributed to the DHS RPS and risk counties.

P.6 Supporting Plans

The State of Wisconsin Nuclear Power Plant Response Plan is supported by the following plans:

- DHS RIRP Vol 1-4
- PBNP Integrated Response Plans (for HAB Incidents)
- County Plans
- Utility Plans

P.7 Supporting Procedures

The State of Wisconsin Nuclear Power Plant Response Plan is supported by the following procedures:

- JOC SOG 2-20
- SEOC Manual
- Emergency Worker Handbook
- DHS Procedures
- Hospital Procedures
- County Procedures

- Utility Procedures

P.8 Table of Contents (TOC) and NUREG Cross Reference

The Table of Contents (TOC) can be found in Section i.

The Radiological Nuclear Annex, Part 2, is organized to mirror the numerical numbering system of NUREG-0654/FEMA-REP-1, Rev. 2. A NUREG crosswalk can be found in Attachment 4.

P.9 Emergency Preparedness Program Review

The plants have a responsibility to review all elements of their EP program by persons with no direct responsibility for the program at least every 12 months or as needed per 10 CFR 50.54(t).

P.10 Contact Information

The REP Contact List is updated quarterly at the Utility Planning Commission (UPC) meeting and distributed via email following the meeting.

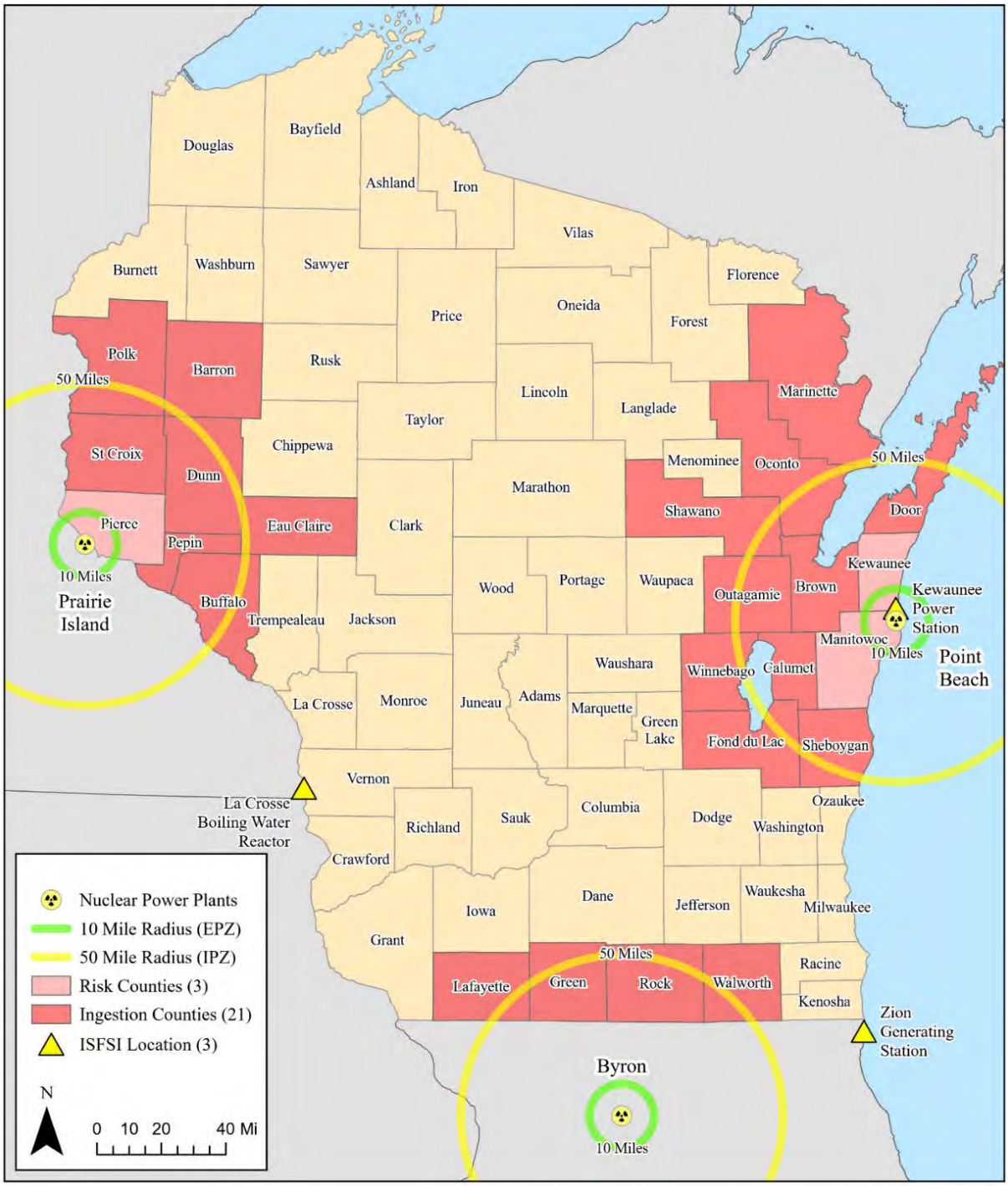
P.11 Plant Corrective Action Programs

The plants have a site-wide corrective action programs that EP personnel may enter issues that could reduce the effectiveness of the emergency plan. Processes for doing so are described in plant processes and procedures.

P.12 Evaluation of Impact from Plant Configuration Changes

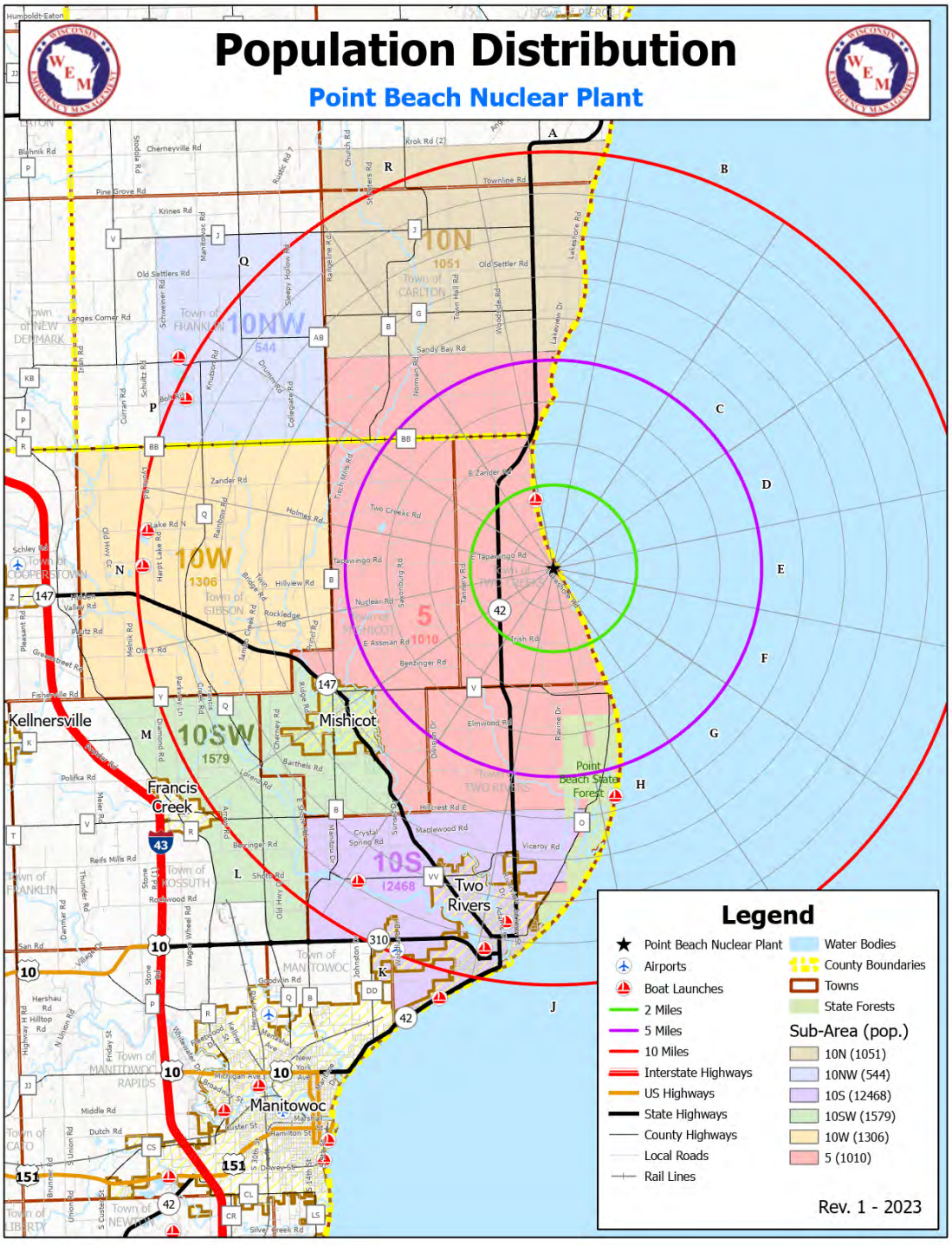
The plants are responsible for maintaining a process for evaluating changes in plant configuration for their impact on the effectives of the emergency plan. Processes for doing so are described in plant processes and procedures.

Attachment 1 – Map of Wisconsin Planning Zones for Commercial Nuclear Power Plants and ISFI Sites

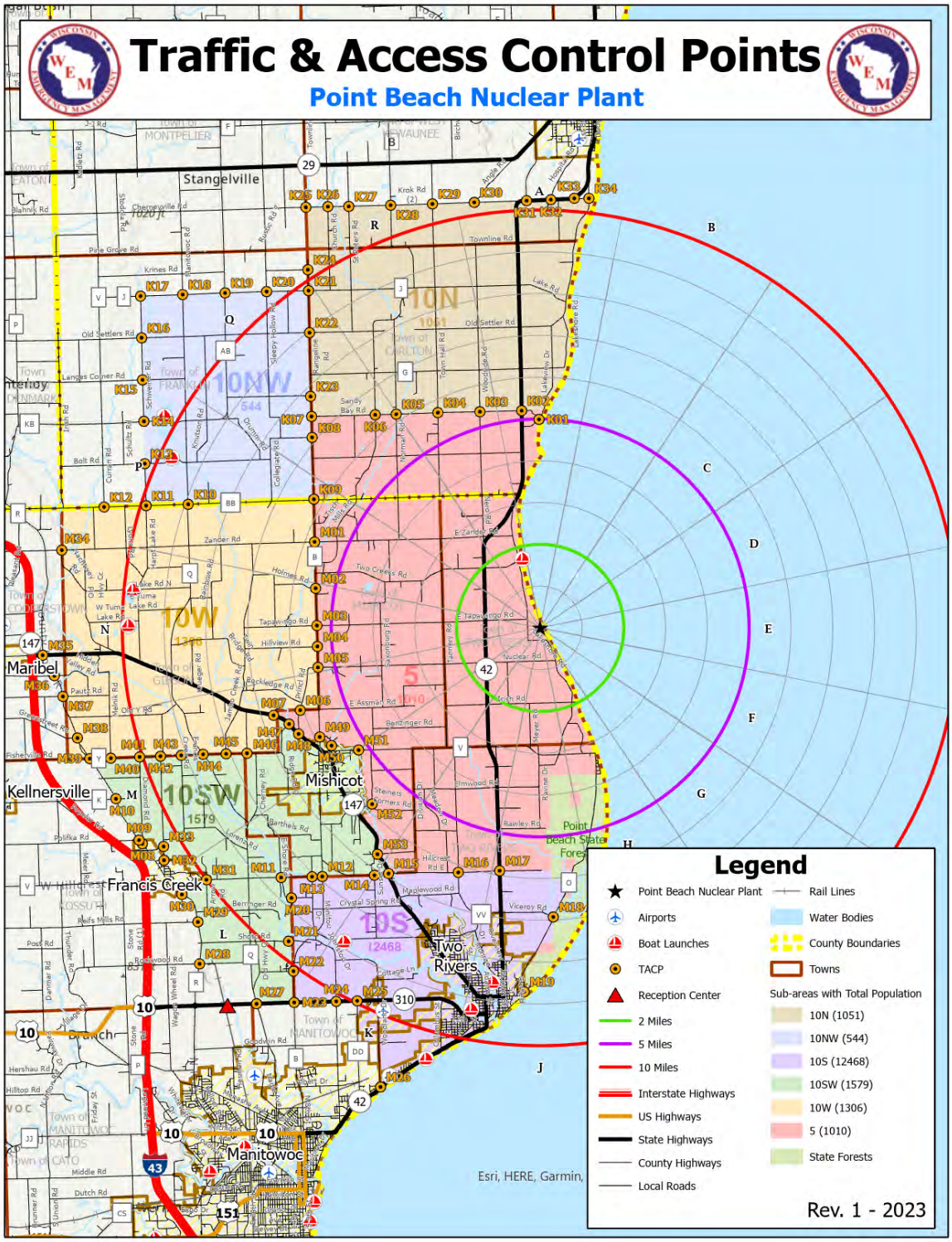


Attachment 2 – PBNP & PINGP Maps

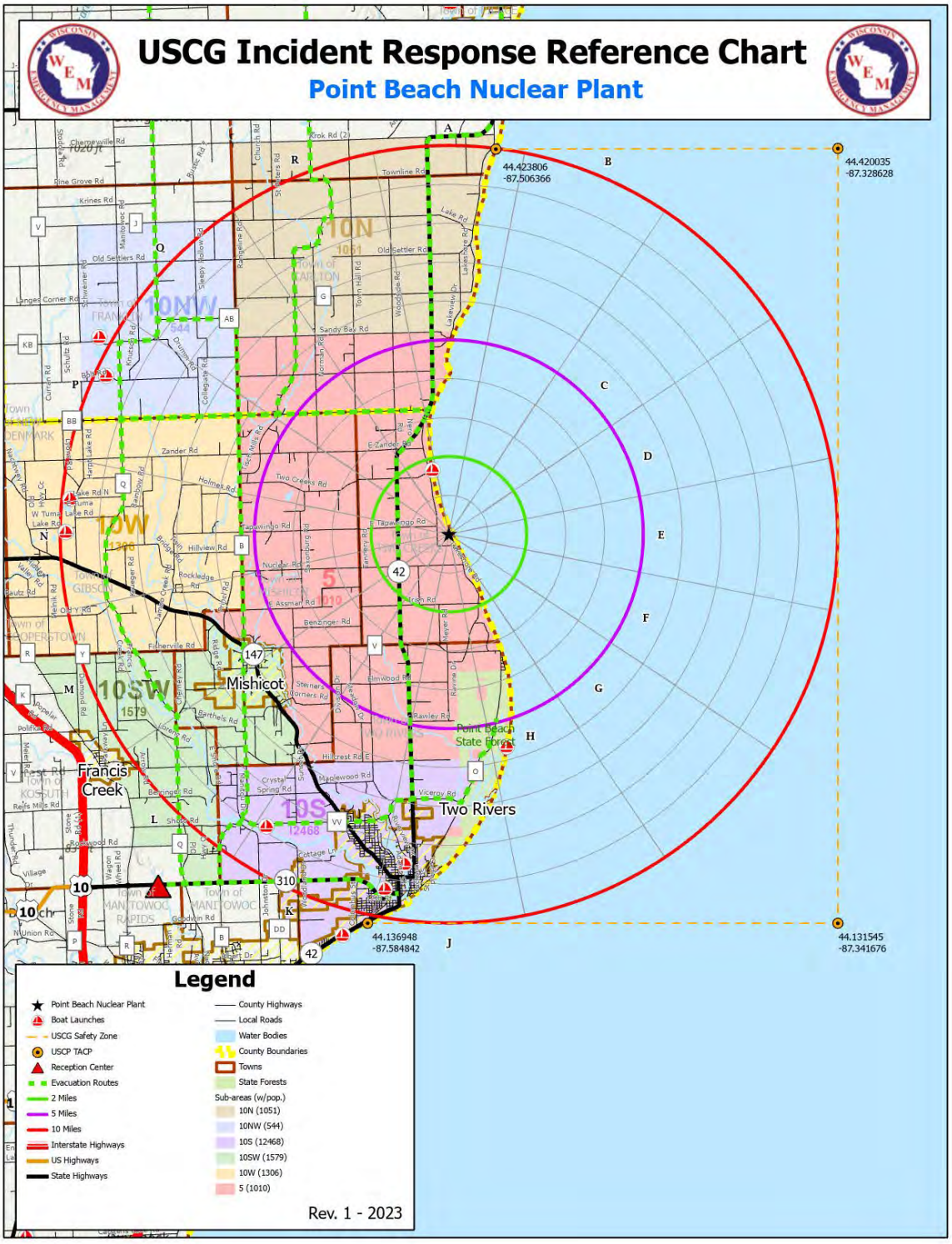
PBNP Evacuation Sub-Areas and Population Distribution



