WASHINGTON STATE FIXED NUCLEAR FACILITY PROTECTION PLAN

June 2014

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PROMULGATION / SIGNATURE PAGE

The Washington State Military Department sincerely appreciates the cooperation and support from those agencies, departments, and local jurisdictions which have contributed to the development and ultimate publication of the *Washington State Fixed Nuclear Facility Protection Plan*.

The Plan provides a one-source document for the fixed nuclear facilities, eight Washington counties, and multiple state and federal agencies that are directly involved in emergency planning for these facilities. The Plan supports the *National Response Framework (National Response Framework), Emergency Support Functions*, and *e National Incident Management System (NIMS).* It should be appended to Emergency Support Function 10, Hazardous Materials, of the *Washington State Comprehensive Emergency Management Plan.*

The *Washington State Fixed Nuclear Facility Protection Plan* is one of the many efforts to be better prepared for emergencies or disasters. It moves the state one step closer to being able to minimize the impacts of emergencies and disasters on people, property, the economy, and the environment of Washington State.

Bret D. Daugherty	Robert Ezelle
Major General	Director
The Adjutant General	Emergency Management Division
Washington State Military Department	Washington State Military Department

FOREWORD

The Washington State Military Department sincerely appreciates the cooperation and support of the local jurisdictions, state agencies, departments and public and private stakeholders that contributed to the revision and publication of the *2014 Washington State Fixed Nuclear Facility (FNF) Protection Plan*. This plan reflects not only changes in technology and in national planning strategy that occurred since the last update but also changes resulting from the development of the *National Response Framework,* the *Radiological Emergency Preparedness Program Manual and the Department of Homeland Security Exercise and Evaluation Program* (HSEEP). Additionally, it builds on lessons learned from the tragedies of September 11, 2001, Hurricanes Katrina (2005) and Irene (2011), and the combined tragedies of the 2011 Tohoku Earthquake and Tsunami in Japan (2011). Advances in technology now allow us to coordinate actions and activities through electronic means more quickly and frequently and to deliver this plan in a digital form versus a paper document as in the past. The plan demonstrates the ability of numerous stakeholders to work together to achieve a common goal. The FNF Protection Plan is a standalone document that supports *ESF 10 – Hazardous Materials of the Washington State Comprehensive Emergency Management Plan* (CEMP).

The *Washington State Fixed Nuclear Facility Protection Plan* replaces the *State of Washington Integrated Fixed Facility Radiological and Chemical Protection Plan, 2008* and involved the cooperative efforts of over 51 stakeholder organizations, Emergency Management Division (EMD) staff, private non-profit organizations and local jurisdictions. EMD staff coordinated with these groups to provide a forum for those with identified responsibilities in the Plan. Stakeholders and EMD staff worked collaboratively in planning and coordinating emergency management activities intended to identify, develop, maintain and enhance state emergency management capabilities.

The FNF Plan is one of a family of plans to prepare the people of Washington for emergencies and disasters. The Plan is formatted using the Emergency Operation Planning Tool (EOPT) and is consistent with the National Response Framework with annexes and appendices that support specific areas necessary to enhance the concepts presented in this plan. The objective is to encourage all communities to follow this format as it enhances the ability of emergency managers to operate in a manner promoting interoperability at the federal, state, and local levels.

RECORD OF CHANGES

Change #	Date Entered	Contents of Change	Initials

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RECORD OF DISTRIBUTION

Washington State Agencies

Washington State Department of Agriculture
Washington State Department of Commerce
State Energy Office
Washington State Department of Ecology
Washington State Department of Fish and Wildlife
Washington State Department of Health
Office of Radiation Protection
Office of Environmental Health, Safety, and Toxicology
Washington State Department of Labor and Industries
Washington State Military Department
Emergency Management Division
National Guard
Washington State Parks and Recreation Commission
Washington State Patrol
Washington State Department of Transportation
Washington State Utilities and Transportation Commission
Energy Facility Site Evaluation Council
Governors' Office of Indian Affairs

County Emergency Management Agencies

Adams County Department of Emergency Management
Benton County Emergency Services
Franklin County Emergency Management
Grant County Department of Emergency Management
Kitsap County Department of Emergency Management
Kittitas County Sheriff's Office, Department of Emergency Management
Klickitat County Department of Emergency Management
Snohomish County Department of Emergency Management
Walla Walla County Department of Emergency Management
Yakima Valley Office of Emergency Management

Federal Agencies

Federal Emergency Management Agency, Department of Homeland Security
- Region X Liaison
- Technical Hazards Branch Director

U.S. Department of Energy, Richland Office (Hanford)

U.S. Coast Guard, 13th District
- Sector Columbia River
- Sector Puget Sound

U.S. Navy
- Puget Sound Naval Shipyard & Naval Station Bremerton
- Naval Nuclear Propulsion Program
- Naval Base Kitsap Bangor & Submarine Group 9
- Naval Station Everett

U.S. Nuclear Regulatory Commission

Advisory Team for Environment, Food, and Health:
- EPA Representative
- HHS Representative
- USDA Representative

Other Agencies

American Red Cross
AREVA NP, Inc.
British Columbia Emergency Management
Energy Northwest, Columbia Generating Station
State of Idaho Bureau of Homeland Security
State of Oregon
Oregon Department of Agriculture
Oregon Department of Energy
Oregon Emergency Management
Oregon Health Authority
Morrow County Emergency Management
Umatilla County Emergency Management
Volunteer Organizations

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BASIC PLAN

I. MISSION, PURPOSE, SCOPE, SITUATION OVERVIEWS, AND ASSUMPTIONS

A. MISSION

To minimize the adverse effects to the people, property, environment, and the economy in Washington State resulting from an incident at the Energy Northwest's Columbia Generating Station, the United States Department of Energy (DOE) Hanford Site facilities, or the Naval Base Kitsap (including Puget Sound Naval Shipyard / Naval Station Bremerton and Naval Submarine Base Bangor) and Naval Station Everett.