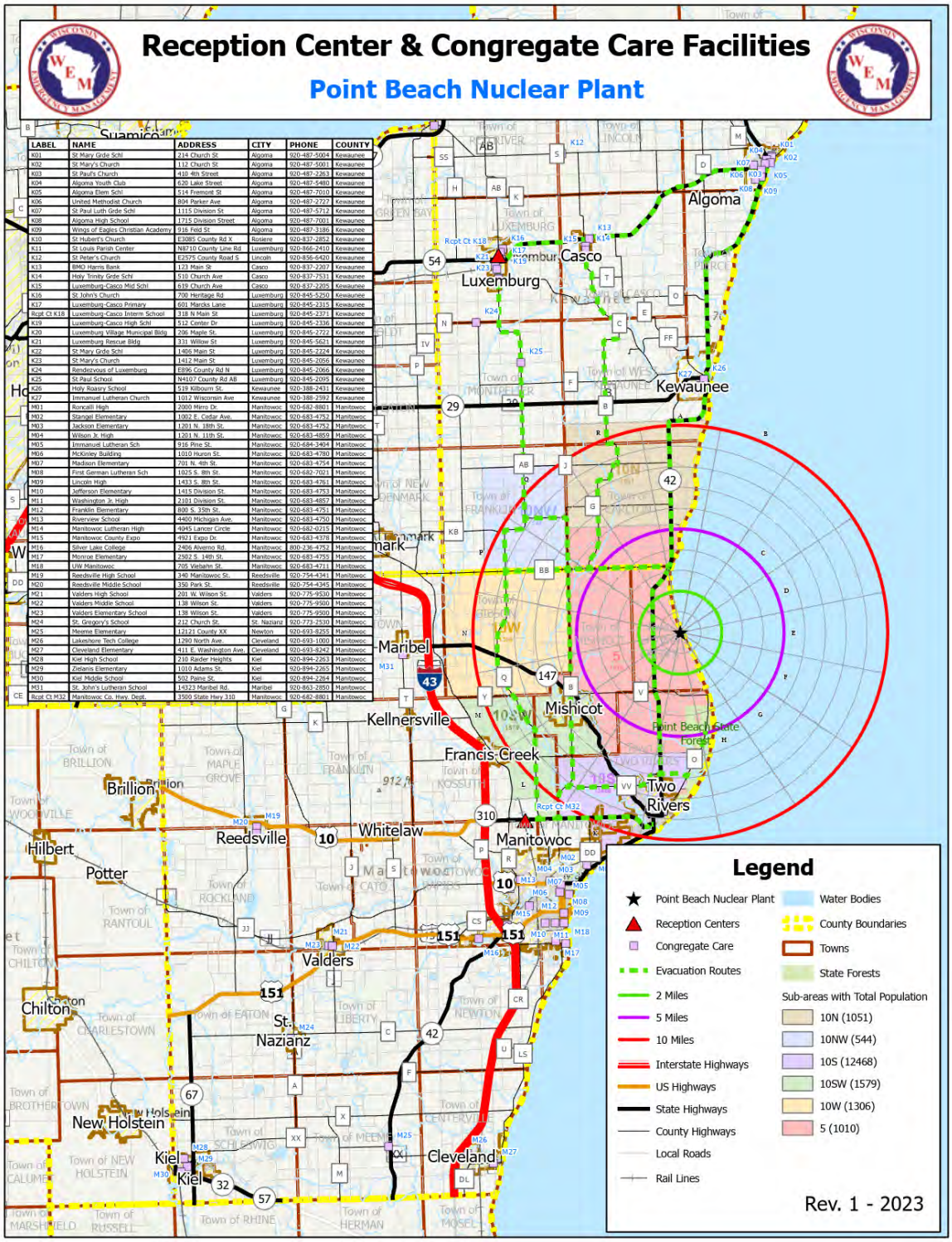
PBNP TACPs


Traffic & Access Control Points
Point Beach Nuclear Plant
Stangelville
Maribel
Kellnersville
Francis Creek
Mishicot
Two Rivers
Manitowoc
Legend
Point Beach Nuclear Plant
Airports
Boat Launches
TACP
Reception Center
2 Miles
5 Miles
10 Miles
Interstate Highways
US Highways
State Highways
County Highways
Local Roads
Rail Lines
Water Bodies
County Boundaries
Towns
Sub-areas with Total Population
10N (1051)
10NW (544)
10S (12468)
10SW (1579)
10W (1306)
5 (1010)
State Forests
Rev. 1 - 2023
Esri, HERE, Garmin,

PBNP Marine Restricted Areas

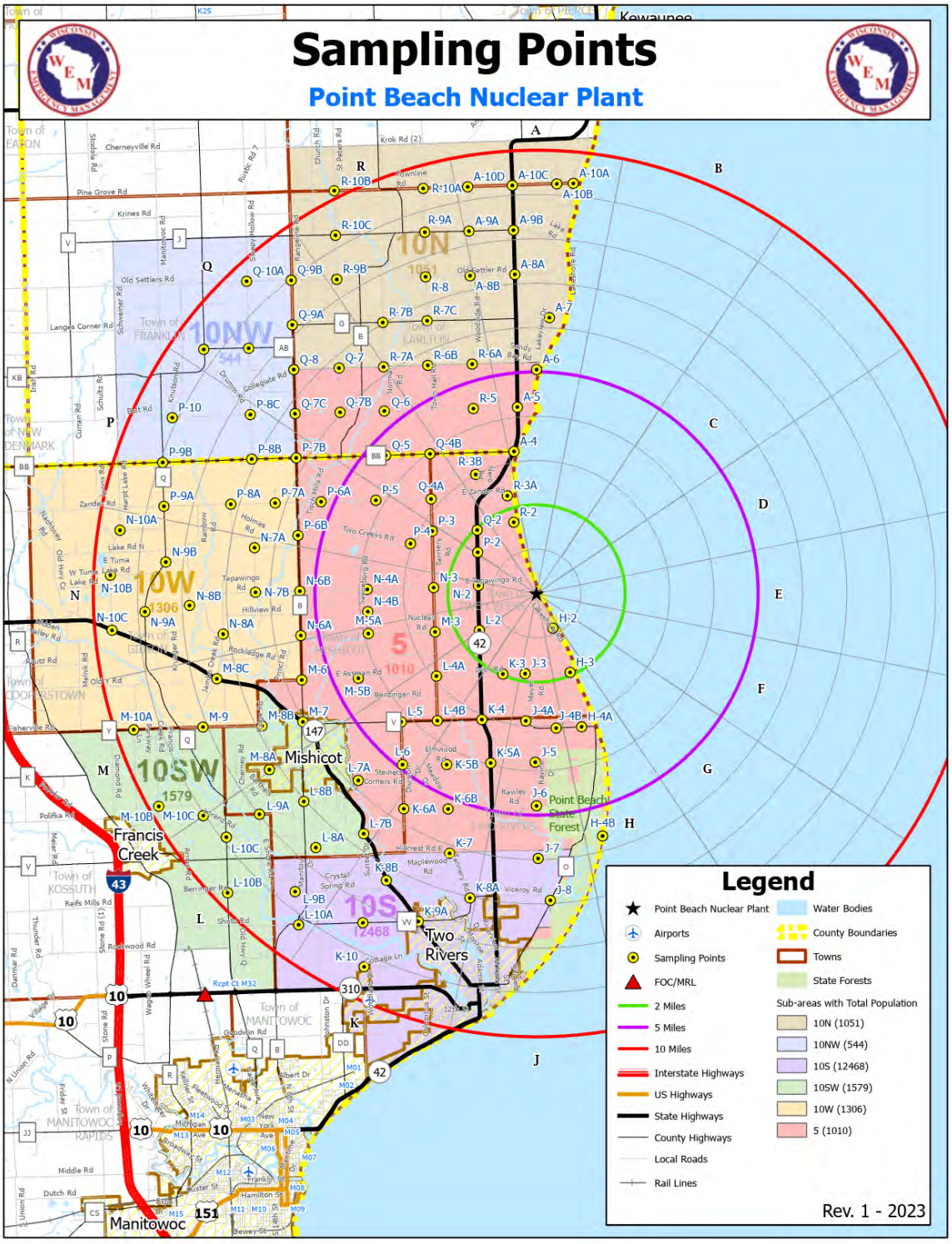


PBNP Congregate Care Centers, Reception Centers, and Evacuation Routes



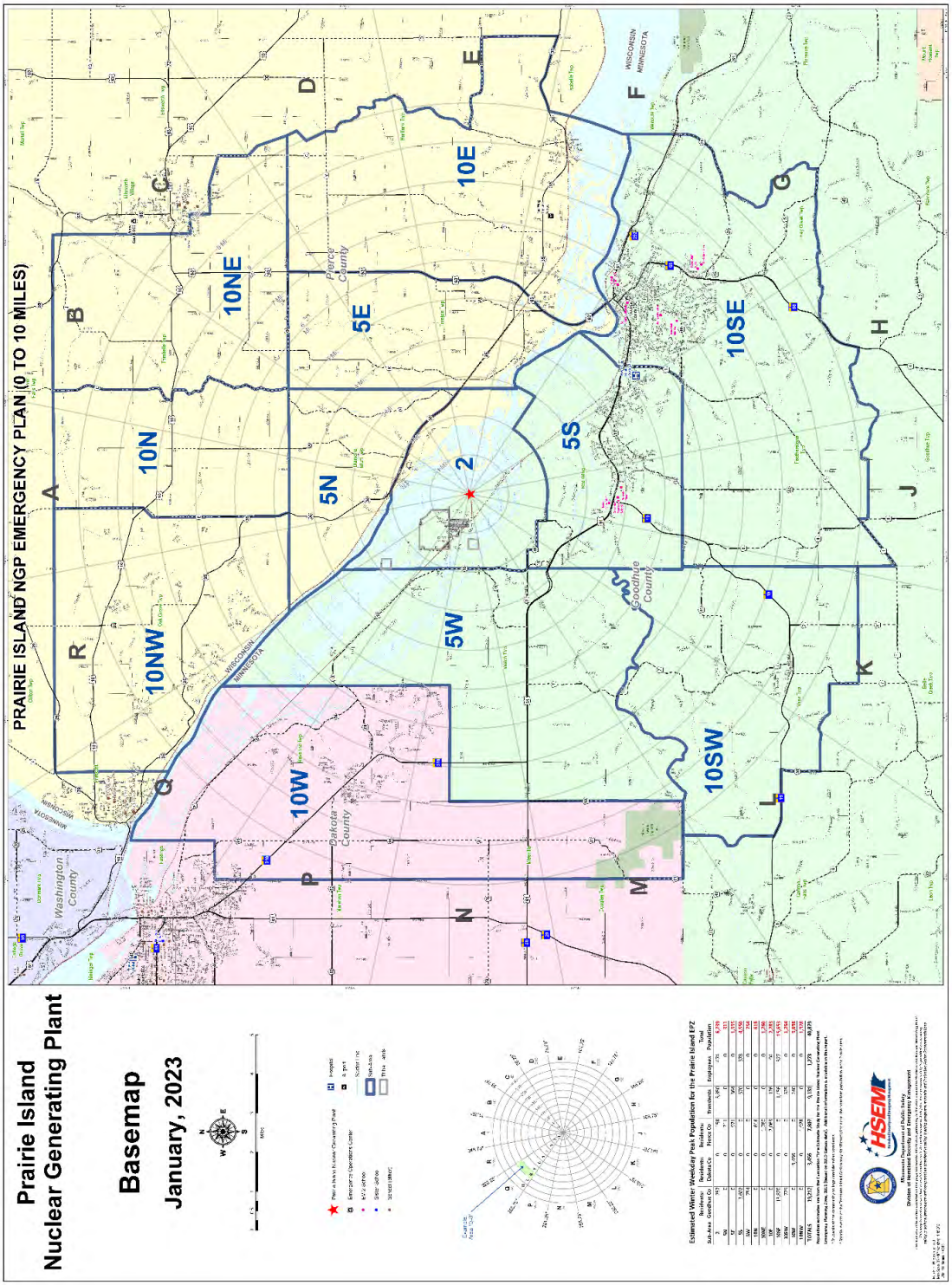
LABEL	NAME	ADDRESS	CITY	PHONE	COUNTY
K01	St Mary Grde Schl	214 Church St	Algoma	920-487-5004	Kewaunee
K02	St Mary's Church	112 Church St	Algoma	920-487-5001	Kewaunee
K03	St Paul's Church	410 4th Street	Algoma	920-487-2263	Kewaunee
K04	Algoma Youth Club	620 Lake Street	Algoma	920-487-5480	Kewaunee
K05	Algoma Elem Schl	514 Fremont St	Algoma	920-487-7010	Kewaunee
K06	United Methodist Church	804 Parker Ave	Algoma	920-487-2727	Kewaunee
K07	St Paul Luth Grde Schl	1115 Division St	Algoma	920-487-5712	Kewaunee
K08	Algoma High School	1715 Division Street	Algoma	920-487-7001	Kewaunee
K09	Wings of Eagles Christian Academy	916 Feld St	Algoma	920-487-3186	Kewaunee
K10	St Hubert's Church	E3085 County Rd X	Rosiere	920-837-2852	Kewaunee
K11	St Louis Parish Center	N8710 County Line Rd	Luxemburg	920-866-2410	Kewaunee
K12	St Peter's Church	E2575 County Road S	Lincoln	920-856-6420	Kewaunee
K13	BMO Harris Bank	123 Main St	Casco	920-837-2207	Kewaunee
K14	Holy Trinity Grde Schl	510 Church Ave	Casco	920-837-7531	Kewaunee
K15	Luxemburg-Casco Mid Schl	619 Church Ave	Casco	920-837-2205	Kewaunee
K16	St John's Church	700 Heritage Rd	Luxemburg	920-845-5250	Kewaunee
K17	Luxemburg-Casco Primary	601 Marcks Lane	Luxemburg	920-845-2315	Kewaunee
Rcpt Ct K18	Luxemburg-Casco Interm School	318 N Main St	Luxemburg	920-845-2371	Kewaunee
K19	Luxemburg-Casco High Schl	512 Center Dr	Luxemburg	920-845-2336	Kewaunee
K20	Luxemburg Village Municipal Bldg	206 Maple St.	Luxemburg	920-845-2722	Kewaunee
K21	Luxemburg Rescue Bldg	311 Willow St	Luxemburg	920-845-5621	Kewaunee
K22	St Mary Grde Schl	1406 Main St	Luxemburg	920-845-2224	Kewaunee
K23	St Mary's Church	1412 Main St	Luxemburg	920-845-2066	Kewaunee
K24	Rendezvous of Luxemburg	E896 County Rd N	Luxemburg	920-845-2066	Kewaunee
K25	St Paul School	N4107 County Rd AB	Luxemburg	920-845-2095	Kewaunee
K26	Holy Roasry School	519 Kilbourn St.	Kewaunee	920-388-2431	Kewaunee
K27	Immanuel Lutheran Church	1012 Wisconsin Ave	Kewaunee	920-388-2592	Kewaunee
M01	Roncalli High	2000 Mirro Dr.	Manitowoc	920-682-8801	Manitowoc
M02	Stangel Elementary	1002 E. Cedar Ave.	Manitowoc	920-683-4752	Manitowoc
M03	Jackson Elementary	1201 N. 18th St.	Manitowoc	920-683-4752	Manitowoc
M04	Wilson Jr. High	1201 N. 11th St.	Manitowoc	920-683-4859	Manitowoc
M05	Immanuel Lutheran Sch	916 Pine St.	Manitowoc	920-684-3404	Manitowoc
M06	McKinley Building	1010 Huron St.	Manitowoc	920-683-4780	Manitowoc
M07	Madison Elementary	701 N. 4th St.	Manitowoc	920-683-4754	Manitowoc
M08	First German Lutheran Sch	1025 S. 8th St.	Manitowoc	920-682-7021	Manitowoc
M09	Lincoln High	1433 S. 8th St.	Manitowoc	920-683-4761	Manitowoc
M10	Jefferson Elementary	1415 Division St.	Manitowoc	920-683-4753	Manitowoc
M11	Washington Jr. High	2101 Division St.	Manitowoc	920-683-4857	Manitowoc
M12	Franklin Elementary	800 S. 35th St.	Manitowoc	920-683-4751	Manitowoc
M13	Riverview School	4400 Michigan Ave.	Manitowoc	920-683-4750	Manitowoc
M14	Manitowoc Lutheran High	4945 Lancer Circle	Manitowoc	920-682-0215	Manitowoc
M15	Manitowoc County Expo	4921 Expo Dr.	Manitowoc	920-683-4378	Manitowoc
M16	Silver Lake College	2406 Alverno Rd.	Manitowoc	800-236-4752	Manitowoc
M17	Monroe Elementary	2502 S. 14th St.	Manitowoc	920-683-4755	Manitowoc
M18	UW Manitowoc	705 Viebahn St.	Manitowoc	920-683-4711	Manitowoc
M19	Reedsville High School	340 Manitowoc St.	Reedsville	920-754-4341	Manitowoc
M20	Reedsville Middle School	350 Park St.	Reedsville	920-754-4345	Manitowoc
M21	Valders High School	201 W. Wilson St.	Valders	920-775-9530	Manitowoc
M22	Valders Middle School	138 Wilson St.	Valders	920-775-9500	Manitowoc
M23	Valders Elementary School	138 Wilson St.	Valders	920-775-9500	Manitowoc
M24	St. Gregory's School	212 Church St.	St. Nazianz	920-773-2530	Manitowoc
M25	Meemie Elementary	12121 County XX	Newton	920-693-8255	Manitowoc
M26	Lakeshore Tech College	1290 North Ave.	Cleveland	920-693-1000	Manitowoc
M27	Cleveland Elementary	411 E. Washington Ave.	Cleveland	920-693-8242	Manitowoc
M28	Kiel High School	210 Rader Heights	Kiel	920-894-2263	Manitowoc
M29	Zielanis Elementary	1010 Adams St.	Kiel	920-894-2265	Manitowoc
M30	Kiel Middle School	502 Paine St.	Kiel	920-894-2264	Manitowoc
M31	St. John's Lutheran School	14323 Maribel Rd.	Maribel	920-863-2850	Manitowoc
Rcpt Ct M32	Manitowoc Co. Hwy. Dept.	3500 State Hwy 310	Manitowoc	920-682-8801	Manitowoc