B. PURPOSE

The purpose of this Plan is to establish authoritative policies in the event of a radiological emergency at a fixed facility in Washington State. The five following facilities in Washington State are required to maintain plans in the event of an emergency that could cause the release of materials from their respective sites.

1. Energy Northwest's Columbia Generating Station
2. DOE Hanford Site
3. Puget Sound Naval Shipyard / Naval Station Bremerton
4. Naval Submarine Base Bangor
5. Naval Station Everett

The state implements this Plan in the event of any fixed facility radiological emergency. However, the use of the concepts and procedures described in this Plan is not limited to these facilities.

Additionally, this Plan provides a framework for state, tribal, and county coordination and cooperation supporting the response and recovery of local jurisdictions in times of emergencies and disasters. The Basic Plan and supporting Annexes and Appendices describe specific roles, responsibilities, functions and support relationships of state agencies.

C. SCOPE

1. This Plan describes the various categories of emergencies likely to occur on the Hanford Reservation or the Puget Sound areas. This Plan further provides conceptual information for disseminating warnings, coordinating response, and for determining, assessing, and reporting the severity and magnitude of such incidents. In addition, this Plan, its Annexes and Appendices, and supporting agency implementing

procedures, present the concepts under which the state and its counties will operate in response to radiological incidents, and:

a. Defines the responsibilities of elected and appointed officials.

b. Defines the emergency roles and functions of state and county agencies, private industries, volunteer organizations, and civic organizations.

c. Creates a framework for the effective and coordinated use of state and local government resources.

d. Outlines the integration and use of government, private sector, and volunteer resources within the National Incident Management System (NIMS) and National Response Framework (NRF) structure and guidance. This integration requires effective emergency management coordination processes and procedures be established, maintained, and exercised between coordinating elements at the federal, state, tribal, county, and local levels.

2. This Plan serves as a one-source fixed nuclear facility plan to support the *Washington State Comprehensive Emergency Management Plan* (CEMP) and Emergency Support Function (ESF) #10 Hazardous Materials.

D. SITUATION OVERVIEW

Emergencies or disasters can occur causing human suffering, injury, death, property damage, environmental degradation, loss of essential services, economic hardship, disruption to state, local and tribal governments, as well as other governmental, public, and private organizations.

The *Washington State Hazard Identification and Vulnerability Assessment* (HIVA) provides information on natural and technological (human-caused) hazards throughout the state. The HIVA assesses the state's vulnerability to hazards, provides a methodology for analyzing hazards, and provides the basis for this plan.

The Washington State *Threat and Hazard Identification and Risk Assessment* (THIRA), required by federal homeland security and emergency management grant programs since 2012, provides an additional layer of hazard analysis not found in the HIVA. The four-step THIRA process involves giving scenario-based context to the threats and hazards that would stress the 31 FEMA Core Capabilities to the maximum extent in Washington State. A statewide Desired Outcome and Capability Target are then developed for each Core Capability, and the Capability Targets are used for the capabilities assessment process which leads to the annual State Preparedness Report. By establishing the following hazard scenario

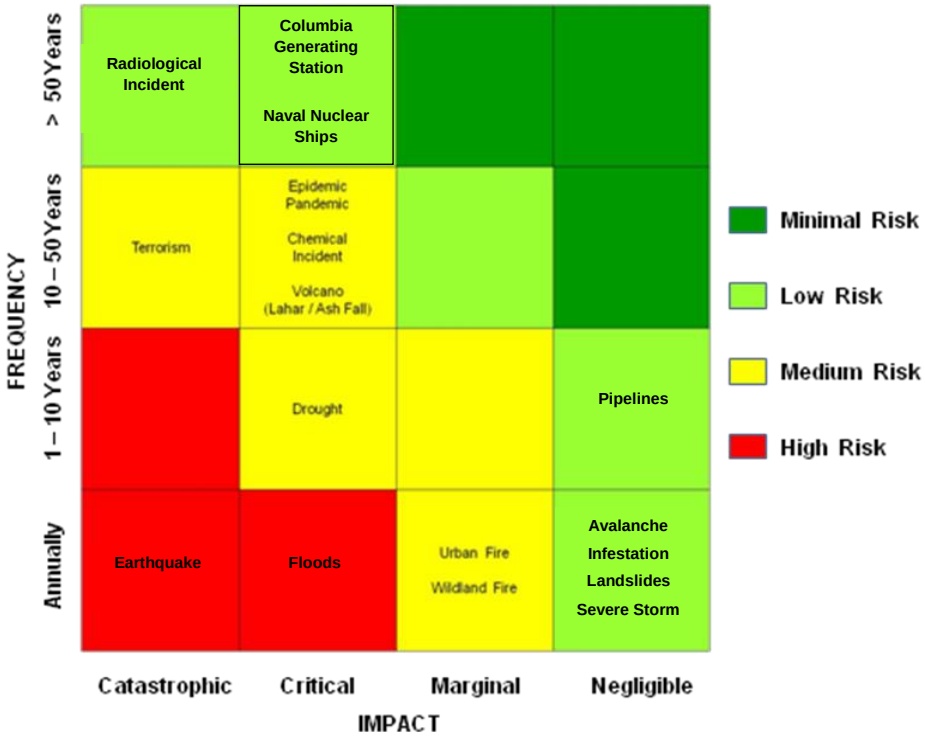
in Washington State's 2012 THIRA, Core Capabilities relevant to the state's Fixed Nuclear Facilities are included in the statewide capabilities targeting and assessment process.