PBNP Sampling Points

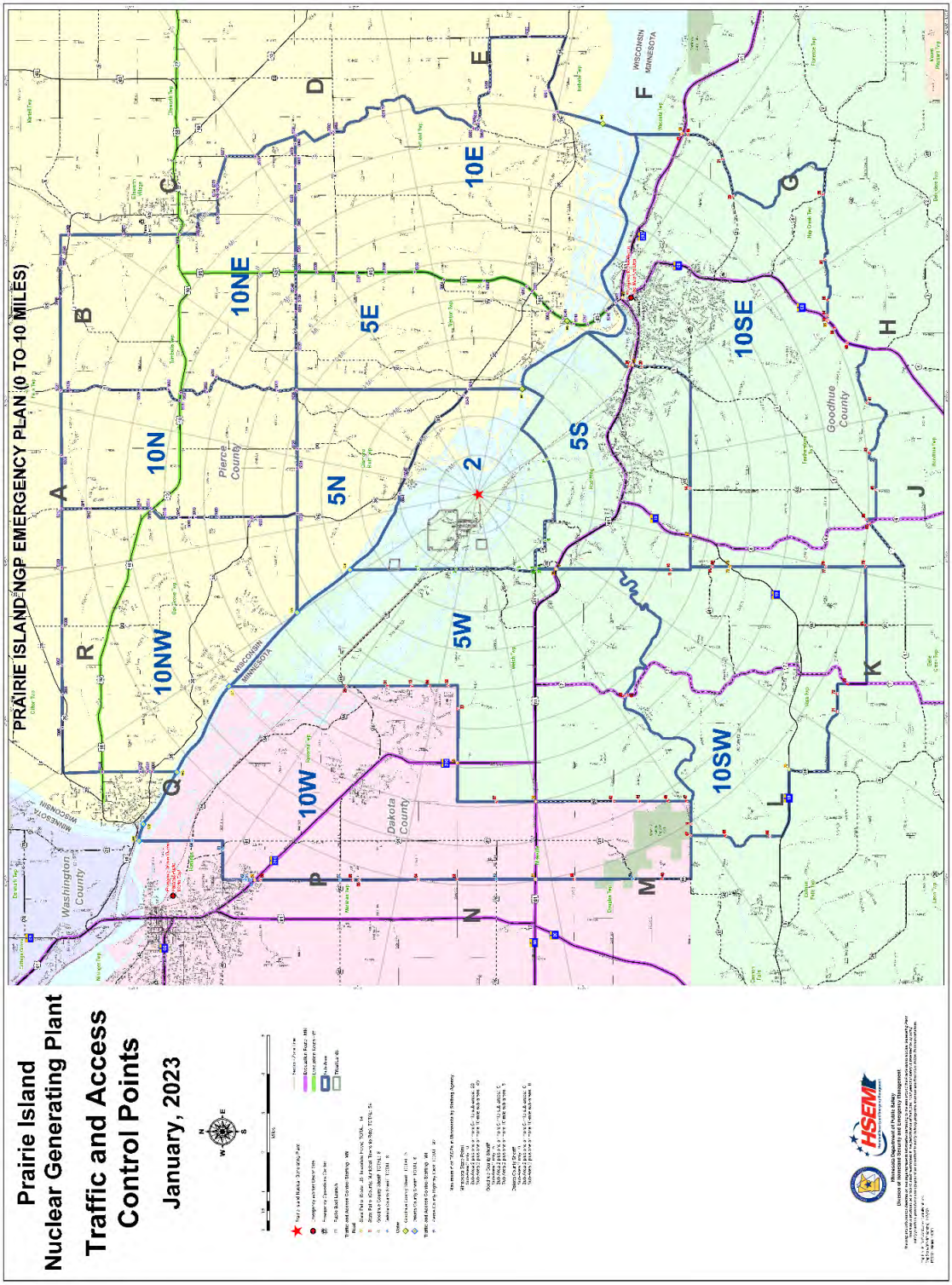


PBNP Ingestion Pathway EPZ

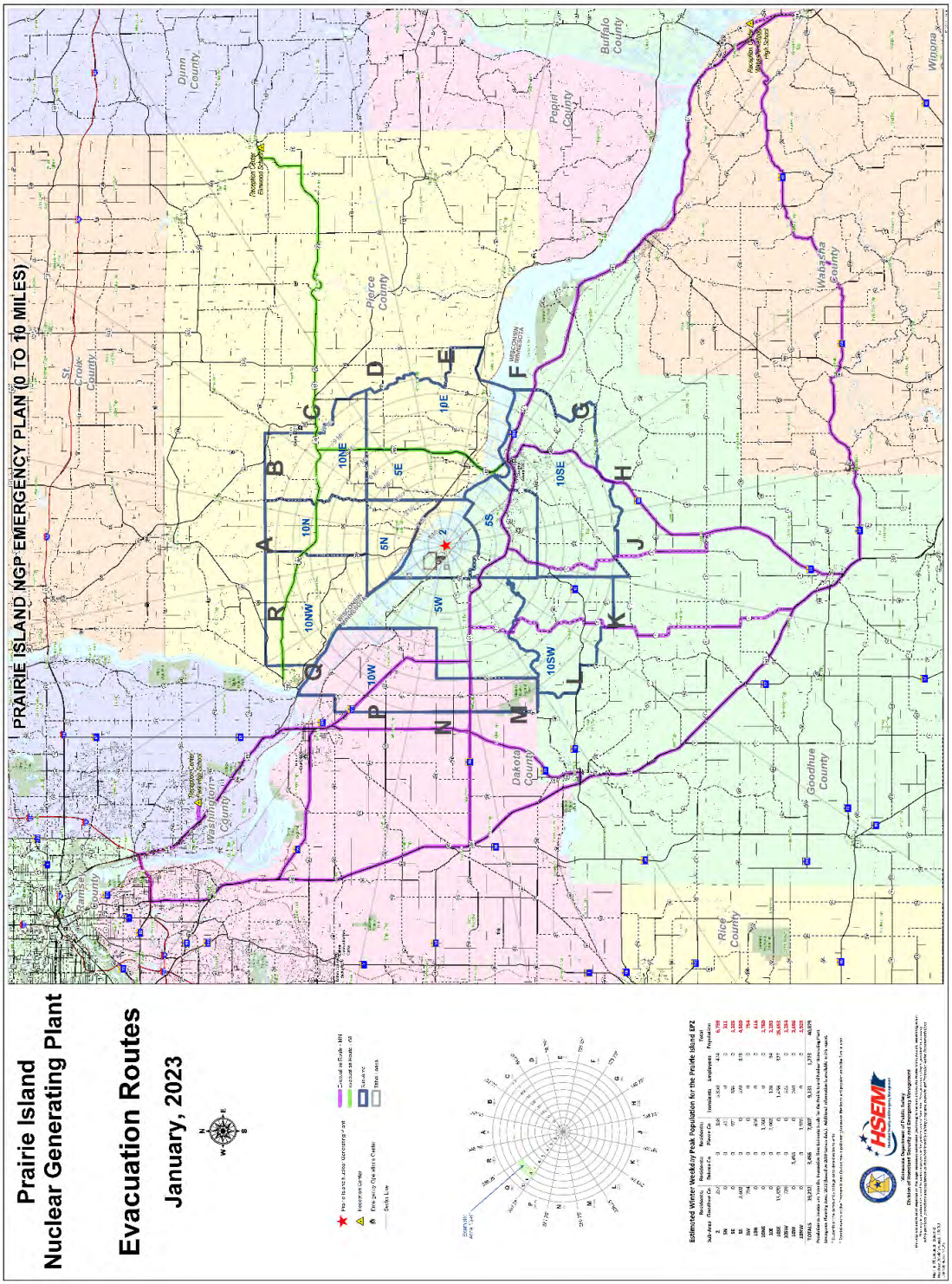
PINGP Evacuation Sub-Areas and Population Distribution



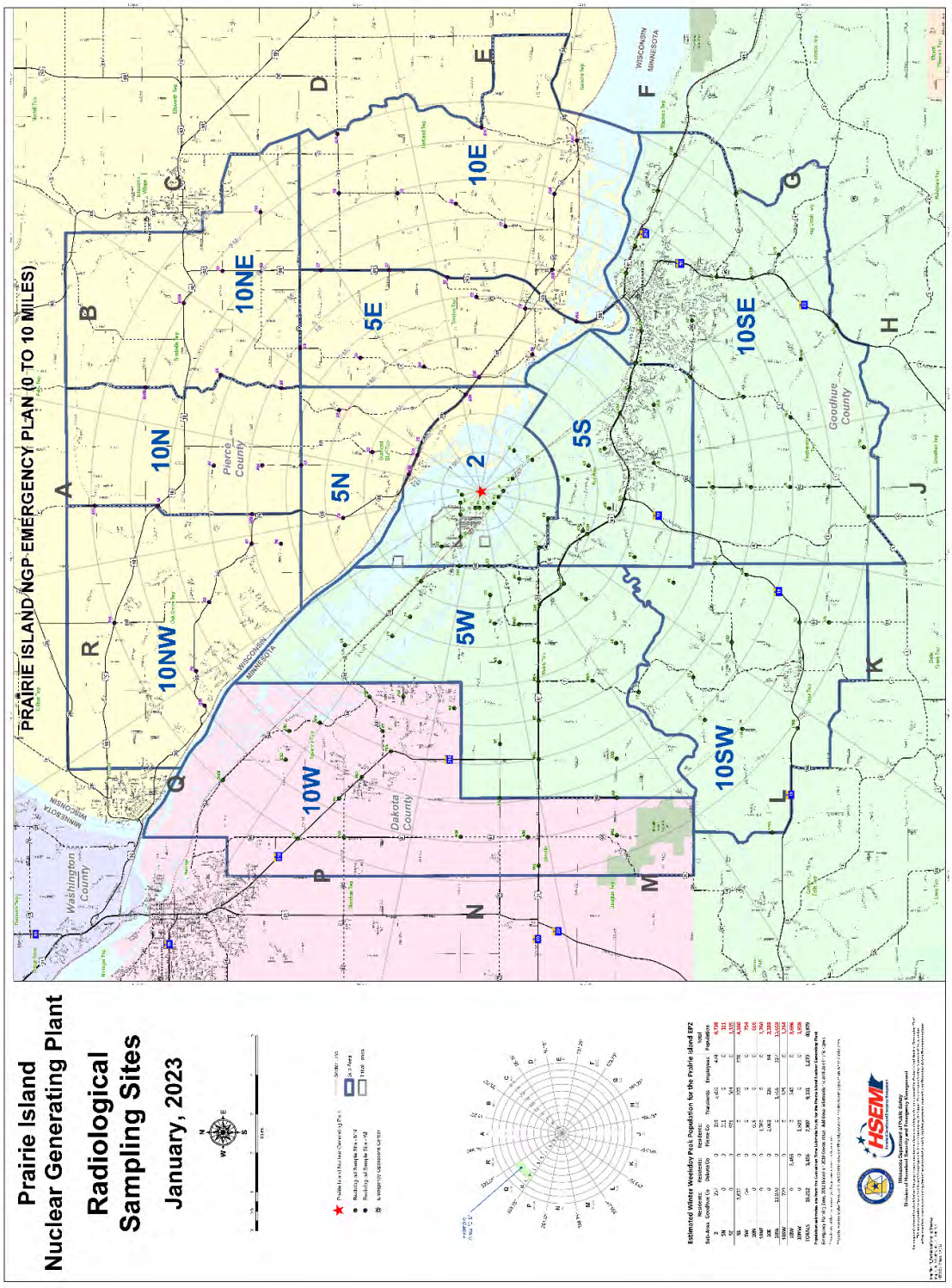
PINGP TACPs


PRAIRIE ISLAND NGP EMERGENCY PLAN (0 TO 10 MILES)
Prairie Island
Nuclear Generating Plant
Traffic and Access
Control Points
January, 2023
Pierce County
Dakota County
Goodhue County
Washington County
WISCONSIN
MINNESOTA
2
2N
5N
5E
5S
5W
10N
10NE
10E
10NW
10W
10SE
10SW
A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
HSEM

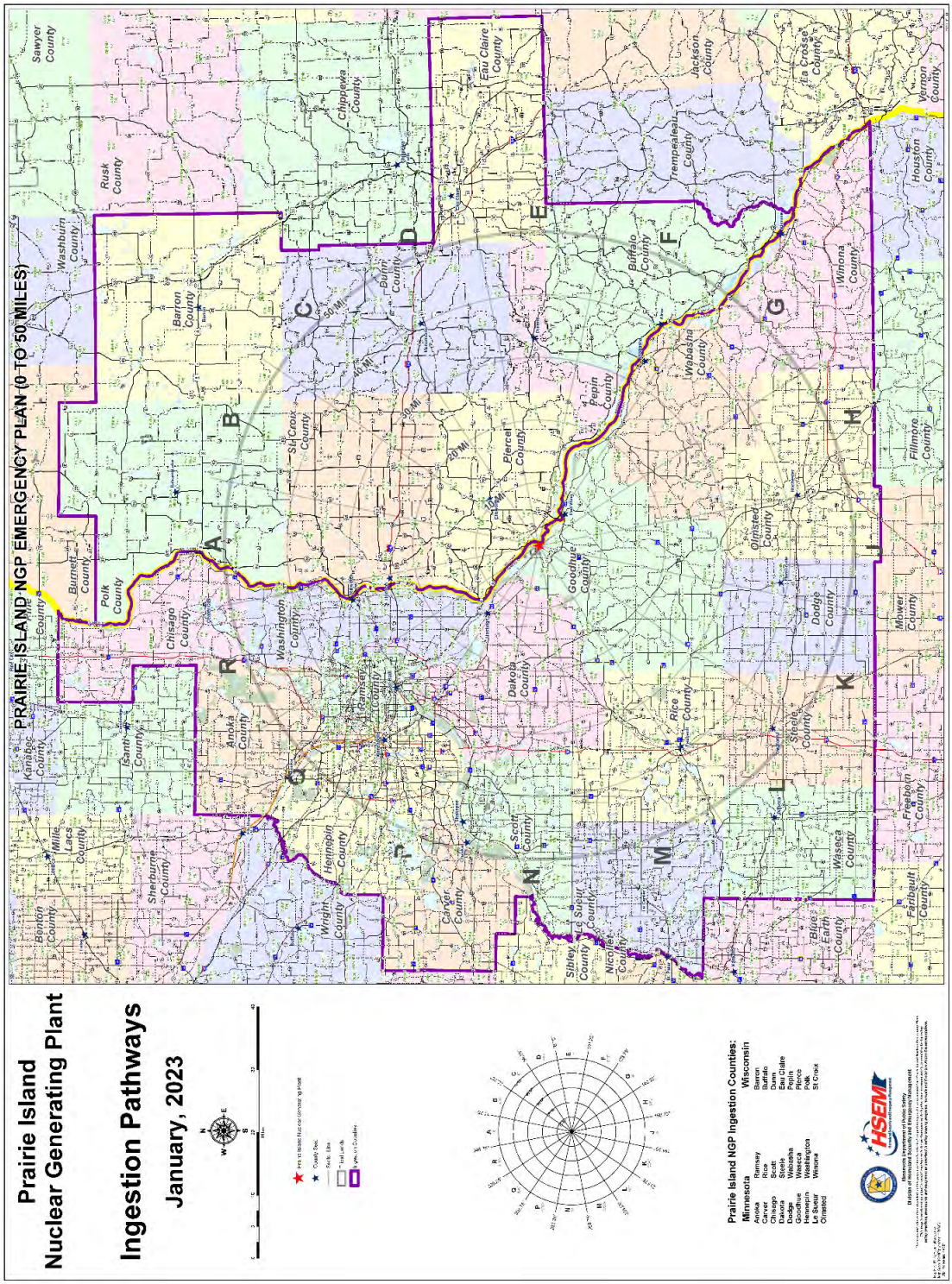
PING Evacuation Routes



PINGP Sampling Points



PINGP Ingestion Pathway EPZ



Attachment 3 – Acronyms

AFRC – Armed Forces Reserve Center
ANI – American Nuclear Insurers
ANS – Alert and Notification Systems
ARES – Amateur Radio Emergency Services
CBRN – Chemical, Biological, Radiological, Nuclear
CERFP – CBRN Emergency Response Force Packages
CFR – Code of Federal Regulations
CST – Civil Support Team
DATCP – Department of Agriculture, Trade and Consumer Protection
DCF – Department of Children and Families
DCI – Department of Criminal Investigation
DIL – Derived Intervention Level
DMA – Department of Military Affairs
DNR – Department of Natural Resources
DOJ – Department of Justice
DOA – Department of Administration
HSEM – Homeland Security and Emergency Management
DOE – Department of Energy
DRD – Direct Reading Dosimeter
DSP – Division of State Patrol
DTSD - Division of Transportation Systems Development
EAL – Emergency Action Level
EAS – Emergency Alert System
IWP – Initial Warning Point
ECL – Emergency Classification Level
EMAC – Emergency Management Assistance Compact
EOC – Emergency Operations Center
EOF – Emergency Operations Facility
EP – Emergency Preparedness
EPA – Environmental Protection Agency
EPD – Electronic Personal Dosimeter
EPZ – Emergency Planning Zone
ERNIE – Emergency Response Notifications of Incidents and Events
ERO – Emergency Response Organization
ETE – Evacuation Time Estimate

FEMA – Federal Emergency Management Agency
NRF – National Response Framework
FMT – Field Monitoring Teams
FRMAC - Federal Radiological Monitoring and Assessment Center
GAR – Governor's Appointed Representative
GE – General Emergency
GIS – Geographic Information Systems
HAB – Hostile Action Based
HERC – Healthcare Emergency Response Coalition
HTL – Health Team Leader
ICP – Incident Command Post
ICS – Incident Command System
IPAWS – Integrated Public Alert and Warning System
IRP – Integrated Response Plan
ISFSI - Independent Spent Fuel Storage Installation
JFHQ – Joint Force Headquarters
JIC – Joint Information Center
JIS – Joint Information System
JOC – Joint Operations Center
JTTF – Joint Terrorism Task Force
KI – Potassium Iodide
KPS – Kewaunee Power Station
LACBWR – La Crosse Boiling Water Reactor
MRL – Mobile Response Lab
NARS – Nuclear Accident Reporting System
NAWAS – National Warning System
NIMS – National Incident Management System
NOUE – Notification of Unusual Event
NUE – Notification of Unusual Event
NUREG – Nuclear Regulation
NWS – National Weather Service
OSC – Operations Support Center
PAD – Protective Action Decision
PAG – Protective Action Guideline
SAE – Site Area Emergency
PAR – Protective Action Recommendation