Washington State is vulnerable to the natural hazards of avalanche, drought, earthquakes, epidemic/pandemic, urban fire, wildland fire, floods, infestation, landslide, tsunami, severe storms, and volcanoes (including ash fall and Lahar). These natural hazards occur more frequently than the technological hazards and have a history of being high impact events.

Washington State is vulnerable to the technological (human-caused) hazards associated with pipelines, dam failure, chemical and radiological incidents, Columbia Generating Station, naval nuclear powered ships, and terrorism (including cyber-terrorism and weapons of mass destruction). All of the technological hazards pose a low to minimal risk but have the potential for a high degree of impact should one of these events occur.

Figure 0-1 - Risk Analysis of State Hazards depicts the risks these natural and technological hazards pose to the people, economy, environment, and property of Washington.

Figure 0-1 - Risk Analysis of State Hazards



E. PLANNING ASSUMPTIONS

Some emergencies, disasters, or incidents will occur with enough warning that appropriate notifications are issued to ensure some level of preparation. Other situations will occur with no advanced warning.

The extent of the challenges created by emergencies or disasters depends on factors such as time of occurrence, severity of impact, existing weather conditions, area demographics, and nature of infrastructure construction. Collateral incidents such as fire, floods, and hazardous materials releases will occur and increase the impact on the community, multiply losses, and hinder immediate emergency response efforts.

Incidents are typically managed at the lowest possible geographic, organizational, and jurisdictional level.

The state may be unable to satisfy all emergency resource requests during a major emergency or disaster.

Members of the public, business, state and local agencies and industries are expected to provide their own resources for the first three days of an emergency or disaster.

Local jurisdictions (political subdivisions) will comply with the intent of Chapter 38.52 RCW and Title 118 Washington Administrative Code (WAC), and will:

- establish procedures for continuity of government and operations.
- establish an emergency management organization and facility, either independently or in partnership with other local jurisdictions.
- prepare plans and procedures, including a Radiological Emergency Preparedness (REP) Plan, and maintain a comprehensive emergency management program.
- communicate with the State Emergency Operations Center (SEOC) on the status of activities during or following any emergency or disaster.
- issue local emergency proclamations and request state assistance when appropriate.
- preserve essential records.

State agencies have their own Radiological Emergency Preparedness plans and procedures that enable them to:

- establish procedures for continuity of government and operations.
- assist in staffing the SEOC.

- support the state's emergency management mission.
- communicate with the SEOC.
- provide situation reports to convey damage assessment and ability to accomplish their functional role during an emergency or disaster.
- develop and implement policies that reduce the effects of an emergency or disaster.
- assist in development and distribution of emergency messages to the public.
- assist local jurisdictions with the unique aspects of a radiological incident.

Federal assistance will be available for disaster response and recovery operations under the provisions of the National Response Framework (NRF) and the Stafford Act, Public Law 93-288.

II. CONCEPT OF OPERATIONS

A. GENERAL

The Washington Military Department is charged with the responsibility of developing, maintaining and administering a comprehensive statewide program of emergency management to ensure the state is adequately prepared to respond to and recover from disasters and emergencies, as defined in RCW 38.52.005 and RCW 38.52.030(3). The Department is responsible for coordinating its efforts with the federal government and other states, with other departments and agencies of state government, with county, tribal and municipal governments as well as with private agencies having a role in emergency management (RCW 38.52.030). When an imminent or actual event threatens the state, the Director will activate the State Emergency Operations Center (SEOC) and recommend, as appropriate, the Governor proclaim a state of emergency (NUREG A.2.b).

The strategic intent and overarching concept of operations is to provide assistance to affected residents and visitors of the state of Washington in a comprehensive, coordinated, unified, and expedited manner. This is particularly essential during major and catastrophic incidents which demand immediate action to preserve public health, protect life, protect public property, or to provide relief to any stricken community overtaken by such occurrences.

B. STATE EMERGENCY OPERATIONS CENTER

The SEOC is a permanent facility located in Building 20 on Camp Murray, Washington 98430-5122. The SEOC coordinates the state response to any major disaster or emergency situation.

Upon notification of an emergency, the State Emergency Operations Officers (SEOOs) will elevate the SEOC operations phase based upon the Emergency Classification Level (Figure 0-2 – SEOC Phases of Operation) at the affected facility and conduct the appropriate notifications in accordance with their procedures (Figures 9-6, 9-7, 9-8, and 9-9 associate the ECLs of various facilities with corresponding SEOC phases of operations). If the notification did not come through dedicated circuits then they will validate the notification with the affected facility's organization. The SEOOs will contact notify the Response Section Manager and/or Deputy EOC Manager as part of the initial notifications.

The Response Section Manager/Deputy EOC Manager will brief senior management and discuss assignment of a DM. The DM and EOC Supervisor will determine which Emergency Support Functions (ESFs) will be needed depending on the type, size, and complexity of the incident. At an Alert or higher level emergency, the SEOO will activate the State EOC to Phase III, conduct the notifications specified in the SEOO Standard Operating Procedures (SOP) by phone, and request staff report to the SEOC for duty

(NUREG F.1.e). Basic Plan II.E describes the process for notifying and activating SEOC staff. The Response Section Manager or Deputy EOC Manager will determine which ESFs will be needed and instruct the SEOOs to notify those specific ESFs by phone. A detailed description of SEOC protocols and organization is maintained in the *Washington State Emergency Operations Plan* (EOP), published separately.