PBNP – Point Beach Nuclear Plant
PINGP – Prairie Island Nuclear Generating Plant
PIO – Public Information Officer
PRD – Permanent Record Dosimeter
PSAP – Public Safety Answering Point
R – Roentgen
RACES – Radio Amateur Civil Emergency Services
RAP - Radiological Assistance Program
RCM – Reception Center Manager
REAC/TS - Radiological Emergency Assistance Center/Training Site
rem – Roentgen Equivalent Man
REP - Radiological Emergency Preparedness
RIRP – Radiological Incident Response Plan
RPS – Radiation Protection Section
RSO – Radiation Science Officer
SEOC – State Emergency Operations Center
SMS – Short Message Service
SNS – Strategic National Stockpile
SRC – State Radiological Coordinator
DHS – Department of Health Services
STAC - Southeastern Wisconsin Threat Analysis Center
TACP – Traffic and Access Control Point
FOC – Forward Operations Center
TAG – The Adjutant General
TOC – Table of Contents
TSC – Technical Support Center
UE – Unusual Event
UPC – Utility Planning Committee
USCG – United States Coast Guard
WEA – Wireless Emergency Alert
WEM – Wisconsin Emergency Management
WING – Wisconsin National Guard
WISCOM - Wisconsin Interoperable System for Communications
WisDOT – Wisconsin Department of Transportation
WSIC - Wisconsin Statewide Intelligence Center

Attachment 4 – NUREG Crosswalk

NUREG-0654/FEMA-REP-1, Rev.2 Cross-Reference (2019 RPM)								
v21.01	Evaluation Criteria (EC)	Applicability				To Meet the Intent Statements (MTIs)		Plan Location
Planning Standard A – Assignment of Responsibility								
Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the EPZs have been assigned, the emergency responsibilities of the various supporting organization have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.								
A.1	The Federal, state, local, and tribal governments, licensee, and other private sector organizations that comprise the overall response for the EPZs are identified.	Li	S	Lo	T	**A.1.i**	A description of all Federal, state, local, tribal, and private-sector organizations comprising the overall offsite response; and	**Rad Annex, Pt 2, A.1**
		Li	S	Lo	T	**A.1.ii**	A list of all principal and supporting organizations.	**Rad Annex, Pt 2, A.1**
A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.	Li	S	Lo	T	**A.1.a.i**	A description of each organization's operational role in an emergency and their relationship to the overall response effort.	**Rad Annex, Pt 2, A.1**
A.1.b	Each organization's emergency plan illustrates these interrelationships in a block diagram.	Li	S	Lo	T	**A.1.b.i**	An illustration of each organization and its relationship to the total emergency response effort.[1] [1] For a sample Incident Command System organization chart, see ICS Form 207, Organizational Chart.	**Rad Annex, Pt 2,**
A.1.c	Each organization identifies the individual, by title/position, who will be in charge of the emergency response.	Li	S	Lo	T	**A.1.c.i**	The individual, by title/position, in charge of the emergency response; and	**Rad Annex, Pt 2, A.1**
		Li	S	Lo	T	**A.1.c.ii**	The individual, by title/position, coordinating response activities under the authority of the individual in charge.	**Rad Annex, Pt 2, A.1**

A.2	References to the applicable acts, codes, or statutes that provide the legal basis for emergency response-related authorities, including those that delegate responsibility and authority to state, local, and tribal governments are included. Each emergency plan indicates who may declare a "State of Emergency" and the powers that ensue.		S	Lo	T	**A.2.i**	The legal authority to assign lead responsibility for emergency preparedness to a particular agency;	**Rad Annex, Pt 2, A.2**
			S	Lo	T	**A.2.ii**	The legal authority to delegate responsibility and authority for preparedness and response; and	**Rad Annex, Pt 2, A.2**
			S	Lo	T	**A.2.iii**	The legal authority to declare a "state of emergency" (or "state of disaster emergency") and what special powers may ensue.	**Rad Annex, Pt 2, A.2**
A.3	Each organization specifies the key individual(s), by title/position, responsible for the following functions, as applicable to that organization: command and control, alert and notification, communications, public information, accident assessment, public health and sanitation, social services, fire and rescue, traffic control, emergency medical services, law enforcement, transportation, protective response (including authority to request Federal assistance and to initiate other protective actions), and radiological exposure control.	Li	S	Lo	T	**A.3.i**	Identification of key individuals, by title/position, with emergency response roles;	**Rad Annex, Pt 2, A.3**
		Li	S	Lo	T	**A.3.ii**	A description of the identified key individuals' assigned functions by functional areas; and	**Rad Annex, Pt 2, A.3**
		Li	S	Lo	T	**A.3.iii**	A visual representation of individuals' assigned functions by functional area.	**Rad Annex, Pt 2, A.3**
A.4	Written agreements with the support organizations having an emergency response role within the EPZs are referenced. The agreements describe the concept of operations, emergency response measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.	Li	S	Lo	T	**A.4.i**	A list of support organizations and the type of assistance, including capabilities and resources they will provide;	**Rad Annex, Pt 2, A.4**
		Li	S	Lo	T	**A.4.ii**	(Or reference) Applicable written agreements between the licensee and ORO, including arrangements for NPP site access, if appropriate;	**Rad Annex, Pt 2, A.4**
		Li	S	Lo	T	**A.4.iii**	Written agreements annotate the services to be provided through the agreement and how those services will be activated;	**Rad Annex, Pt 2, A.4**

		Li	S	Lo	T	**A.4.iv**	Written agreements by reference or in a suitable appendix; and	**Rad Annex, Pt 2, A.4**
		Li	S	Lo	T	**A.4.v**	A statement that written agreements are reviewed annually to verify their validity, including developing new written agreements and updating signatories as necessary.	**Rad Annex, Pt 2, A.4**
A.5	Each principal response organization is capable of continuous operations for a protracted period. The principal response organization specifies the individual, by title/position, who is responsible for ensuring continuity of resources (technical, administrative, and material).	Li	S	Lo	T	**A.5.i**	The individual(s), by title/position, responsible for ensuring continuity of resources in support of 24-hour operations;	**Rad Annex, Pt 2, A.5**
		Li	S	Lo	T	**A.5.ii**	A reference to a roster that identifies at least two shifts of key staff, by title/position;	
		Li	S	Lo	T	**A.5.iii**	The individual(s), by title/position, responsible for maintaining the roster, how it will be maintained, and where the roster is located; and	**Rad Annex, Pt 2, A.5**
		Li	S	Lo	T	**A.5.iv**	The shift period and provisions for outgoing staff to brief the incoming staff on the status of the emergency and response activities occurring.	**Rad Annex, Pt 2, A.5**
Planning Standard B – Onsite Emergency Organization								
On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.								
NOTE: Although there is no requirement for offsite organizations (i.e., OROs) to address for this planning standard, it is important that OROs understand the onsite response organization's structure and authority. Table B-1 referenced in evaluation criterion B.3 can be found in NUREG-0654/FEMA-REP-1, Rev. 2.								
B.1	*The emergency plan specifies how the requirements of 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to 10 CFR Part 50 are met.*							**Rad Annex, Pt 2, B.1**

B.1.a	*The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.*							**Rad Annex, Pt 2, B.1**
B.2	*An individual is designated as the on-shift emergency coordinator (individual title may vary) who has the authority and responsibility to immediately and unilaterally initiate any emergency response measures, including approving protective action recommendations (PARs) to be disseminated to authorities responsible for implementing offsite emergency response measures.*							**Rad Annex, Pt 2, B.2**
B.2.a	*The functional responsibilities assigned to the ERO are established and the responsibilities that may not be delegated to other members of the ERO are clearly specified in the emergency plan.*							**Rad Annex, Pt 2, B.2**
B.3	*A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan. Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," provides a model for licensees to consider.*							**Rad Annex, Pt 2, B.3**
B.4	*The interfaces between and among the licensee functional areas of emergency activity, local services support, and state, local, and tribal government organizations are identified. The information includes all licensee emergency response facilities. A block diagram is preferred for ease of use, but not required.*							**Rad Annex, Pt 2, B.4**
B.5	*The external organizations, including contractors, that may be requested to provide technical assistance to and augmentation of the ERO, as applicable, are specified.*							**Rad Annex, Pt 2, B.5**
Planning Standard C – Emergency Response Support and Resources								
Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's EOF have been made, and other organizations capable of augmenting the planned response have been identified.								
C.1	Emergency response support and resources provided to the licensee's EOF, as agreed upon, are described.	Li	S	Lo	T	**C.1.i**	Whether an ORO liaison(s) will be provided to the licensee's emergency operations facility (EOF), and if so, the individual(s), by title/position, that would be dispatched;	**Rad Annex, Pt 2, C.1**
		Li	S	Lo	T	**C.1.ii**	The emergency response support role the liaison(s) will be fulfilling while at EOF; and	**Rad Annex, Pt 2, C.1**
		Li	S	Lo	T	**C.1.iii**	The resources, if any, the OROs will provide to the licensee's EOF.	**Rad Annex, Pt 2, C.1**

C.2	Provisions made for additional emergency response support and resources are described and include the following **(:)**	Li	S	Lo	T	**C.2**		**Rad Annex, Pt 2, C.2**
C.2.a	The individual(s), by title/position, authorized to request emergency response support and resources from responding organizations.	Li	S	Lo	T	**C.2.a.i**	The individual(s), by title/position, authorized to request emergency response support and resources.	**Rad Annex, Pt 2, C.2**
C.2.b	(1) Each organization from which emergency response support and/or resources may be requested, (2) the circumstance(s) in which the emergency response support and/or resources would be required, (3) the process for requesting needed emergency response support and/or resources, (4) categories of capabilities and/or resources expected to be provided, (5) when the expected emergency response support and/or resources would be available once requested, and (6) how integration would occur.	Li	S	Lo	T	**C.2.b.i**	A process for identifying potential shortfalls in capabilities and resources;	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.b.ii**	The organization(s) from which emergency response support and/or resources may be requested;	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.b.iii**	Circumstances under which the emergency response support and/or resources would be needed;	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.b.iv**	The process for requesting needed emergency response support and/or resources;	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.b.v**	Categories of capabilities and/or resources expected to be provided;	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.b.vi**	The amount of time expected for emergency response support and/or resources to be available once requested; and	**Rad Annex, Pt 2, C.2**

		Li	S	Lo	T	**C.2.b.vii**	How incoming emergency response support and/or resources will integrate with response efforts.	**Rad Annex, Pt 2, C.2**
C.2.c	Coordination of NPP site access and support for external organizations that have agreed to provide requested emergency response support and resources.	Li	S	Lo	T	**C.2.c.i**	Provisions to allow ORO organizations, including mutual aid/supplemental support and resources, access to the NPP;	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.c.ii**	Identification of means for granting access to personnel from each organization who are authorized site access resources; and	**Rad Annex, Pt 2, C.2**
		Li	S	Lo	T	**C.2.c.iii**	Provisions for coordination between in-bound response resources and evacuation efforts.	**Rad Annex, Pt 2, C.2**
C.2.d	Agreements between licensees and local agencies for law enforcement, medical and ambulance services, fire, hospital support, and other support.	Li	S	Lo	T	**C.2.d.i**	A list of external organizations that have agreed to provide requested emergency response support to the NPP, as well as the type of support they will provide.	**Rad Annex, Pt 2, C.2**
C.3	The capability of each principal organization to coordinate with other principal organizations leading the incident response is described.	Li	S	Lo	T	**C.3.i**	Identification of principal organizations;	**Rad Annex, Pt 2, C.3**
		Li	S	Lo	T	**C.3.ii**	Roles and responsibilities of principal organizations based on their authorities;	**Rad Annex, Pt 2, C.3**
		Li	S	Lo	T	**C.3.iii**	A description of how coordination and integration between principal organizations will occur; and	**Rad Annex, Pt 2, C.3**

		Li	S	Lo	T	**C.3.iv**	Whether a representative(s) from another organization will be provided to ORO operational centers (e.g., a county emergency operations center [EOC]) to act as a liaison(s), and if so, identification of the individual(s), by title/position, that would be dispatched.	**Rad Annex, Pt 2, C.3**
C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.	Li	S	Lo	T	**C.4.i**	The laboratories qualified to analyze samples of potentially contaminated materials;	**Rad Annex, Pt 2, C.4**
		Li	S	Lo	T	**C.4.ii**	A description of the radiochemical and analytical capabilities of each laboratory;	**Rad Annex, Pt 2, C.4**
		Li	S	Lo	T	**C.4.iii**	The laboratories' locations and expected availability of each laboratory to provide services; and	**Rad Annex, Pt 2, C.4**
		Li	S	Lo	T	**C.4.iv**	The number of samples the laboratories would be able to process in a given period.	**Rad Annex, Pt 2, C.4**
C.5	*Arrangements are described for integrating the licensee's response with the NRC Headquarters and regional incident response centers and, when dispatched, the NRC's site response team.*							**Rad Annex, Pt 2, C.5**
C.5.a	*The activation process for the NRC's emergency response data system (ERDS) during an emergency is described.*							**Rad Annex, Pt 2, C.5**
C.5.b	*Provisions to continuously maintain open communications lines with the NRC, when requested, are described.*							**Rad Annex, Pt 2, C.5**
Planning Standard D – Emergency Classification System								
A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.								
D.1	*A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.*							**Rad Annex,**

								Pt 2, D.1
D.1.a	*The EALs are developed using guidance provided or endorsed by the NRC that is applicable to the reactor design.*							**Rad Annex, Pt 2, D.1**
D.1.b	The initial emergency classification and action level scheme is discussed and agreed to by the licensee and OROs, and approved by the NRC. Thereafter, the scheme is reviewed with OROs on an annual basis.	Li	S	Lo	T	**D.1.b.i**	Reference the standard ECLs;	**Rad Annex, Pt 2, D.1**
		Li	S	Lo	T	**D.1.b.ii**	Acknowledgment that the ECL system will form the basis for determining the level of response to an incident that will be coordinated with the licensee; and	**Rad Annex, Pt 2, D.1**
		Li	S	Lo	T	**D.1.b.iii**	Agreement on the initial ECL scheme and an annual review of the scheme.	**Rad Annex, Pt 2, D.1**
D.2	*The capability to assess, classify, and declare the emergency condition within 15 minutes after the availability of indications to NPP operators that an EAL has been met or exceeded is described.*							**Rad Annex, Pt 2, D,2**
D.3	*A summary of emergency response measures to be taken for each ECL is provided. The detailed emergency response measures are described in implementing procedures.*							**Rad Annex, Pt 2, D.3**
D.4	Emergency response measures based on the ECL declared by the licensee and applicable offsite conditions are described.		S	Lo	T	**D.4.i**	The minimum emergency response measures to be taken to protect the public at each ECL, given the offsite conditions at the time of the emergency.	**Rad Annex, Pt 2, D.4**

Planning Standard E – Notification Methods and Procedures

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ have been established.

E.1	The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.	Li	S	Lo	T	**E.1.i**	The agreed upon process for direct and prompt notification to both response organizations and the designated offsite 24-hour warning point;	**Rad Annex, Pt 2, E.1**
		Li	S	Lo	T	**E.1.ii**	A statement that the agreed upon notification process is aligned with the emergency classification and action level scheme as described in D.1.b;	**Rad Annex, Pt 2, E.1**
		Li	S	Lo	T	**E.1.iii**	The process for when the initial notification originates from an entity other than the licensee; and	**Rad Annex, Pt 2, E.1**
		Li	S	Lo	T	**E.1.iv**	The agreed upon process for disseminating subsequent notifications from the licensee and/or ORO to other offsite organizations.	**Rad Annex, Pt 2, E.1**
E.1.a	Provisions for notification of response organizations are established, including the means for verification of messages.	Li	S	Lo	T	**E.1.a.i**	Method for verifying the initial notification from the licensee to the 24-hour warning point, if applicable;	**Rad Annex, Pt 2, E.1**
		Li	S	Lo	T	**E.1.a.ii**	Provisions for notifying all appropriate response organizations, including specific notifications made at each ECL;	**Rad Annex, Pt 2,**
		Li	S	Lo	T	**E.1.a.iii**	The individual(s), by title/position, responsible for notifying emergency response personnel within their organization; and	**Rad Annex, Pt 2, E.1**
		Li	S	Lo	T	**E.1.a.iv**	Individual(s), by title/position, responsible for disseminating subsequent notifications.	**Rad Annex, Pt 2, E.1**
E.1.b	*The capability to notify responsible OROs within 15 minutes and the NRC within 60 minutes is described.*							

E.2	The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.	Li	S	Lo	T	**E.2.i**	A statement that the ANS is capable of meeting the 15-minute design objective;	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.ii**	A description of the physical means of alert and notification, including the system(s) used to alert and notify the general public, persons with disabilities and access/functional needs, and exception areas (if applicable), and their respective point(s) of activation;	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.iii**	A description of the administrative means of alert and notification, including**(:)**	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.iii (a)**	Title of the organizations or individuals responsible for: (1) making the decision to activate the ANS and (2) activating the system; and	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.iii (b)**	ANS activation procedures and associated time needed to implement these procedures.	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.iv**	List of broadcast stations and/or other systems (e.g., Integrated Public Alert and Warning System [IPAWS], National Weather Service (NWS), tone alert radios, route alerting) used to provide emergency instructions to the public;	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.v**	Describe the broadcast stations' or systems' capability to participate in the public notification process;	**Rad Annex, Pt 2, E.2**