The Disaster Manager (DM) assures the continuity of technical, administrative, and material resources for 24-hour emergency operations; however, the DM may delegate the implementation of the task to General Staff. The General Staff will determine relief staff as well as needs and staff for other positions. The Finance/Admin Section Chief will coordinate with the DM, EOC Supervisor, and other General Staff to determine staffing needs for the period of time determined appropriate for the incident. This is typically 72 hours but may be adjusted based upon the needs of the incident. The Finance/Admin Section Chief develops, coordinates, and maintains the SEOC staffing pattern, which is reviewed and approved by the DM (NUREG A.4).

The 24-hour, in-state, emergency number for the SEOC is 1-800-258-5990.

In the event the SEOC is threatened or unusable, an alternate SEOC may be activated in accordance with the *Washington Military Department Continuity of Operations Plan*, published separately.

In accordance with NIMS and ICS principles, the staffing levels in the SEOC will expand and contract based upon the type, size, and complexity of the incident. A Phase I activation level is routine operations and is handled by the Alert and Warning Center staff. For Phase II activations, the minimum staffing for the SEOC is the Disaster Manager, EOC Supervisor, and at least one additional EOC responder. A Phase III activation will typically include Disaster Manager, EOC Supervisor, all General Staff and ESF 15 and expand and contract Emergency Support Functions as the incident situation requires. The general phases of operation and minimum staffing are outlined in Figure 0-2 - SEOC Phases of Operation.

Figure 0-2 - SEOC Phases of Operation

PHASE I **ROUTINE OPERATIONS**	**MINIMUM SEOC STAFFING**
Phase I is the routine, day-to-day operational phase in which state agencies and Emergency Support Functions conduct their daily emergency management responsibilities. Incidents are managed and coordinated by the State Emergency Operations Officers (SEOO) in the SEOC Alert and Warning Center (AWC) in cooperation with local, state and federal agencies.	**Two (2) SEOOs**

PHASE II ENHANCED OPERATIONS	**MINIMUM SEOC STAFFING**
Phase II is a limited activation of the SEOC for incidents which could potentially grow beyond the capability of the SEOOs. The SEOOs, along with select staff, support the incident from the SEOC during this phase. The SEOOs continue to monitor and process other requests for assistance, separate from the incident causing the SEOC activation during Phase II operations. As a general rule, transition from Phase I to Phase II will automatically occur when: • a local jurisdiction activates its EOC, • the Emergency Management Division deploys staff to the field, intelligence data indicates the potential for an emergency that may grow beyond the capability of affected local jurisdictions, or • the SEOC transitions to recovery operations.	**Disaster Manager** **EOC Supervisor** **One (1) Section Chief**

PHASE III FULL OPERATIONS	**MINIMUM SEOC STAFFING**
Phase III is a full-scale activation of the SEOC requiring representation in the SEOC by all appropriate state and outside agencies and organizations to support expanded operations. The number of staff and the agencies represented will vary by incident.	**Disaster Manager** **EOC Supervisor** **All General Staff** **ESF 15**

PHASE IV CATASTROPHIC OPERATIONS	**MINIMUM SEOC STAFFING**
Phase IV is a full-scale activation of the SEOC in response to a major catastrophic incident which exceeds the capabilities of the state and local governments to provide a timely and effective response. SEOC staffing will expand to include representation of other states, federal agencies, local representatives, the private sector and volunteer staff as required by the incident.	**Disaster Manager** **EOC Supervisor** **All General Staff** **ESF 15**

The SEOC is organized using the Incident Command System as a model and includes the following functional areas (see Figure 0-3 - SEOC Organizational Chart).

Command Staff

The Governor provides overall direction and control for emergency actions to preserve public health, protect life and public property or to provide relief to any stricken community overtaken by such occurrences, in accordance with RCW 38.52.050, through a Multi-Agency Coordinating Group (MACG) (NUREG A.1.d).

Whenever an emergency occurs which requires activation of the SEOC, a MACG will be established, in whole or part, to assess the situation and oversee state agency actions. The MACG makes recommendations to the Governor on actions for consideration. The MACG is comprised of the following positions.

- The Governor's Chief of Staff
- The Governor's Press Secretary
- The Adjutant General
- Director, Emergency Management Division
- Disaster Manager

In addition to the members listed above, the Governor's cabinet and state agency directors, as appropriate, will be represented. For example, in emergencies where public health is a major concern, the Secretary of the Department of Health should be included on the MACG just as the Director of the Department of Ecology would be included on the MACG during a major oil spill incident.

The Command Staff also includes the EOC Supervisor, Assistant EOC Supervisor, ESF 14 Recovery Advisor and ESF 15 External Affairs staff.

General Staff

The Operations Section is responsible for overarching coordination with federal, state and provincial agencies during activations of the SEOC. The Operations Section processes requests for assistance and tasking of state resources. In coordination with the Logistics Section, Operations tracks availability, distribution and redistribution of resources, to include transportation arrangements and other mission essential details. The Operations Section Supervisor is responsible for coordination and direction of state liaison personnel in the field.