		Li	S	Lo	T	**E.2.vi**	If broadcast stations are used to activate the system, a description of individual responsibilities from each broadcast station and system, and documentation agreed upon commitments (e.g., MOUs and/or LOAs) to honor their responsibilities in a radiological incident;	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.vii**	Identification of the broadcast station and system points of contact, by title/position, who are accessible 24 hours a day, 7 days a week and identification of an alternate station if the selected station does not have backup power supply;	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.viii**	Provisions for special news broadcasts to disseminate supplemental information to the emergency alert system (EAS) message; and	**Rad Annex, Pt 2, E.2**
		Li	S	Lo	T	**E.2.ix**	The interval for broadcasting official information statements.	**Rad Annex, Pt 2, E.2**
E.3	The licensee, state, local, and tribal government organizations establish the contents of the initial and follow-up emergency notifications to be sent from the NPP.	Li	S	Lo	T	**E.3.i**	Initial notification templates to capture the ECL, whether a release is taking place, any populations and areas that may potentially be affected, and whether protective measures may be necessary; and	**Rad Annex, Pt 2, E.3**
		Li	S	Lo	T	**E.3.ii**	Provisions as to what information is to be included in follow-up notifications from the NPP to offsite authorities.	**Rad Annex, Pt 2, E.3**
E.4	Each organization establishes the contents of the initial and follow-up messages to the public including, as applicable, instructions for protective actions.		S	Lo	T	**E.4.i**	EAS message templates that would be modified as necessary and sent to the EAS station(s) for broadcast;	**Rad Annex, Pt 2, E.4**

			S	Lo	T	**E.4.ii**	The process for selecting, modifying, approving, and releasing EAS messages;	**Rad Annex, Pt 2, E.4**
			S	Lo	T	**E.4.iii**	The methodology for EAS message rebroadcast, along with the frequency (how many times and at what interval, such as every 15 minutes);	**Rad Annex, Pt 2, E.4**
			S	Lo	T	**E.4.iv**	Provisions for follow-up messages; and	**Rad Annex, Pt 2, E.4**
			S	Lo	T	**E.4.v**	Provisions for foreign language translations of EAS messages and special news broadcasts, if required.	**Rad Annex, Pt 2, E.4**
E.5	Provisions are made to provide timely supplemental information periodically throughout the radiological incident to inform the public.	Li	S	Lo	T	**E.5.i**	A description of how supplemental information is provided periodically to inform the public throughout an incident;	**Rad Annex, Pt 2, E.5**
		Li	S	Lo	T	**E.5.ii**	A description of supplemental topics/messages that may be disseminated; and	**Rad Annex, Pt 2, E.5**
		Li	S	Lo	T	**E.5.iii**	A description of the method for disseminating supplemental information.	**Rad Annex, Pt 2, E.5**
Planning Standard F – Emergency Communications								
Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.								
F.1	Each principal response organization establishes redundant means of communication and addresses the following provisions **(:)**	Li	S	Lo	T	**F.1**		**Rad Annex, Pt 2, F.1**
F.1.a	Continuous capability for notification to, and activation of, the emergency response network, including a minimum	Li	S	Lo	T	**F.1.a.i**	A description of the system used to ensure continuous availability to receive and transmit notifications; and	**Rad Annex, Pt 2, F.1**

	of two independent communication links.	Li	S	Lo	T	**F.1.a.ii**	A description of the equipment used for notifying and communicating with the organization's personnel and other response organizations. The equipment described must include at least two independent communication links.	**Rad Annex, Pt 2, F.1**
F.1.b	Communication with applicable organizations to include a description of the methods that may be used when contacting each organization.	Li	S	Lo	T	**F.1.b.i**	Provisions for a minimum of two independent communication methods between all applicable organizations requiring communications within the plume and ingestion exposure pathway EPZs; and	**Rad Annex, Pt 2, F.1**
		Li	S	Lo	T	**F.1.b.ii**	Organizational titles and alternates for both ends of the communication links.	**Rad Annex, Pt 2, F.1**
F.1.c	Systems for alerting or activating emergency personnel in each response organization.	Li	S	Lo	T	**F.1.c.i**	A general description of how emergency personnel are alerted and activated; and	**Rad Annex, Pt 2, F.1**
		Li	S	Lo	T	**F.1.c.ii**	Lists of names and contact information of emergency personnel to alert or activate based on the ECL.	**Rad Annex, Pt 2, F.1**
F.2	Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.	Li	S	Lo	T	**F.2.i**	A description of at least two independent communication methods among the fixed and mobile medical support facilities, applicable EOCs, and the licensee.	**Rad Annex, Pt 2, F.2**

F.3	The testing method and periodicity for each communication system used for the functions identified in Evaluation Criteria E.2, F.1, and F.2 are described.	Li	S	Lo	T	**F.3.i**	A description of the test method and periodicity (e.g., monthly, quarterly or annually) for each communication system used for the functions identified in evaluation criteria E.2, F.1, and F.2.	**Rad Annex, Pt 2, F.3**
Planning Standard G – Public Education and Information								
Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.								
G.1	Provisions are made for a coordinated annual dissemination of information to the public within the plume exposure pathway EPZ, including transient populations and those with disabilities and access/functional needs, regarding how they will be notified and what actions should be taken. The information is disseminated using multiple methods, to include non-English translations per current Federal guidance.	Li	S	Lo	T	**G.1.i**	A description of public information material(s) (e.g., brochure, utility bill insert, current technology used for disseminating public information) distributed annually to the general public within the plume exposure pathway EPZ, including the dissemination method(s) used to reach all residences;	**Rad Annex, Pt 2, G.1**
		Li	S	Lo	T	**G.1.ii**	Provisions for identifying individuals who need evacuation assistance and how personally identifiable information (PII) will be protected;	**Rad Annex, Pt 2, G.1**
		Li	S	Lo	T	**G.1.iii**	A description of public information material(s) (e.g., visitor brochure) targeted to transient populations, including dissemination method(s);	**Rad Annex, Pt 2, G.1**
		Li	S	Lo	T	**G.1.iv**	Provisions for providing accessible public information for those with access and functional needs within the plume exposure pathway EPZ; and	**Rad Annex, Pt 2, G.1**
		Li	S	Lo	T	**G.1.v**	Mechanisms for translating public information for non-English speaking populations within plume exposure pathway EPZ.	**Rad Annex, Pt 2, G.1**
G.2	Methods, consistent with JIS concepts, are established for coordinating and disseminating information to the public and media.	Li	S	Lo	T	**G.2.i**	The physical location(s) for briefing and interacting with the media;	**Rad Annex, Pt 2, G.2**

	Plans include the physical location(s) for interacting with the media.	Li	S	Lo	T	**G.2.ii**	A physical description of the media briefing facility(ies);	**Rad Annex, Pt 2, G.2**
		Li	S	Lo	T	**G.2.iii**	A description of the organization's capability to answer media telephone inquiries; and	**Rad Annex, Pt 2, G.2**
		Li	S	Lo	T	**G.2.iv**	The mechanism for coordination between the team of personnel designated to answer media calls and the organization's spokesperson(s)/Public Information Officer(s) (PIO(s)), as well as POCs located at other facilities supporting the joint information center (JIC).	**Rad Annex, Pt 2, G.2**
G.3	Organizations designate news media points of contact and a spokesperson(s) with access to necessary information.	Li	S	Lo	T	**G.3.i**	Identification of the individual(s), by title/position, to serve as news media point(s) of contact and spokesperson(s)/ PIO(s) at designated media briefing location(s);	**Rad Annex, Pt 2, G.3**
		Li	S	Lo	T	**G.3.ii**	If operating remotely from the EOC, a description of how the exchange of information between the EOC and other media briefing location(s) will be coordinated;	**Rad Annex, Pt 2, G.3**
		Li	S	Lo	T	**G.3.iii**	The process for identified individual(s) to obtain, verify, and coordinate approval in advance of disseminating information to the public and/or media; and	**Rad Annex, Pt 2, G.3**
		Li	S	Lo	T	**G.3.iv**	Procedures for control and authorization of releasing sensitive information.	**Rad Annex, Pt 2, G.3**
G.3.a	Arrangements are made for the timely exchange of information among	Li	S	Lo	T	**G.3.a.i**	Provisions for the timely exchange, discussion, and coordination of	

	the designated spokespersons representing the entities involved in incident response.	Li	S	Lo	T		information among all designated spokespersons/PIOs, including those at different locations.	**Rad Annex, Pt 2, G.3**
		Li	S	Lo	T			
		Li	S	Lo	T			
G.4	Organizations establish coordinated arrangements for identifying and addressing public inquiries and inaccurate information.	Li	S	Lo	T	**G.4.i**	A description of the capability to effectively receive and manage numerous, simultaneous responses to public inquiries, and address inaccurate information;	**Rad Annex, Pt 2, G.4**
		Li	S	Lo	T	**G.4.ii**	The method(s) for publicizing all the available communication channels, including dedicated telephone number(s) and other platforms, for public inquiries;	**Rad Annex, Pt 2, G.4**
		Li	S	Lo	T	**G.4.iii**	Provisions for monitoring public inquiries and media messaging to identify incomplete, inaccurate, or ambiguous information related to the emergency in the public domain; and	**Rad Annex, Pt 2, G.4**
		Li	S	Lo	T	**G.4.iv**	If an ORO sends a delegate or relies on another organization to answer public inquiries, identify which organization provides or coordinates the public inquiries and the method for contacting that organization.	**Rad Annex, Pt 2, G.4**
G.5	Organizations conduct programs to acquaint news media with the emergency plans at least annually.	Li	S	Lo	T	**G.5.i**	Provisions for an annual media briefing or other information exchange means to acquaint news media with emergency plans, the media's role during an incident response, and other radiological incident response topics;	**Rad Annex, Pt 2, G.5**
		Li	S	Lo	T	**G.5.ii**	A description of each informational item provided in the media kits; and	**Rad Annex, Pt 2, G.5**

		Li	S	Lo	T	**G.5.iii**	Means of distributing media kits.	**Rad Annex, Pt 2, G.5**
Planning Standard H – Emergency Facilities and Equipment								
Adequate emergency facilities and equipment to support the emergency response are provided and maintained.								
H.1	*A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.*							**Rad Annex, Pt 2, H.1**
H.2	*An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.*							**Rad Annex, Pt 2, H.2**
H.3	*An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.*							**Rad Annex, Pt 2, H.3**
H.3.a	*For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.*							**Rad Annex, Pt 2, H.3**
H.4	*An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.*							**Rad Annex, Pt 2, H.4**
H.5	*A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.*							**Rad Annex, Pt 2, H.5**
H.6	Each organization establishes an emergency operations center (EOC) for use in directing and controlling response functions, and provides for timely EOC activation. For an EOC located within the plume exposure pathway EPZ, an alternate EOC, or location outside the plume exposure pathway EPZ, is identified to continue response functions in the event of an evacuation.		S	Lo	T	**H.6.i**	A description of, or reference to, the location and layout of the EOC;	**Rad Annex, Pt 2, H.6**
			S	Lo	T	**H.6.ii**	The organization and official, by title/position, responsible for maintaining the operational readiness of the EOC;	**Rad Annex, Pt 2, H.6**
			S	Lo	T	**H.6.iii**	A list of facility equipment necessary to support EOC operations;	**Rad Annex, Pt 2, H.6**

			S	Lo	T	**H.6.iv**	Access control details into the facility;	**Rad Annex, Pt 2, H.6**
			S	Lo	T	**H.6.v**	Backup power capability to the facility, if available; and	**Rad Annex, Pt 2, H.6**
			S	Lo	T	**H.6.vi**	A description of, or reference to, the location and layout of the alternate EOC, if applicable.	**Rad Annex, Pt 2, H.6**
H.7	*Onsite monitoring systems used to initiate emergency response measures in accordance with the emergency classification scheme, as well as those to be used for conducting assessment, are identified. Monitoring systems consist of geophysical phenomena monitors, including meteorological, hydrologic, and seismic instrumentation; radiation monitors and sampling equipment; plant process monitors; and fire, toxic gas, and combustion products detectors.*							**Rad Annex, Pt 2, H.7**
H.8	*Provisions are made to acquire data from offsite monitoring and analysis equipment, including data on geophysical phenomena (e.g., meteorological, hydrologic, and seismic monitors) and radiological data (e.g., from FMTs, environmental dosimeters, and laboratory analyses).*							**Rad Annex, Pt 2, H.8**
H.9	Organizations directly responsible for offsite radiological monitoring provide for radiological monitoring equipment. This includes equipment that is located or stored near the NPP site, as well as additional equipment that may be brought to the site.	Li	S	Lo	T	**H.9.i**	A description of radiological monitoring equipment, by type and amount, that is located at or stored near the NPP, or will be brought in by the ORO; and	**Rad Annex, Pt 2, H.9**
		Li	S	Lo	T	**H.9.ii**	A list of fixed radiological monitoring stations near the NPP.	**Rad Annex, Pt 2, H.9**
H.10	*Instrumentation is provided to obtain current meteorological information. Additional provisions are made to obtain representative meteorological information from other sources as needed by the NPP's radiological assessment models for site-specific characterization of plume dispersion and transport. Meteorological information is provided to the control room, TSC, EOF (or backup EOF), and NRC (via ERDS).*							**Rad Annex, Pt 2, H.10**
H.11	Provisions are made to ensure that emergency equipment and supplies are tested, maintained, and available in sufficient quantities, to include reserves and replacements, when needed. This includes **(:)**	Li	S	Lo	T	**H.11.i**	Quantities of instruments, equipment, and supplies necessary to ensure that procedures in the plan can be performed; and	**Rad Annex, Pt 2, H.11**
		Li	S	Lo	T	**H.11.ii**	Backup emergency equipment and supply reserves/replacements.	**Rad Annex, Pt 2, H.11**

H.11.a	Identification of the organization(s) responsible for the testing and maintenance of emergency equipment.	Li	S	Lo	T	**H.11.a.i**	The organization(s) responsible for testing and maintenance of all emergency equipment.	**Rad Annex, Pt 2, H.11**
H.11.b	Calibration and operational checks of emergency equipment per national standards or the manufacturer's instructions, whichever is more frequent.		S	Lo	T	**H.11.b.i**	Specifics for maintaining and conducting calibration and operational checks of emergency equipment;	**Rad Annex, Pt 2, H.11**
			S	Lo	T	**H.11.b.ii**	Tests to be performed on each type of equipment and who will complete those tests; and	**Rad Annex, Pt 2, H.11**
			S	Lo	T	**H.11.b.iii**	Documentation methods for all testing and maintenance procedures performed.	**Rad Annex, Pt 2, H.11**
H.12	Emergency kits are identified by general category. Contents and quantity of each emergency kit are specified in the emergency plan or other document(s) referenced in the emergency plan.	Li	S	Lo	T	**H.12.i**	The number and contents of emergency kits by location and general category; and	**Rad Annex, Pt 2, H.12**
		Li	S	Lo	T	**H.12.ii**	The quantity of each item per kit.	**Rad Annex, Pt 2, H.12**
H.13	Each organization identifies the location(s) for the receipt and analysis of field monitoring data and coordination of sample media, and identifies the organization(s) responsible for assessing radiological data.	Li	S	Lo	T	**H.13.i**	Organization(s) responsible for assessing radiological data;	**Rad Annex, Pt 2, H.13**
		Li	S	Lo	T	**H.13.ii**	The location(s) for the receipt and analysis for compiling and analyzing all field monitoring data, including the means used by FMTs to relay information to the identified location(s); and	**Rad Annex, Pt 2, H.13**
		Li	S	Lo	T	**H.13.iii**	The coordination and analysis of sample media, including procedures for transporting samples and transferring the data from the laboratory to the identified location(s).	**Rad Annex, Pt 2, H.13**

Planning Standard I – Accident Assessment								
Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.								
I.1	*Capabilities for performing radiological assessment for all reactor core and spent fuel pool sources, individually and collectively, including response to events occurring simultaneously at all units on the NPP site, are described. These capabilities include:*							**Rad Annex, Pt 2, I.1**
I.1.a	*Methods for determining the magnitude and isotopic composition of an ongoing release of radioactive material through waterborne or airborne release pathways, or estimating these parameters for a potential release.*							**Rad Annex, Pt 2, I.1**
I.1.b	*A radiological assessment model for airborne releases that provides estimates of offsite radiation exposures and contamination levels using a dispersion model that is representative of the plant release points, topographical features, and meteorological regimes at the NPP site.*							**Rad Annex, Pt 2, I.1**
I.1.c	*A capability to coordinate and implement in-field radiological assessments by FMTs and provisions to assess the data obtained.*							**Rad Annex, Pt 2, I.1**
I.2	Methods for assessing contamination of drinking water by waterborne releases for NPP sites located on bodies of water from which public drinking water is drawn.		S	Lo	T	**I.2.i**	Methods and locations for sampling drinking water; and	**Rad Annex, Pt 2, I.2**
			S	Lo	T	**I.2.ii**	Supporting laboratory procedures that demonstrate the capability to detect radioisotopes at derived response levels (DRLs) for the most sensitive population.	**Rad Annex, Pt 2, I.2**
I.3	*The capability and responsibility for monitoring the following parameters, which provide input to radiological assessments during an emergency, are described:* *1. Status of reactor fuel (e.g., no fuel damage, technical specification activity, clad failure, core melt).* *2. Status of containment integrity.* *3. Leakage of radioactive material from plant systems, structures, and components.* *4. Status of engineered safety features used to mitigate the release of radioactive material to the environment (e.g., filters, containment spray, etc.).* *5. Onset and duration of an actual release of radioactive material to the environment, or estimating these parameters for a potential release.*							**Rad Annex, Pt 2, I.3**
I.4	*The methods and responsibility for determining the source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are described.*							**Rad Annex, Pt 2, I.4**
I.4.a	*The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.*							**Rad Annex, Pt 2, I.4**
I.5	The organizations responsible for FMT activities, and necessary resources, are identified.	Li	S	Lo	T	**I.5.i**	The organizations responsible for FMT activities; and	**Rad Annex, Pt 2, I.5**

		Li	S	Lo	T	**I.5.ii**	The capabilities and resources of FMTs.	**Rad Annex, Pt 2, I.5**
I.6	Each organization, where appropriate, provides methods, equipment, and expertise to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including development of post-plume PARs for comparison to current Federal guidance.	Li	S	Lo	T	**I.6.i**	The process for activating and notifying FMTs;	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.ii**	The composition of FMTs (e.g., organizations involved, number of teams [two or more], number of members on each team);	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.iii**	Means of transportation available for FMTs (e.g., four-wheel drive vehicles);	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.iv**	Estimated deployment times to reach monitoring or sampling locations, if applicable;	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.v**	Staging area location(s) that may be used as initial deployment points for FMTs;	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.vi**	The individual, by title/position, responsible for directing FMTs to proper locations for monitoring and air sampling;	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.vii**	The process for obtaining centerline and plume-edge measurements;	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.viii**	Monitoring, sampling, and communications equipment used by FMTs;	**Rad Annex, Pt 2, I.6**