The Logistics Section receives all requests for assistance from local jurisdictions and state agencies, determines appropriate source and tasks responsible agencies. Logistics is responsible for locating, procuring, cataloging and prioritizing redistribution of resources in accordance with ESF 7. In coordination with the Planning and Operations Sections, Logistics tracks availability, distribution, redistribution and projected resource needs during the response phase as well as coordinating the return of resources during recovery/demobilization.

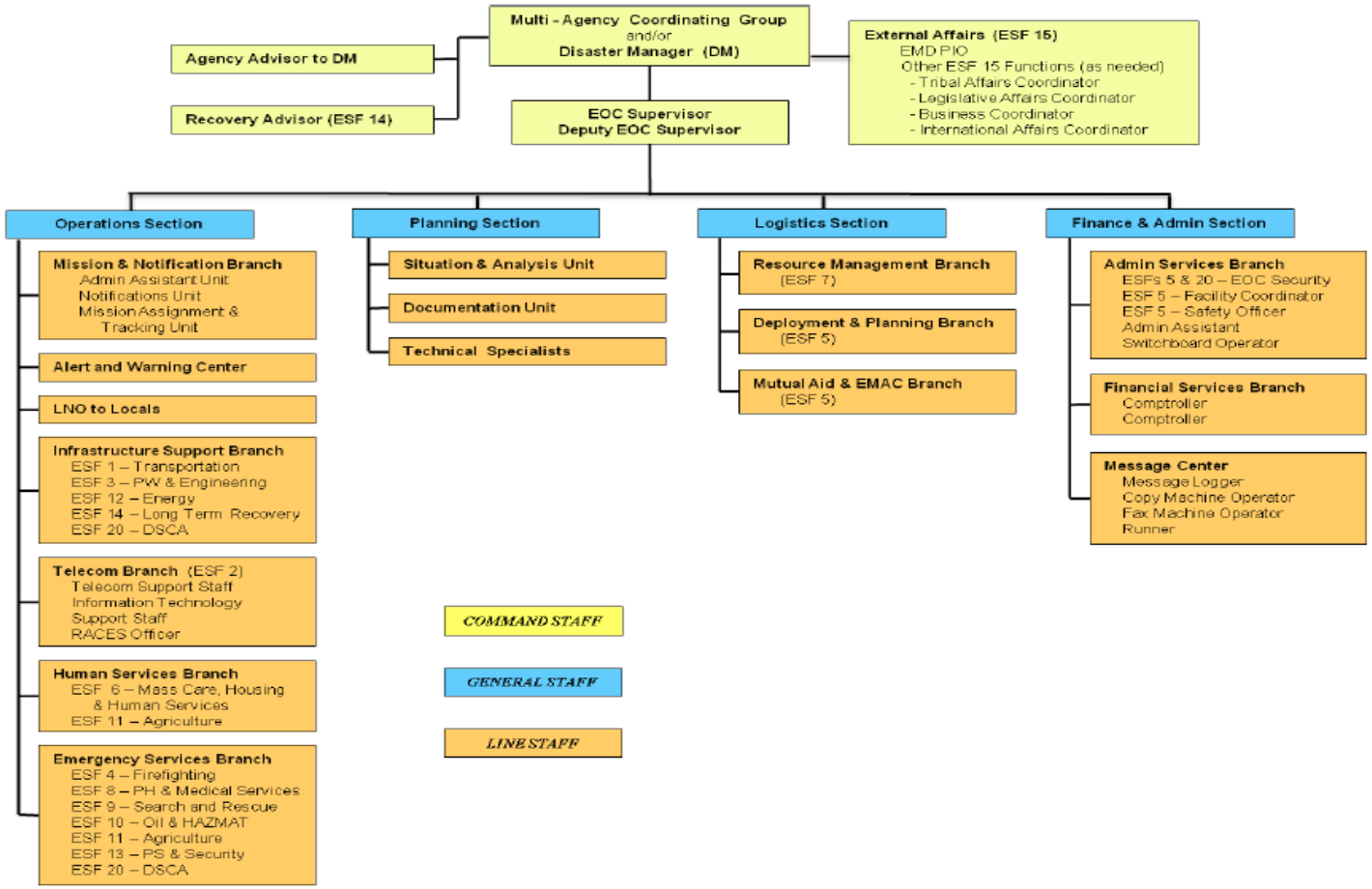
The Administration and Finance Section is responsible for comptroller services and all internal support to the SEOC and staff. This includes, but is not limited to, activation cost tracking and resolution, clerical support, staff assignment and scheduling, record/log maintenance, SEOC security, SEOC facility maintenance, SEOC staff feeding, SEOC logistical support and other administration activities.

The Planning Section collects, compiles, evaluates, and displays information to assess the overall impact and magnitude of an incident. Planning's focus is ahead of the current situation; anticipating and prioritizing projected needs and actions. This includes the damage assessment function in the early stages of recovery efforts and intelligence and information collection to facilitate analysis and forecasting. The Planning Section prepares the Governor's Proclamation of Emergency, SEOC Action Plan and State Situation Report (SITREP).

Emergency Support Functions (ESF) responsible agency representation in the SEOC provides a modular structure to activate the precise capability needed to best address the requirements of the incident and the resulting jurisdictional and agency needs. The ESFs are staffed by primary and support agencies and organizations identified in the respective ESFs. ESFs are activated as needed and on the basis of the size and complexity of the incident.

Figure 0-3 - SEOC Organizational Chart illustrates the level of staffing required for each 12-hour shift during a Phase III or IV activation. Regardless of the activation level, outgoing staff brief incoming staff on the status of the emergency and response activities occurring (NUREG A.4).

Figure 0-3 - SEOC Organizational Chart



C. DIRECTION AND CONTROL

All disasters and emergencies begin locally and initial response is by local jurisdictions working in collaboration with local, joint local and county emergency management agencies. Direction and control provides supervision, authority, coordination, and cooperation of emergency management activities to ensure the continued operation of government and essential services during emergencies.

Operational direction and control of response and recovery activities within local jurisdictions is conducted by on-scene incident commanders who report to the local jurisdiction's elected officials and request resources through the local EOC. Requests for assistance after public, private and mutual aid or inter-local agreement resources from adjacent political subdivisions are exhausted should be requested by the county EOC to the SEOC. Although requests for assistance from cities independently recognized by the state as separate emergency management jurisdictions can be made directly to the SEOC, it is strongly recommended such requests be coordinated through the county EOC beforehand to verify if more timely assistance is available through the county.

Operational direction and control of emergency management response and recovery activities within state agencies is conducted by the agencies' on-scene incident commanders. Requests for medical assistance should be directed to the jurisdiction in which the facility is located. Damage to leased facilities should be reported and assistance requested from the owner of the building(s). Loss or disruption to utilities should be reported to the utility. All other requests for assistance should be through the state agency to the SEOC.

D. RESPONSIBILITIES

The following key positions in state and federal government direct and control emergency management activities during disasters and emergencies.

1. *The Governor* is responsible (statutorily and constitutionally) for providing general supervision and control of the emergency management functions, carrying out the provisions of Chapter 38.52 RCW and, in the event of disaster beyond local control, assuming direct operational control over all or any part of the emergency management functions within this state, as described in RCW 35.52.050(1). In performing his or her duties under Chapter 38.52 RCW, the governor is authorized to cooperate with the federal government, with other states, and with private agencies in all matters pertaining to the emergency management of this state and of the nation, as authorized in RCW 38.52.050(2) (NUREG A.2.b). The Governor is further authorized and empowered:

- to make, amend, and rescind the necessary orders, rules and regulations to carry out the provisions of Chapter 38.52 RCW within the limits of the authority conferred upon him or her herein, with due consideration of the plans of the federal government [RCW 38.52.050(3)(a)];
- on behalf of this state, to enter into mutual aid arrangements with other states and territories, or provinces of the Dominion of Canada and to coordinate mutual aid inter-local agreements between political subdivisions of this state [RCW 38.52.050(3)(b)]; and
- to cooperate with the President and the heads of the armed forces, the emergency management agency of the United States, and other appropriate federal officers and agencies, and with the officers and agencies of other states in matters pertaining to the emergency management of the state and nation [RCW 38.52.050(3) (e)].

2. *The Director of the Washington Military Department* may employ personnel and make expenditures within the appropriation therefore, or from other funds made available for purposes of emergency management, as may be necessary to carry out the purposes of Chapter 38.52 RCW, as authorized by RCW 38.52.030(1). The director, subject to the direction and control of the Governor, is responsible to the Governor for carrying out the program for emergency management of this state (NUREG A.1.d). The director coordinates the activities of all organizations for emergency management within the state, maintains liaison with and cooperates with emergency management agencies and organizations of other states and the federal government and has such additional authority, duties and responsibilities authorized by Chapter 38.52 RCW, as may be prescribed by the Governor, pursuant to RCW 38.52.030(2). The director, subject to the direction and control of the Governor, shall develop and maintain the CEMP for the state and is responsible to the Governor for carrying out the program for emergency

management of the state, to include the procedures to be used during emergencies for coordinating local resources, as necessary, and the resources of all state agencies, departments, commissions and boards, as authorized by RCW 38.52.030(3). This includes preparing and administering a state program for emergency assistance to individuals within the state who are victims of a natural, technological or human caused emergency or disaster, as defined by RCW 38.52.010(6)(1). The program is to be integrated into and coordinated, to the extent possible, with federal disaster assistance plans and programs providing the state or, through the state, any political subdivision thereof, services, equipment, supplies, materials, or funds by way of gift, grant or loan for purposes of assistance to individuals affected by a disaster.

3. *The Director of the Emergency Management Division* (EMD) ensures the state is prepared to deal with any disaster or emergency by administering the program for emergency management delineated by the Washington Military Department Director. The EMD Director is also responsible for coordinating the state's response in any disaster or emergency.

4. *The State Coordinating Officer (SCO)* is the authorized representative of the Governor to manage and coordinate state and local emergency response and recovery efforts. The SCO is authorized to commit any and all state resources necessary to cope with the emergency or disaster. The SCO also has the authority to direct all state, regional and local agencies, including law enforcement agencies, to identify personnel needed from those agencies to assist in meeting the needs created by this emergency. The Governor directs all agencies and departments to place all such personnel under the direct command of the SCO.

5. *The Governor's Authorized Representative (GAR)* is empowered by the Governor to execute all necessary documents for disaster assistance on behalf of the state, including certification of application for public assistance. The GAR also coordinates and supervises the state disaster assistance program to include serving as its grant administrator. The GAR is designated in the FEMA-State Agreement. In general, the SCO is designated the GAR. The exception is in the case of the FEMA State Fire Assistance Grant Program when the State Forester is designated as the GAR.

6. *The Director of Emergency Management for Political Subdivisions* is appointed by the executive head of the political subdivision, and has direct responsibility for the organization, administration and operation of the local organization for emergency management, subject to the direction and control of such executive officer or officers. The Political Subdivision Director performs emergency management functions within the

territorial limits of the political subdivision within which it is organized and, in addition, conducts such functions outside of its territorial limits as may be required pursuant to the provisions of Chapter 38.52 RCW.