		Li	S	Lo	T	**I.6.ix**	Procedures for field monitoring, sample collection, and field sample analysis and the calculations to be used to characterize the plume, specifically those used to determine radioiodine concentrations;	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.x**	The laboratories designated to analyze specific samples (specific radioisotopes), including associated estimated delivery and analysis times, transportation and temporary storage arrangements, and procedures for chain-of-custody records; and	**Rad Annex, Pt 2, I.6**
		Li	S	Lo	T	**I.6.xi**	Requirements for FMT members' radiological exposure control.	**Rad Annex, Pt 2, I.6**
I.7	The capability to detect and measure radioiodine concentrations in air in the plume exposure pathway EPZ as low as 10-7 µCi/cc (microcuries per cubic centimeter) under field conditions is described. The sample collection process takes into account the sample flow rate, collection efficiency of the sample media used to collect the sample, duration of the sample, counter efficiency, and background radiation, including interference from the presence of noble gases.	Li	S	Lo	T	**I.7.i**	The capability to collect air samples within the plume exposure pathway EPZ and perform analysis that will detect radioiodine concentrations as low as 10-7µCi/cc under field conditions;	**Rad Annex, Pt 2, I.7**
		Li	S	Lo	T	**I.7.ii**	The process used for collecting air samples, including location of sampling points, timing of sample collection, and techniques used to collect and count; and	**Rad Annex, Pt 2, I.7**
		Li	S	Lo	T	**I.7.iii**	Calculations that use factors consistent with the ORO specific procedures to calculate airborne radioiodine concentrations.	**Rad Annex, Pt 2, I.7**
		Li	S	Lo	T			
I.8	A means is established for relating the various measured parameters (e.g., exposure rates, contamination levels, and air activity levels) to dose or dose rates. Provisions are made for	Li	S	Lo	T	**I.8.i**	A description of personnel and equipment that will be involved in dose assessment;	**Rad Annex, Pt 2, I.8**

	estimating integrated dose from the projected and actual dose rates and for comparing these estimates with current Federal guidance. In addition, provisions are established to validate dose projections with field data and compare projections with other organizations also calculating dose projections. The detailed provisions are described in implementing procedures.	Li	S	Lo	T	**I.8.ii**	A description of dose assessment computer software, including documentation and data input procedures, that will be used;	**Rad Annex, Pt 2, I.8**
		Li	S	Lo	T	**I.8.iii**	Alternate calculation methods that may be used (e.g., hand calculations);	**Rad Annex, Pt 2, I.8**
		Li	S	Lo	T	**I.8.iv**	Information/variables to run the model, including proper units of measure;	**Rad Annex, Pt 2, I.8**
		Li	S	Lo	T	**I.8.v**	Means for obtaining initial information (e.g., from licensee monitors or inventory estimates);	**Rad Annex, Pt 2, I.8**
		Li	S	Lo	T	**I.8.vi**	A description of how field data will verify and modify model results; and	**Rad Annex, Pt 2, I.8**
		Li	S	Lo	T	**I.8.vii**	Procedures for comparing dose results with those of other organizations that perform dose assessments.	**Rad Annex, Pt 2, I.8**
I.9	Arrangements to locate and track the airborne radioactive plume are made using available resources, which includes Federal, state, local, and tribal governments, and/or licensee resources. Provisions are made to characterize the plume including taking peak plume measurements. Identification of the plume includes determining a measurement that is high enough to be reasonably above background radiation readings and sufficient enough to indicate submersion within the plume.	Li	S	Lo	T	**I.9.i**	Planned use of outside resources, to locate and track the plume, including taking measurements and collecting air samples from or near the plume's peak concentration, if applicable.	**Rad Annex, Pt 2, I.9**

I.10	Organizations directly responsible for radiological monitoring, analysis, and dose projections describe the capability for coordinating monitoring efforts, tracking and trending data, and sharing analytical results with other organizations performing radiological assessment functions.	Li	S	Lo	T	**I.10.i**	Methods of integrating monitoring and analytical augmentation and support from other state, licensee, educational and research facilities, and government and private organizations; and	**Rad Annex, Pt 2, I.10**
		Li	S	Lo	T	**I.10.ii**	Procedures and responsibilities for integrating Federal agency monitoring, analysis, and data management support.	**Rad Annex, Pt 2, I.10**
Planning Standard J – Protective Response								
A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. ETEs have been developed by applicants and licensees. Licensees shall update the ETEs on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.								
J.1	*The means and time required to alert, notify, and provide a range of protective actions for onsite individuals and individuals who may be in areas controlled by the licensee (including members of the public) during a radiological incident are described.*							**Rad Annex, Pt 2, J.1**
J.1.a	*Provisions are made for evacuation of onsite non-essential personnel at an SAE or General Emergency (GE).*							**Rad Annex, Pt 2, J.1**
J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.	Li	S	Lo	T	**J.2.i**	A description of assistance provided to licensees during an onsite evacuation or a statement that no assistance is required;	**Rad Annex, Pt 2, J.2**
		Li	S	Lo	T	**J.2.ii**	The offsite location where onsite individuals will be transported;	**Rad Annex, Pt 2, J.2**
		Li	S	Lo	T	**J.2.iii**	Alternative offsite location(s) and evacuation route(s) for use during inclement weather, when there is high traffic density, and/or during potential radiological conditions; and	**Rad Annex, Pt 2, J.2**
		Li	S	Lo	T	**J.2.iv**	Provisions for coordinating arrangements with other OROs to expedite evacuation of onsite personnel.	**Rad Annex, Pt 2, J.2**

J.3	*Provisions for radiological monitoring and decontamination, if necessary, of personnel evacuated from the NPP site are described.*							**Rad Annex, Pt 2, J.3**
J.4	*The capability to account for all individuals inside the NPP Protected Area following declaration of an SAE or GE is described. The names of missing individuals are ascertained within 30 minutes following the emergency declaration and accountability is maintained for the duration of the incident. This capability includes provisions for prompt accountability following events that may preclude completion within 30 minutes (e.g., hostile action).*							**Rad Annex, Pt 2, J.4**
J.5	*Provisions are made for personal radiological protection for individuals arriving or remaining onsite during the incident.*							**Rad Annex, Pt 2, J.5**
J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.	Li	S	Lo	T	**J.6.i**	The rationales used to make initial and subsequent PARs;	**Rad Annex, Pt 2, J.6**
		Li	S	Lo	T	**J.6.ii**	The basis and methodology used in developing PARs, including references to applicable Federal guidance; and	**Rad Annex, Pt 2, J.6**
		Li	S	Lo	T	**J.6.iii**	The basis and methodology used in developing PARs involving radioprotective drugs, including references to applicable Federal guidance.	**Rad Annex, Pt 2, J.6**
J.7	A site-specific protective action strategy or decision-making process, informed by the ETE study, is coordinated between the licensee and OROs. Current Federal guidance is used.	Li	S	Lo	T	**J.7.i**	A site-specific protective action strategy or decision-making process that is coordinated between the licensee and OROs;	**Rad Annex, Pt 2, J.7**
		Li	S	Lo	T	**J.7.ii**	References to current Federal guidance and methodologies used in developing the protective action strategy or decision-making process; and	**Rad Annex, Pt 2, J.7**
		Li	S	Lo	T	**J.7.iii**	Specific information from the evacuation time estimate (ETE) study used to develop protective action strategies.	**Rad Annex, Pt 2, J.7**
J.8	The latest ETEs are **(:)**	Li	S	Lo	T	**J.8.i**	The latest ETE information to plan for an evacuation.	**Rad Annex, Pt 2, J.8**

J.8.a	*Incorporated either by reference or in their entirety into the emergency plan.*							
J.8.b	Incorporated either by reference or as a summary of the latest ETE analysis into the emergency plan.		S	Lo	T	**J.8.b.i**	A reference or summary of the latest ETE analysis used for evacuation planning;	**Rad Annex, Pt 2, J.8**
			S	Lo	T	**J.8.b.ii**	Time estimates for evacuation of various sectors or evacuation areas;	**Rad Annex, Pt 2, J.8**
			S	Lo	T	**J.8.b.iii**	Time estimates for movement of populations in specific areas, particularly for individuals with access and functional needs;	**Rad Annex, Pt 2, J.8**
			S	Lo	T	**J.8.b.iv**	Evacuation routes and traffic capacities of evacuation routes; and	**Rad Annex, Pt 2, J.8**
			S	Lo	T	**J.8.b.v**	Potential use of alternate evacuation routes.	**Rad Annex, Pt 2, J.8**
J.9	PARs are provided, in a timely manner, directly to the designated ORO(s) responsible for making protective action decisions (PADs) within the plume exposure pathway EPZ.	Li	S	Lo	T	**J.9.i**	Process for communicating PARs to designated OROs responsible for making PADs.	**Rad Annex, Pt 2, J.9**
J.10	Plans include maps, charts, or other information that demonstrate the following for the plume exposure pathway EPZ **(:)**	Li	S	Lo	T	**J.10.i**	Clear and legible maps, charts, and other pertinent plume exposure pathway EPZ information necessary to support emergency response.	**Rad Annex, Pt 2, J.10**
J.10.a	Evacuation routes, evacuation areas, reception centers in host areas, and shelter areas.	Li	S	Lo	T	**J.10.a.i**	Clear, legible maps of all evacuation routes, evacuation areas, reception/relocation centers in host jurisdictions, and shelter areas/congregate care centers.	**Rad Annex, Pt 2, J.10**

J.10.b	Population distribution around the NPP site by evacuation areas.	Li	S	Lo	T	**J.10.b.i**	Clear, legible maps, charts, or other information showing population distribution around the NPP site by evacuation areas.	**Rad Annex, Pt 2, J.10**
J.11	A capability for implementing protective actions based on current Federal guidance is established. The process ensures coordinated implementation of PADs with all appropriate jurisdictions. The process for implementing protective actions for the plume exposure pathway EPZ is described and includes the following **(:)**		S	Lo	T	**J.11.i**	The process for considering PARs provided;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.ii**	Procedures for making PADs and the rationale for initial and subsequent PADs;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.iii**	Procedures for implementing protective actions based upon PAGs that are consistent with EPA recommendations; and	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.iv**	The process to ensure coordination of PADs with all appropriate jurisdictions.	**Rad Annex, Pt 2, J.11**
J.11.a	Means for identifying and protecting residents who would have difficulty in implementing protective actions without assistance. This includes those with access and functional needs, transportation-dependent residents, those in special facilities, and those in correctional facilities. These means include notification, support, and assistance in implementing protective actions where appropriate.		S	Lo	T	**J.11.a.i**	The means to protect those with impaired mobility because of institutionalization or other confinement (e.g., children in schools or licensed day cares and persons in nursing homes, hospitals, and correctional facilities);	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.a.ii**	Methods for determining the number and location, by evacuation area, of residents, in the plume exposure pathway EPZ who may need assistance, including the type of assistance required;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.a.iii**	The means for notifying residents needing assistance;	**Rad Annex, Pt 2, J.11**

			S	Lo	T	**J.11.a.iv**	Reference lists of documented individuals requiring assistance in an evacuation of the plume exposure pathway EPZ and process for keeping the list(s) up-to-date;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.a.v**	Process for evacuating identified residents and for sheltering those who cannot be moved; and	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.a.vi**	Transportation needs or resources for these groups, including types and quantities of vehicles.	**Rad Annex, Pt 2, J.11**
J.11.b	The decision-making methodologies for use of radioprotective drugs and the provisions for administration to the general public, emergency workers, and institutionalized persons within the plume exposure pathway EPZ. This includes the means of determining quantities, maintaining and managing supplies, communicating recommendations, and distributing.		S	Lo	T	**J.11.b.i**	The individual(s), by title/position, with the authority to make decisions regarding the use of radioprotective drugs during an emergency;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.b.ii**	The criteria and decision-making processes for recommending the use of radioprotective drugs;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.b.iii**	Groups who may be advised to take radioprotective drugs;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.b.iv**	A description of the adequate supply of radioprotective drugs for each individual in the plume exposure pathway EPZ, including quantities, storage locations, and means of distribution;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.b.v**	A description of the adequate maintenance, shelf life extensions, and timely replacement of radioprotective drugs; and	**Rad Annex, Pt 2, J.11**

			S	Lo	T	**J.11.b.vi**	Means for communicating a recommendation to take radioprotective drugs to emergency workers, institutionalized persons, and (if included as an option in the plans/procedures) the general public.	**Rad Annex, Pt 2, J.11**
J.11.c	Means of evacuation informed by the updated ETEs. The evacuation routes and transportation resources to be utilized are described and include projected traffic capacities of evacuation routes and implementation of traffic control schemes during evacuation.		S	Lo	T	**J.11.c.i**	A statement identifying which version of the ETE study the evacuation plan and procedures are based on;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.c.ii**	Means for controlling traffic to assure a safe and efficient evacuation; and	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.c.iii**	The resources and equipment necessary to control traffic control.	**Rad Annex, Pt 2, J.11**
J.11.d	The locations of pre-identified reception centers beyond the boundaries of the plume exposure pathway EPZ, organizations responsible for managing reception centers, arrangements for handling service animals and pets, and provisions for radiological monitoring/decontamination.		S	Lo	T	**J.11.d.i**	Locations of all reception centers and host schools for evacuees and students by name and address;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.d.ii**	Organizations responsible for managing reception centers and staffing requirements for each center;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.d.iii**	Provisions and arrangements for the radiological monitoring of evacuees, service animals, pets, and evacuee vehicles;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.d.iv**	Arrangements for managing students at reception centers and/or host schools;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.d.v**	Identified hospitals, correctional facilities, and nursing homes that will receive evacuees; and	**Rad Annex, Pt 2, J.11**

			S	Lo	T	**J.11.d.vi**	Arrangements for congregate care based on historical need.	**Rad Annex, Pt 2, J.11**
J.11.e	Means for the initial and ongoing control of access to evacuated areas and organizational responsibilities for such control, including identifying pre-selected control points.		S	Lo	T	**J.11.e.i**	Means for initial and ongoing control of access to evacuated areas;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.e.ii**	Organization(s) responsible for providing access control and staffing TCPs and ACPs;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.e.iii**	Maps identifying pre-selected TCPs/ACPs (may be incorporated by reference);	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.e.iv**	Equipment and resources needed (e.g., cones or barricades);	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.e.v**	Procedures and responsibilities for controlling ingress and egress to other areas affected by an incident; and	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.e.vi**	Procedures for providing TCP/ACP staff with the status of emergency response activities.	**Rad Annex, Pt 2, J.11**
J.11.f	Identification of and means for dealing with potential impediments to the use of evacuation routes (e.g., seasonal impassability of roads) and contingency measures. The resources available to clear impediments and responsibility for re-routing traffic, as necessary, are described.		S	Lo	T	**J.11.f.i**	Resources available (e.g., personnel and equipment) to clear impediments to use of evacuation routes and emergency response in areas affected by incidents;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.f.ii**	The potential need to use alternate routes because of traffic impediments, including procedures for implementing alternate evacuation routes; and	**Rad Annex, Pt 2, J.11**

			S	Lo	T	**J.11.f.iii**	The individual(s), by title/position, responsible for directing resources and rerouting traffic.	**Rad Annex, Pt 2, J.11**
J.11.g	Identification of and means to implement precautionary protective actions (e.g., actions taken at an SAE).		S	Lo	T	**J.11.g.i**	Precautionary protective actions that may be taken;	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.g.ii**	The ECLs at which a precautionary protective action may be taken; and	**Rad Annex, Pt 2, J.11**
			S	Lo	T	**J.11.g.iii**	Methods used to implement precautionary protective actions.	**Rad Annex, Pt 2, J.11**
J.12	Protective actions to be used for the ingestion exposure pathway EPZ are specified, including the methods for protecting the public from consumption of contaminated foodstuffs, and are based on current Federal guidance.		S	Lo	T	**J.12.i**	The organization and individual(s), by title/position, with the authority to make decisions in the ingestion exposure pathway EPZ;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.ii**	Planned ingestion protective actions and the rationale for the selection of actions;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.iii**	The methodology used to designate the areas of concern where monitoring and sampling will be implemented;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.iv**	The methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures;	**Rad Annex, Pt 2, J.12**

			S	Lo	T	**J.12.v**	The analytical laboratory capability to analyze various samples and the procedure for reporting analytical results to the appropriate organization;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.vi**	The location and means of obtaining up-to-date information on licensed agribusiness facilities within the ingestion exposure pathway EPZ;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.vii**	The ability to obtain information on facilities outside the ingestion exposure pathway EPZ at risk for receiving potentially contaminated products, including names and telephone numbers for points of contact;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.viii**	The location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.ix**	The DILs that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs;	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.x**	The availability of suitable maps, including GIS maps, for recording various data; and	**Rad Annex, Pt 2, J.12**
			S	Lo	T	**J.12.xi**	The means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products.	**Rad Annex, Pt 2, J.12**
J.13	The means for registering, monitoring, and decontaminating evacuees, service animals, pets, vehicles, and possessions at reception centers in host areas are described. The		S	Lo	T	**J.13.i**	The radiological capabilities to monitor evacuees, service animals, vehicles, and possessions;	**Rad Annex, Pt 2, J.13**

	personnel and equipment available are capable of monitoring 20 percent of the plume exposure pathway EPZ population, including transients, assigned to each facility within a 12-hour period.		S	Lo	T	**J.13.ii**	Decontamination procedures, including the triggers/action levels14 that indicate the need for decontamination activities and procedures for medical attention referral;	**Rad Annex, Pt 2, J.13**
			S	Lo	T	**J.13.iii**	Contamination control measures, such as safety requirements, decontamination site layout, and decontamination protocol;	**Rad Annex, Pt 2, J.13**
			S	Lo	T	**J.13.iv**	The physical layout of the area, with diagrams that show the flow and layout of operations, including a description of the means for separating contaminated, uncontaminated, and unscreened individuals, vehicles, service animals, and pets; and	**Rad Annex, Pt 2, J.13**
			S	Lo	T	**J.13.v**	The processes for registering evacuees, service animals, and pets in host/support jurisdictions, including documentation of monitoring for referral to temporary care facilities.	**Rad Annex, Pt 2, J.13**
J.14	General plans for the removal or continued exclusion of individuals from restricted areas are developed. Relocation plans include **(:)**		S	Lo	T	**J.14.i**	General plans for the removal or continued exclusion of individuals from restricted areas; and	**Rad Annex, Pt 2, J.14**
			S	Lo	T	**J.14.ii**	Relocation plans are developed when the decision for removal or continued exclusion of individuals from restricted areas.	**Rad Annex, Pt 2, J.14**
J.14.a	Process for implementing current Federal guidance for relocation.		S	Lo	T	**J.14.a.i**	Organization(s) with the responsibility for making decisions on relocation;	**Rad Annex, Pt 2, J.14**
			S	Lo	T	**J.14.a.ii**	The rationale used to determine areas for relocation; and	**Rad Annex,**

								Pt 2, J.14
			S	Lo	T	**J.14.a.iii**	The process for notifying individuals who are being relocated.	Rad Annex, Pt 2, J.14
J.14.b	Means to identify and determine the boundaries of relocation areas, including a buffer zone.		S	Lo	T	**J.14.b.i**	The process used to identify areas where the projected first-year dose will exceed the 2 rem relocation PAG; and	Rad Annex, Pt 2, J.14
			S	Lo	T	**J.14.b.ii**	The process for identifying the need for buffer zones, as well as their establishment when warranted.	Rad Annex, Pt 2, J.14
J.14.c	Prioritization of relocation based on projected dose to an individual and the timeframe for relocation.		S	Lo	T	**J.14.c.i**	Priorities for relocation; and	Rad Annex, Pt 2, J.14
			S	Lo	T	**J.14.c.ii**	Designation of intervals to continually assess projected doses from the relocation areas.	Rad Annex, Pt 2,
J.14.d	Control of access to and egress from relocation areas and security provisions for evacuated areas.		S	Lo	T	**J.14.d.i**	Establishment of access control/check points around the relocation area;	Rad Annex, Pt 2,
			S	Lo	T	**J.14.d.ii**	Processes for identifying those who are authorized to enter relocation areas;	Rad Annex, Pt 2, J.14
			S	Lo	T	**J.14.d.iii**	Methods to provide exposure and contamination control to those authorized to enter relocation areas; and	Rad Annex, Pt 2, J.14
			S	Lo	T	**J.14.d.iv**	Establishment of monitoring and decontamination stations at points of egress in the buffer zone around relocation areas.	Rad Annex, Pt 2, J.14

J.14.e	Contamination control during relocation.		S	Lo	T	**J.14.e.i**	Methods for monitoring and decontamination of individuals who are being relocated from areas not previously evacuated.	**Rad Annex, Pt 2, J.14**
J.14.f	Means for coordinating and providing assistance during relocation.		S	Lo	T	**J.14.f.i**	Physical and economic assistance for those who are relocated; and	**Rad Annex, Pt 2, J.14**
			S	Lo	T	**J.14.f.ii**	Provisions for physical, economic, and financial assistance of individuals being relocated.	**Rad Annex, Pt 2, J.14**
Planning Standard K – Radiological Exposure Control								
Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.								
K.1	*The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects **(:)***							**Rad Annex, Pt 2, K.1**
K.1.a	*Onsite emergency exposure guidelines for emergency workers consistent with their assigned duties and current Federal guidance and the conditions under which the guidelines apply.*							**Rad Annex, Pt 2, K.1**
K.1.b	*The capability to evaluate emergency worker dose (i.e., the sum of the effective dose equivalent and the committed effective dose equivalent) at the time of exposure when direct measurement is not feasible.*							**Rad Annex, Pt 2, K.1**
K.1.c	*The capability to monitor and assess the radiation doses received by emergency workers for the duration of the incident.*							**Rad Annex, Pt 2, K.1**
K.1.d	*The capability to implement onsite contamination control measures.*							**Rad Annex, Pt 2, K.1**
K.1.e	*The capability to decontaminate emergency workers, equipment, and vehicles.*							**Rad Annex, Pt 2, K.1**
K.1.f	*Appropriate radiation protection briefings for repair teams that are being dispatched into the plant and FMTs being sent onsite and offsite, the scope of which is consistent with the expected risk to the team.*							**Rad Annex, Pt 2, K.1**
K.1.g	*The process for NPP site access and dosimetry issuance to personnel from OROs arriving to assist with the onsite response.*							**Rad Annex, Pt 2, K.1**

K.2	Individual(s) that can authorize personnel to receive radiation doses in excess of the occupational dose limits in accordance with the minimum standards set forth in 10 CFR Part 20 or 29 CFR 1910.1096, as applicable to the organization, are identified by title/position. Such authorizations are documented.	Li	S	Lo	T	**K.2.i**	(Or reference) The occupational dose limits in accordance with the regulation applicable to their organization;	**Rad Annex, Pt 2, K.2**
		Li	S	Lo	T	**K.2.ii**	The individual(s), by title/position, who can authorize radiation doses in excess of occupational limits; and	**Rad Annex, Pt 2, K.2**
		Li	S	Lo	T	**K.2.iii**	Processes for authorizing and documenting personnel to exceed occupational dose limits.	**Rad Annex, Pt 2, K.2**
K.2.a	*The process for allowing onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities is described.*							**Rad Annex, Pt 2, K.2**
K.2.b	The process for authorizing emergency workers to incur exposures which may result in doses in excess of the current Federal guidance is described.		S	Lo	T	**K.2.b.i**	Emergency worker dose limits;	**Rad Annex, Pt 2, K.2**
			S	Lo	T	**K.2.b.ii**	Process for when emergency worker dose limits are reached and subsequently exceeded;	**Rad Annex, Pt 2, K.2**
			S	Lo	T	**K.2.b.iii**	Authorization and documentation processes for authorizing emergency workers to exceed dose limits, including exceeding limits identified in current Federal guidance;	**Rad Annex, Pt 2, K.2**
			S	Lo	T	**K.2.b.iv**	Briefing and documentation processes for communicating risks involved for incurring excessive dose; and	**Rad Annex, Pt 2, K.2**
			S	Lo	T	**K.2.b.v**	Any special conditions requiring additional limitations.	**Rad Annex, Pt 2, K.2**

K.3	The capability to determine the doses received by emergency workers involved in any commercial NPP radiological incident is described. Each organization makes provisions for distribution of direct-reading dosimeters (DRDs) and permanent record dosimeters (PRDs).		S	Lo	T	**K.3.i**	Types and quantities of dosimeters (and dosimeter chargers, when applicable) available per location and the number of emergency workers requiring dosimetry devices;	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.ii**	Dosimetry storage locations;	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.iii**	Process for distributing dosimeters to all emergency workers;	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.iv**	Exposure control methods for emergency workers, including exposure from inhalation;	**Rad Annex, Pt 2, K.3** **Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.v**	Process for reading DRDs and any early reading of PRDs; and	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.vi**	Specific dosimetry instructions, including record keeping of dosimeter readings and return of dosimeters.	**Rad Annex, Pt 2, K.3**
K.3.a	Provisions to ensure that DRDs are read at designated intervals and dose records are maintained for emergency workers are described.		S	Lo	T	**K.3.a.i**	Designated time intervals for reading DRDs;	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.a.ii**	The method for emergency workers to record and report DRD readings;	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.a.iii**	The methods for obtaining and recording dose readings from emergency workers;	**Rad Annex, Pt 2, K.3**

			S	Lo	T	**K.3.a.iv**	The method for maintaining dose records for emergency workers; and	**Rad Annex, Pt 2, K.3**
			S	Lo	T	**K.3.a.v**	Appropriate reporting if administrative limits have been reached or exceeded.	**Rad Annex, Pt 2, K.3**
K.4	Action levels for determining the need for decontamination are specified and the means for radiological decontamination are established for emergency workers and the general public, as well as equipment, vehicles, and personal possessions. The means for disposal of contaminated waste created by decontamination efforts are also established.		S	Lo	T	**K.4.i**	A description of facilities for monitoring and decontaminating emergency workers, equipment, and vehicles;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.ii**	A description of facilities for monitoring and decontaminating general public, personal possessions, and vehicles;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.iii**	Locations of monitoring and decontamination facilities (facilities for the public should be located outside the plume EPZ);	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.iv**	Number of people needed to perform monitoring and decontamination operations;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.v**	Survey instruments (i.e., specific appropriate equipment and sensitivity, including radiation type) used to monitor emergency workers, equipment, and vehicles;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.vi**	Other supplies and equipment needed for monitoring and decontamination;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.vii**	Methods for controlling the spread of contamination at the emergency	

							worker and general public monitoring facilities;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.viii**	The process for handling contaminated waste collection, handling, and storage;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.ix**	Radioactive contamination levels that will trigger decontamination procedures, expressed in applicable units;	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.x**	The process for re-monitoring individuals, equipment, vehicles, and personal possessions, and recording the results; and	**Rad Annex, Pt 2, K.4**
			S	Lo	T	**K.4.xi**	Criteria for sending individuals with fixed contamination for medical attention.	**Rad Annex, Pt 2, K.4**
Planning Standard L – Medical and Public Health Support								
Arrangements are made for medical services for contaminated injured individuals.								
L.1	Arrangements are established with primary and backup hospitals (one hospital is located outside the plume exposure pathway EPZ) and medical services. These facilities have the capability for evaluation of radiation exposure and uptake. The persons providing these services are adequately trained and prepared to handle contaminated, injured emergency workers and members of the general public.		S	Lo	T	**L.1.i**	A list of primary and backup hospitals/medical facilities to treat potentially contaminated, injured, and/or exposed individuals;	**Rad Annex, Pt 2, L.1**
			S	Lo	T	**L.1.ii**	Individual facility capabilities to evaluate radiation exposure and uptake, including the number of radiologically trained medical personnel and support staff;	**Rad Annex, Pt 2, L.1**
			S	Lo	T	**L.1.iii**	A description of hospital/medical facility and support service capabilities to treat potentially contaminated, injured, and/or exposed individuals; and	**Rad Annex, Pt 2, L.1**

			S	Lo	T	**L.1.iv**	A description of dosimetry procedures, including record-keeping and final receipt for processing.	**Rad Annex, Pt 2, L.1**
L.2	*Arrangements for the medical treatment of contaminated, injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:*							**Rad Annex, Pt 2, L.2**
L.2.a	*An onsite first aid capability with adequate medical equipment and supplies.*							**Rad Annex, Pt 2, L.2**
L.2.b	*Primary and backup offsite medical facilities.*							**Rad Annex, Pt 2, L.2**
L.2.c	*Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas.*							**Rad Annex, Pt 2, L.2**
L.2.d	*Provisions to evaluate for radiological contamination either prior to transport to a medical facility or after arrival.*							**Rad Annex, Pt 2, L.2**
L.2.e	*Contact information for facilities capable of treating overexposure to radioactive material.*							**Rad Annex, Pt 2, L.2**
L.3	Supplemental lists are developed that indicate the location of the closest public, private, and military hospitals and other emergency medical facilities within the state or contiguous states considered capable of providing medical support for any contaminated, injured individual.		S	Lo	T	**L.3.i**	Supplemental lists of additional hospitals/medical facilities capable of providing medical support for contaminated, injured individuals. The list includes any special radiological capabilities.	**Rad Annex, Pt 2, L.3**
L.4	Each organization arranges for the transportation of contaminated, injured individuals and the means to control contamination while transporting victims of radiological incidents to medical support facilities and the decontamination of transport vehicle following use.	Li	S	Lo	T	**L.4.i**	The individual(s), by title/position, responsible for determining an appropriate hospital/medical facility and the determination process;	**Rad Annex, Pt 2, L.4**
		Li	S	Lo	T	**L.4.ii**	Means of transporting individuals;	**Rad Annex, Pt 2, L.4**
		Li	S	Lo	T	**L.4.iii**	How to request additional emergency medical transport services;	**Rad Annex, Pt 2, L.4**

		Li	S	Lo	T	**L.4.iv**	Process for maintaining communications between the transport crew and hospital/medical facility staff;	**Rad Annex, Pt 2, L.4**
		Li	S	Lo	T	**L.4.v**	Specifics of radiological monitoring and contamination control measures during transport;	**Rad Annex, Pt 2, L.4**
		Li	S	Lo	T	**L.4.vi**	Decontamination techniques, including trigger/action levels; and	**Rad Annex, Pt 2, L.4**
		Li	S	Lo	T	**L.4.vii**	Dosimetry for the transport crew.	**Rad Annex, Pt 2, L.4**
Planning Standard M – Recovery, Reentry, and Post-Accident Operations								
General plans for recovery and reentry are developed.								
M.1	General recovery, reentry, and return plans for radiological incidents are developed, as appropriate. These plans address reoccupancy, as appropriate. The plans should include **(:)**	Li	S	Lo	T	**M.1.i**	Planned recovery efforts, including a list of recovery-specific actions and organizations responsible for carrying them out;	**Rad Annex, Pt 2, M.1**
		Li	S	Lo	T	**M.1.ii**	The process for public reentry into restricted areas;[18]	**Rad Annex, Pt 2, M.1**
		Li	S	Lo	T	**M.1.iii**	The process for establishing restricted areas; and	**Rad Annex, Pt 2, M.1**
		Li	S	Lo	T	**M.1.iv**	The process for establishing reoccupancy decisions.	**Rad Annex, Pt 2, M.1**
M.1.a	*Provisions for allowing reentry into areas controlled by the licensee. Reentry planning includes evaluation of the controls necessary for reentry under post-incident conditions.*							**Rad Annex, Pt 2, M.1**
M.1.b	Provisions for reentry into restricted areas, including exposure and contamination control, as appropriate. A method for coordinating and implementing decisions regarding		S	Lo	T	**M.1.b.i**	The process for authorizing reentry, including the individual(s), by title/position, authorized to grant access into a restricted area;	**Rad Annex, Pt 2, M.1**

	temporary reentry into restricted areas is addressed.		S	Lo	T	**M.1.b.ii**	The evaluation criteria/method for approving reentry requests;	**Rad Annex, Pt 2, M.1**
			S	Lo	T	**M.1.b.iii**	The access control process for reentry, including the authorization verification method by access control/check point officials;	**Rad Annex, Pt 2, M.1**
			S	Lo	T	**M.1.b.iv**	Provisions for exposure control of those authorized reentry;	**Rad Annex, Pt 2, M.1**
			S	Lo	T	**M.1.b.v**	Contamination control practices within a restricted area; and	**Rad Annex, Pt 2, M.1**
			S	Lo	T	**M.1.b.vi**	Methods and resources for monitoring and decontamination of individuals exiting a restricted area.	**Rad Annex, Pt 2, M.1**
M.2	*Individuals that will comprise the licensee's recovery organization are identified by title/position. The recovery organization includes technical personnel with responsibilities to develop, evaluate, and direct recovery and reentry operations.*							**Rad Annex, Pt 2, M.2**
M.3	*The process for initiating recovery actions is described and includes the criteria for terminating the emergency.*							**Rad Annex, Pt 2, M.3**
M.4	The process for initiating recovery actions is described and includes provisions to ensure continuity during transfer of responsibility between phases. The chain of command is established.		S	Lo	T	**M.4.i**	The process for initiating recovery actions;	**Rad Annex, Pt 2, M.4**
			S	Lo	T	**M.4.ii**	Provisions for continuity during transfer of responsibility from the emergency phase to the recovery phase;	**Rad Annex, Pt 2, M.4**
			S	Lo	T	**M.4.iii**	Changes that may take place in the organizational structure, to include the chain of command; and	**Rad Annex, Pt 2, M.4**

			S	Lo	T	**M.4.iv**	The means to keep all involved response organizations informed of the recovery efforts.	**Rad Annex, Pt 2, M.4**
M.5	The framework for relaxing protective actions and allowing for return are described. Prioritization is given to restoring access to vital services and facilities.		S	Lo	T	**M.5.i**	Criteria for relaxing protective actions and allowing for public return;	**Rad Annex, Pt 2, M.5**
			S	Lo	T	**M.5.ii**	The process for allowing public return into a previously restricted area; and	**Rad Annex, Pt 2, M.5**
			S	Lo	T	**M.5.iii**	A process for establishing priorities in restoring vital services and facilities to areas where return is permitted.	**Rad Annex, Pt 2, M.5**
M.6	The organization(s) responsible for developing and implementing cleanup operations offsite is identified.		S	Lo	T	**M.6.i**	The appropriate local, state, tribal or Federal organization(s) responsible for cleanup operations; and	**Rad Annex, Pt 2, M.6**
			S	Lo	T	**M.6.ii**	Resources that may be needed to conduct cleanup efforts.	**Rad Annex, Pt 2, M.6**
M.7	Provisions for developing and modifying sampling plans are established. Provisions for laboratory analysis of samples are included in the plan.	Li	S	Lo	T	**M.7.i**	The process for developing and modifying sampling plans;	**Rad Annex, Pt 2, M.7**
		Li	S	Lo	T	**M.7.ii**	Identification of laboratories to process samples; and	**Rad Annex, Pt 2, M.7**
		Li	S	Lo	T	**M.7.iii**	A description of each identified laboratory's sampling capability and capacity.	**Rad Annex, Pt 2, M.7**