The political subdivision, in which any disaster or emergency occurs, as defined in RCW 38.52.010(6)(a), is authorized by RCW 38.52.070(2) to enter into contracts and incur obligations necessary to combat such disaster, protect the health and safety of persons and property and provide emergency assistance to the victims of the disaster. Each political subdivision is authorized to exercise these statutory powers in the light of the exigencies of an extreme emergency situation without regard to time-consuming procedures and formalities prescribed by law (excepting mandatory constitutional requirements), including, but not limited to, budget law limitations, requirements of competitive bidding and publication of notices, provisions pertaining to the performance of public work, entering into contracts, the incurring of obligations, the employment of temporary workers, the rental of equipment, the purchase of supplies and materials, the levying of taxes and the appropriation and expenditures of public funds.

7. *The Federal Coordinating Officer (FCO)* coordinates federal assistance to a state affected by a disaster or emergency. The FCO will generally be assigned to the Joint Field Office (JFO) for the duration of the emergency and work with the SCO to coordinate the federal response. The FCO will be in unified command with the SCO throughout the event to coordinate requested federal assistance.

E. MONITORING, DETECTION, ALERT AND WARNING

The Alert and Warning Center (AWC), located in Building 20 on Camp Murray, Washington, is a function of the Emergency Management Division (EMD) which provides 24-hour coverage for notifications, alerts and warnings of emergency events affecting the state of Washington (NUREG A.1.e, F.1.a). The AWC provides the state with a single point to disseminate information and warnings to governmental officials (federal, state and/or local) when a hazardous situation could threaten or is threatening the general welfare, health, safety, and/or property of the state's population or environment. As the Washington State Warning Point, the AWC provides the official notification mechanism for several governmental programs requiring notifications under specified conditions such as the Radiological Emergency Preparedness. In addition, the AWC provides continuous situational monitoring during non-emergency periods as well as in times of disaster and emergency. The SEOOs monitor media outlets from various sources such as online news sites, television, online radio stations, online newspapers, etc., 24 hours a day. SEOOs work

12-hour shifts with two on-duty SEOOs for each shift; EMD's Deputy SEOC Manager maintains the staff contacts and schedule to ensure 24-hour coverage in the AWC. Continuous information flow also comes from a variety of sources such as emergency management officials, regional coordinators, county warning points, private citizens, National Weather Service, nuclear power plant, private industry, etc. The collected information is analyzed by the SEOOs on-duty in the AWC for state, regional, national, and international threats.

The EMD Response Section Manager is responsible for managing the AWC and maintains the personnel roster for the SEOOs (NUREG A.1.e).

The AWC maintains back-up dedicated voice and data systems which are linked to each county warning point, the four National Weather Service forecast offices serving Washington, the Emergency Alert System, local primary television and radio stations, each nuclear facility, the USDOE Hanford Site, and the Washington Military Department Joint Operations Center. The entire emergency communications systems is tested during annual exercises (NUREG F.3). The SEOOs participate in CRASH line tests weekly, NAWAS tests twice daily, and federal call tests quarterly.

Figure 0-4 - Communication Matrix identifies the primary and secondary means of notification and ongoing communication to federal and state agencies, local jurisdictions, and facilities.

Should the initial notification of an event may originate from an entity other than the licensee, such as the Washington State Fusion Center, the SEOO validates the notification with the affected facility. The SEOO Standard Operating Procedures contain current points of contact for the licensee and responding organizations, including the methods of notification, backup, and message verification (NUREG E.1).

Figure 0-4 - Communication Matrix

	CRASH		Dial-up	PIO	Dedicated Fax	Commercial	Radio				Commercial	Satellite	Email	WebEOC
	CGS	DOE	CGS	Dial-up CGS	CGS	Fax	CEMNET	LERN	Fire	Amateur	Phone	Phone		
Washington State EOC	P	P	S	S	P	S	S			S	P		P	P
Franklin EOC	P	P	S	S	P	S	S			S	P	S	P	P
Franklin Dispatch	P	P			P	S		S	S		P			
Benton EOC	P	P	S	S	P	S	S	S	S	S	P	S	P	
Benton Dispatch (SECOMM)	P	P	S		P	S	S	S	S		P			P
Yakima EOC						S	S				P		P	P
Yakima Dispatch (SUNCOM 911)						S					P			
Grant EOC		P				S	S				P		P	P
Grant Dispatch (MACC)						S					P			
Adams EOC						S	S				P		P	P
Adams Dispatch						S					P			
Walla Walla EOC						S	S	S	S	S	P		P	P
Walla Walla Dispatch						S					P			
Klickitat Dispatch						S					P			

	CRASH		Dial-up	PIO	Dedicated Fax	Commercial	Radio				Commercial	Satellite	Email	WebEOC
	CGS	DOE	CGS	Dial-up CGS	CGS	Fax	CEMNET	LERN	Fire	Amateur	Phone	Phone		
Kittitas Dispatch (KITTCOM)						S					P			
Skamania Dispatch						S					P			
Oregon OERS						S					P		P	
Oregon DOE						S					P		P	
FEMA Region X						S					P	S	P	
Yakama Nation						S					P			
CGS EOF	P	P	S		P	S					S	S		
CGS JIC	P		S	S	P	S					S		P	
USDOE-RL Shift Office	P	P			P	S					S		P	
USDOE-RL EOC	P	P	S		P	S					S		P	
USDOE-RL JIC						S					S		P	