M.8	A method for periodically conducting radiological assessments of public exposure is established.		S	Lo	T	**M.8.i**	The agencies responsible for, and involved in, long-term dose assessment activities post-incident; and	**Rad Annex, Pt 2, M.8**
			S	Lo	T	**M.8.ii**	The method for periodically conducting radiological assessments of public exposure, including estimation of the health impacts.	**Rad Annex, Pt 2, M.8**
Planning Standard N – Exercises and Drills								
Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.								
N.1	Exercises and drills are conducted, observed, and critiqued/evaluated as set forth in NRC and FEMA regulations and guidance.	Li	S	Lo	T	**N.1.i**	Exercises are conducted in accordance with NRC and FEMA regulations and guidance.	**Rad Annex, Pt 2, N.1**
N.1.a	The process to critique/evaluate exercises and drills is described.	Li	S	Lo	T	**N.1.a.i**	The process to critique and evaluate exercises and drills utilizes FEMA REP's assessment methodology.	**Rad Annex, Pt 2, N.1**
N.1.b	The process used to track findings and associated corrective actions identified by drill and exercise critiques/evaluations, including their assignment and completion, is described.	Li	S	Lo	T	**N.1.b.i**	A description of the process for tracking identified findings and any associated corrective actions from identification through resolution.	**Rad Annex, Pt 2, N.1**
N.1.c	*A drill or exercise starts between 6:00 p.m. and 4:00 a.m. at least once every eight-year exercise cycle.*							**Rad Annex, Pt 2, N.1**
N.1.d	*A drill or exercise is unannounced at least once every eight-year exercise cycle.*							**Rad Annex, Pt 2, N.1**
N.2	Exercises are designed to enable the response organizations' demonstration of the key skills and capabilities necessary to implement the emergency plan. The following two types of exercises are conducted at the frequency noted **(:)**	Li	S	Lo	T	**N.2.i**	All major elements of plans/procedures are tested at the minimum frequency specified.	**Rad Annex, Pt 2, N.2**

N.2.a	Plume Exposure Pathway Exercises. Plume exposure pathway exercises are conducted biennially. These exercises include mobilization of licensee, and state, local, and tribal government personnel and resources and implementation of emergency plans to demonstrate response capabilities within the plume exposure pathway EPZ.	Li	S	Lo	T	**N.2.a.i**	Capabilities are exercised at least biennially in response to a plume exposure pathway scenario; and	**Rad Annex, Pt 2, N.2**
		Li	S	Lo	T	**N.2.a.ii**	Exercise scenarios include a radioactive release of such a magnitude that it drives accomplishment of the exercise objectives.	**Rad Annex, Pt 2, N.2**
N.2.b	Ingestion Exposure Pathway Exercises. Ingestion exposure pathway exercises are conducted at least once every eight years. These exercises include mobilization of state, local, and tribal government personnel and resources and implementation of emergency plans to demonstrate response capabilities to a release of radioactive materials requiring post-plume phase protective actions within the ingestion exposure pathway EPZ.		S	Lo	T	**N.2.b.i**	Capabilities are exercised at least once every eight years in response to an ingestion exposure pathway scenario;	**Rad Annex, Pt 2, N.2**
			S	Lo	T	**N.2.b.ii**	The numbers and types of personnel participating in an ingestion exposure pathway exercise will be sufficient for demonstrating capabilities required by the plans/procedures; and	**Rad Annex, Pt 2, N.2**
			S	Lo	T	**N.2.b.iii**	OROs within the 50-mile ingestion exposure pathway EPZ that are not part of the full participation ingestion exercise with the state, participate in an ingestion TTX or other ingestion pathway training activity at least once during each eight-year exercise cycle.	**Rad Annex, Pt 2, N.2**
N.3	Exercise Scenario Elements. During each eight-year exercise cycle, biennial, evaluated exercise scenario content is varied to provide the opportunity to demonstrate the key skills and capabilities necessary to respond to the following scenario elements **(:)**	Li	S	Lo	T	**N.3.i**	Scenarios for exercises are varied from exercise to exercise to provide opportunity for appropriate capabilities to be demonstrated; and	**Rad Annex, Pt 2, N.3**
		Li	S	Lo	T	**N.3.ii**	All exercise scenario elements are utilized during each eight-year exercise cycle.	**Rad Annex, Pt 2, N.3**
N.3.a	Hostile Action-Based (HAB). Hostile action directed at the NPP site. This scenario element may be combined with either a radiological release scenario or a no/minimal radiological	Li	S	Lo	T	**N.3.a.i**	The HAB scenario element is utilized at least once during each eight-year exercise cycle; and	**Rad Annex, Pt 2, N.3**

	release scenario, but a no/minimal radiological release scenario should not be included in consecutive HAB exercises at an NPP site.	Li	S	Lo	T	**N.3.a.ii**	The HAB scenario element is not combined with the no/minimal radiological release scenario in consecutive exercises at a single site.	**Rad Annex, Pt 2, N.3**
N.3.b	Rapid Escalation. An initial classification of, or rapid escalation to, a SAE or GE.	Li	S	Lo	T	**N.3.b.i**	A rapid escalation scenario element is utilized at least once during each eight-year exercise cycle.	**Rad Annex, Pt 2, N.3**
N.3.c	No/Minimal Release of Radioactive Materials. No release or an unplanned minimal release of radioactive material which does not require public protective actions. This scenario element is used only once during each eight-year exercise cycle.	Li	S	Lo	T	**N.3.c.i**	A no/minimal radioactive material release scenario element is utilized only once each eight-year exercise cycle and is optional for state, local, and tribal governments.	**Rad Annex, Pt 2, N.3**
N.3.c.1	The licensee is required to demonstrate the ability to respond to a no/minimal radiological release scenario. State, local, and tribal government response organizations have the option, and are encouraged, to participate jointly in this demonstration. If the offsite organizations elect not to participate in the licensee's required minimal or no release exercise, the OROs will still be obligated to meet the exercise requirements as specified in 44 CFR 350.9.	Li	S	Lo	T	**N.3.c.1.i**	ORO participation is optional for a no/minimal release scenario.	**Rad Annex, Pt 2, N.3**
N.3.c.2	When planning for a joint no/minimal radiological release exercise, affected state, local, and tribal government jurisdictions, the licensee, and FEMA will identify offsite capabilities that may still need to be evaluated and agree upon appropriate alternative evaluation methods to satisfy FEMA's biennial criteria requirements. Alternative evaluation methods that could be considered during the extent of play negotiations include expansion of the exercise scenario, out of sequence activities, plan reviews, staff assistance visits, or other means as described in FEMA guidance.	Li	S	Lo	T	**N.3.c.2.i**	The planning process will account for capabilities and activities that may not have the opportunity to be evaluated under the no/minimal radiological release scenario elements; and	**Rad Annex, Pt 2, N.3**
		Li	S	Lo	T	**N.3.c.2.ii**	Consideration is given to alternative demonstration and evaluation venues.	**Rad Annex, Pt 2, N.3**

N.3.d	Resource Integration. Integration of offsite resources with onsite response.	Li	S	Lo	T	**N.3.d.i**	A resource integration element is utilized once during each eight-year exercise cycle; and	**Rad Annex, Pt 2, N.3**
		Li	S	Lo	T	**N.3.d.ii**	This scenario element may be combined with other scenario elements.	**Rad Annex, Pt 2, N.3**
N.3.e	10 CFR 50.54(hh)(2) Strategies. Demonstration of the use of equipment, procedures, and strategies developed in compliance with 10 CFR 50.54(hh)(2).							
N.4	Drills are designed to enable an organization's demonstration and maintenance of key skills and capabilities necessary to fulfill functional roles. Drills include, but are not limited to, the following at their noted frequencies (:)	Li	S	Lo	T	**N.4.i**	All major elements of plans/procedures are tested at the minimum frequency specified.	**Rad Annex, Pt 2, N.4**
N.4.a	*Emergency Medical Drills. Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).*							**Rad Annex, Pt 2, N.4**
N.4.b	Medical Services Drills. Medical services drills are conducted annually at each medical facility designated in the emergency plan. These drills involve a simulated, contaminated emergency worker and/or member of the general public and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).		S	Lo	T	**N.4.b.i**	Annual medical services drills are conducted annually at each medical facility identified in the emergency plan.	**Rad Annex, Pt 2, N.4**

N.4.c	Laboratory Drills. Laboratory drills are conducted biennially at each laboratory designated in the emergency plan. These drills involve demonstration of handling, documenting, provisions for record keeping, and analyzing air, soil, and food samples as well as quality control and quality assurance processes. These drills also involve an assessment of the laboratory's capacity to handle daily and weekly samples and the volume of samples that can be processed daily or weekly.		S	Lo	T	**N.4.c.i**	Laboratory drills are conducted biennially.	**Rad Annex, Pt 2, N.4**
N.4.d	Environmental Monitoring Drills. Environmental monitoring drills are conducted annually. These drills include direct radiation measurements in the environment, collection and analysis of all sample media (e.g., water, vegetation, soil, and air), and provisions for record keeping.	Li	S	Lo	T	**N.4.d.i**	Environmental monitoring drills are conducted annually.	**Rad Annex, Pt 2, N.4**
N.4.e	Ingestion Pathway Drills. Ingestion pathway drills are conducted biennially. These drills involve sample plan development, analysis of lab results from samples, assessment of the impact on food and agricultural products, protective decisions for relocation, and food/crop embargos.		S	Lo	T	**N.4.e.i**	Ingestion pathway drills are conducted biennially; and	**Rad Annex, Pt 2, N.4**
			S	Lo	T	**N.4.e.ii**	Participants include any OROs that have roles/responsibilities for the ingestion pathway and/or post-plume phase activities.	**Rad Annex, Pt 2, N.4**
N.4.f	Communications Drills. Communications amongst and between emergency response organizations, including those at the state, local, and Federal level, the FMTs, and nuclear facility within both the plume and ingestion exposure pathway EPZs, are tested at the frequencies determined in Evaluation Criterion F.3. Communications drills include the aspect of understanding the content of messages and can be done in conjunction with the testing described in Evaluation Criterion F.3.	Li	S	Lo	T	**N.4.f.i**	Communications drills between all applicable emergency response organizations within the plume and ingestion exposure pathway EPZs are conducted at the frequencies determined in evaluation criterion F.3; and	**Rad Annex, Pt 2, N.4**
		Li	S	Lo	T	**N.4.f.ii**	A message content check is included in all communications drills.	**Rad Annex, Pt 2, N.4**
N.4.g	*Post-Accident Sampling Drills. Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.*							**Rad Annex, Pt 2, N.4**

N.4.h							*Off-Hours Report-In Drills. Off-hours report-in drills are conducted biennially and are unannounced.*	**Rad Annex, Pt 2, N.4**
N.4.i							*Off-Hours Call-In Drills. Off-hours call-in drills are conducted quarterly, such that each ERO member's normally expected response time is assessed at least biennially based on call-in drill responses or an alternate means for determining response time. Some drills are unannounced.*	**Rad Annex, Pt 2, N.4**
N.4.j							*Onsite Personnel Protective Action Drills. Onsite personnel protective action drills are conducted during every eight-year exercise cycle. These drills demonstrate the NPP site's ability to implement and coordinate protective actions for onsite personnel during hostile action.*	**Rad Annex, Pt 2, N.4**
N.4.k							*Aircraft Threat/Attack Response Drills. Aircraft threat/attack response drills are conducted during every eight-year exercise cycle. These drills demonstrate the use of procedures and protective measures developed for responding to hostile action involving an aircraft threat or attack.*	**Rad Annex, Pt 2, N.4**
Planning Standard O – Radiological Emergency Response Training								
Radiological emergency response training is provided to those who may be called on to assist in an emergency.								
	Each organization ensures the training of emergency responders and other appropriate individuals with an operational role described in the emergency plan. Initial training and at least annual retraining are provided.	Li	S	Lo	T	**O.1.i**	The organization(s) or individual(s) responsible for ensuring training requirements are met, including a description of their responsibilities;	**Rad Annex, Pt 2, O.1**
		Li	S	Lo	T	**O.1.ii**	Provisions to ensure personnel with an operational role receive appropriate training;	**Rad Annex, Pt 2, O.1**
		Li	S	Lo	T	**O.1.iii**	A description of training programs, including scope, time intervals at which training will be offered, and organization(s) that will provide training assistance;	**Rad Annex, Pt 2, O.1**

		Li	S	Lo	T	**O.1.iv**	Identification of mutual aid organizations and applicable arrangements for offering or receiving training;	**Rad Annex, Pt 2, O.1**
		Li	S	Lo	T	**O.1.v**	Provisions for initial training;	**Rad Annex, Pt 2, O.1**
		Li	S	Lo	T	**O.1.vi**	Provisions for at least annual retraining;	**Rad Annex, Pt 2, O.1**
		Li	S	Lo	T	**O.1.vii**	Provisions for just-in-time training; and	**Rad Annex, Pt 2, O.1**
		Li	S	Lo	T	**O.1.viii**	Documentation of attendance for training.	**Rad Annex, Pt 2, O.1**
O.1.a	*Site-specific emergency response training is developed and conducted for those offsite organizations that may be called upon to provide onsite assistance in the event of an emergency.*							**Rad Annex, Pt 2, O.1**
O.2	*The ERO training program consists of learning objectives that are used to develop and maintain key skills. This includes a systematic analysis of jobs and tasks to be performed from which learning objectives are derived.*							**Rad Annex, Pt 2, O.2**
O.2.a	*The ERO training program is reviewed at least annually and revised as necessary.*							**Rad Annex, Pt 2, O.2**
O.2.b	*Training sessions that provide performance opportunities to develop, maintain, or demonstrate key skills are critiqued in order to identify weak or deficient areas that need correction.*							**Rad Annex, Pt 2, O.2**
Planning Standard P – Responsibility for the Planning Effort: Development, Periodic Review, and Distribution of Emergency Plans								
Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.								
P.1	The training program, including initial training and periodic retraining, of individuals responsible for the planning effort is described.	Li	S	Lo	T	**P.1.i**	The individual(s), by title/position, that require training because of their planning responsibilities; and	**Rad Annex, Pt 2, P.1**
		Li	S	Lo	T	**P.1.ii**	A description of the initial and recurrent training program for the identified individuals.	**Rad Annex, Pt 2, P.1**
P.2	The individual with the overall authority and responsibility for radiological emergency planning is identified by title/position.	Li	S	Lo	T	**P.2.i**	The individual(s), by title/position, with the overall authority and responsibility for radiological emergency response planning.	**Rad Annex, Pt 2, P.2**

P.3	The individual(s) with the responsibility for the development, maintenance, review, updating, and distribution of emergency plans, as well as the coordination of these plans with other response organizations, is identified by title/position.	Li	S	Lo	T	**P.3.i**	The individual(s), by title/position, responsible for developing, maintaining, reviewing, updating, and distributing emergency plans/procedures, as well as coordinating plans/procedures with other response organizations.	**Rad Annex, Pt 2, P.3**
P.4	The process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements is described. The process includes a method for recording changes made to the documents and, when appropriate, how those changes are retained.	Li	S	Lo	T	**P.4.i**	A description of the process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements;	**Rad Annex, Pt 2, P.4**
		Li	S	Lo	T	**P.4.ii**	A method to indicate where and when the most recent plans/procedures changes were made;	**Rad Annex, Pt 2, P.4**
		Li	S	Lo	T	**P.4.iii**	A method to indicate how plan/procedure changes are retained and historical context preserved;	**Rad Annex, Pt 2, P.4**
		Li	S	Lo	T	**P.4.iv**	The process for correcting identified findings and plan issues; and	**Rad Annex, Pt 2, P.4**
		Li	S	Lo	T	**P.4.v**	Acknowledgment/documentation that plans/procedures and agreements have been reviewed for accuracy and completeness of information, and when appropriate, changes have been made, within the last year.	**Rad Annex, Pt 2, P.4**
P.5	Provisions for distributing the emergency plan and implementing procedures to all organizations and appropriate individuals with responsibility for implementation of the plan/procedures are described.	Li	S	Lo	T	**P.5.i**	A list of the organizations and individuals, by title/position, who are to receive the updated plans/procedures;	**Rad Annex, Pt 2, P.5**
		Li	S	Lo	T	**P.5.ii**	The process for distributing the latest plans/procedures to appropriate organizations and individuals; and	**Rad Annex, Pt 2, P.5**

		Li	S	Lo	T	**P.5.iii**	A process to verify that updated plan/procedures have been received.	**Rad Annex, Pt 2, P.5**
P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan.	Li	S	Lo	T	**P.6.i**	A list of annexes, appendices, and supporting plans; and	**Rad Annex, Pt 2, P.6**
		Li	S	Lo	T	**P.6.ii**	Originating agency for each listed annex, appendix, and support plan.	**Rad Annex, Pt 2, P.6**
P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.	Li	S	Lo	T	**P.7.i**	A list of all implementing procedures associated with the emergency plan; and	**Rad Annex, Pt 2, P.7**
		Li	S	Lo	T	**P.7.ii**	Identification of which section(s) of the plan are implemented by each procedure.	**Rad Annex, Pt 2, P.7**
P.8	A table of contents and a cross-reference index to each of the NUREG-0654/FEMA-REP-1, Rev. 2 evaluation criteria are included. The evaluation criteria that do not apply are identified.	Li	S	Lo	T	**P.8.i**	A table of contents; and	**Rad Annex, Pt 2, P.8**
		Li	S	Lo	T	**P.8.ii**	A cross-reference between the plans/procedures and the NUREG-0654/FEMA-REP-1, Rev. 2 evaluation criteria.	**Rad Annex, Pt 2, P.8**
P.9	*Provisions for addressing the requirements of 10 CFR 50.54(t) are described.*							
P.10	The administrative process for the periodic review and updating of contact information identified in the emergency plan and implementing procedures is described.	Li	S	Lo	T	**P.10.i**	The process for reviewing and updating contact information.	**Rad Annex, Pt 2, P.10**
P.11	*The process for entering EP program-related issues that could reduce the effectiveness of the emergency plan into the sitewide corrective action program is described.*							**Rad Annex, Pt 2, P.11**

P.12	*The process to evaluate changes in plant configuration for their impact on the effectiveness of the emergency plan is described.*	**Rad Annex, Pt 2, P.12**