Primary = P
Secondary = S

The SEOOs staffing the AWC follow established procedures outlined in the *Washington State Division of Emergency Management State Emergency Operations Officer Standard Operating Procedures* (SOP) in response to alerts and warnings. SEOOs may also respond to unique circumstances not specifically addressed in an SOP using independent judgment, experience and training to determine the best course of action. Once alerted or warned of a disaster or emergency, the SEOOs immediately notify the EMD Response Section Manager; Deputy EOC Manager; EMD Mitigation, Response and Recovery Unit Manager; EMD Assistant Director and/or EMD Director or Acting Director, any of whom can activate the SEOC. The SEOOs will contact The Adjutant General (Director, Washington Military Department), Governor's Staff Director and Press Secretary, potentially affected or responding state agencies, local governments, tribes, neighboring states and provinces and requisite federal agencies and apprise them of the situation and recommend protective and/or response actions. The SEOOs activate the SEOC based on the Emergency Classification Level at the affected facility and conduct additional notifications in accordance with the SOPs. The Response Section Manager or Deputy EOC Manager then briefs senior management and discusses the assignment of a Disaster Manager (DM) and which Emergency Support Functions (ESFs) may be needed. The SEOOs notify the DM and other essential staff and ESFs by phone to report to the SEOC. SEOOs, managers, or supervisors may make the initial notifications to staff by phone, email, or in person; current staff contact information is maintained by the Director's office (TEL 1) and each staff manager and supervisor (NUREG E.2.1, F.1.e). SEOOs make the initial notifications to appropriate organizations as described in the SEOO SOP (NUREG E.2.2). Notification methods are detailed in Figure 0-4 - Communication Matrix (NUREG E.2.5).

F. EMERGENCY DECLARATION / PROCLAMATION PROCESS

A Governor's proclamation of emergency is important for a number of reasons, not the least of which is the proclamation allows the state and local governments to mobilize their communities for impending or existing disasters and emergencies and facilitates response activities. The Governor, for example, routinely proclaims a state of emergency pursuant to RCW 43.06.010(12) to meet a variety of response and recovery needs, such as:

- deploying response assets;
- activating the National Guard in the event of a public disaster;
- prohibiting activities to help preserve and maintain life, health, property or the public peace;
- waiving or suspending certain state laws and regulations, including procurement restrictions, to facilitate response and recovery operations;
- expanding social services;
- providing assistance to disaster survivors, and
- managing elections disrupted by the emergency.

The process of proclaiming an emergency is described in further detail below.

Authority to Proclaim a State of Emergency

The Governor's authority to proclaim a state of emergency is identified in RCW 43.06.010(12). The executive heads of government at the local level (mayor, city manager, or board of county commissioners) may declare a local state of emergency in accordance with the provisions of their local codes, charters, and/or ordinances. The Governor is empowered with this responsibility at the state level. The President of the United States declares an emergency or disaster at the national level.

Local Political Subdivision Emergency Declaration Process

Impacted counties, cities, or towns will coordinate the emergency response effort to an emergency or disaster within their political jurisdictions and should declare/proclaim a state of emergency in accordance with their local codes, charters and/or ordinances. When the event is beyond the capacity of the local government, the subdivision's emergency management agency will request state assistance through the SEOC.

State Emergency Proclamation Process

The Governor may, after finding a disaster or emergency exists within the state or any part thereof affecting life, health, property or the public peace, proclaim a state of emergency in the area affected (NUREG A.2.b). The powers granted the Governor during a state of emergency will only be effective within the area described in the proclamation, in accordance with RCW 43.06.210(12). The proclamation by the Governor is also a prerequisite for accessing the full range of federal disaster recovery programs available to the state and is a precondition for requesting interstate mutual aid through the Emergency Management Assistance Compact (EMAC). The Governor's authority to proclaim an emergency and issue related orders and proclamations under Chapters 38.08, 38.52 and 43.06 RCW is a broad grant of police power to the Governor in times of emergency.

The general process for proclaiming a state of emergency is as follows.

- The public is alerted to and/or warned of an imminent or actual event.
- The SEOC initiates response plans of the CEMP to manage the emergency or disaster.
- A political subdivision declares a local state of emergency.
- The MACG, Military Department Director, EMD Director and/or DM determine an emergency proclamation is required and verifies the specific, factual background and justification for the proclamation.
- The MACG, Military Department Director, EMD Director and/or DM recommends to the Governor that he or she proclaim a state of emergency. The SEOC prepares the Governor's Proclamation and forwards it to the Governor's Office for approval.
- The Governor approves and signs the proclamation and forwards it to the Secretary of State for attestation, affixation of the state seal, and filing. The proclamation is also dated and time stamped. Copies of the proclamation are forwarded to the SEOC, government agencies and Emergency Support Function 15 (External Affairs) for dissemination to the public.
- If federal assistance is requested, a copy of the Governor's Proclamation is provided to the FEMA Region X Regional Administrator.

All proclamations shall indicate the nature of emergency, the area or areas threatened and the conditions which have brought the emergency about or which make possible its termination. The state of emergency shall cease to exist upon the issuance of a proclamation of the Governor declaring its termination. The Governor must terminate the proclaimed state of emergency when order is restored in the area affected in accordance with RCW 43.06.210.

G. MITIGATION ACTIVITIES

Mitigation is an action to reduce or eliminate long-term risk to people, property, the environment and the economy from natural and technological hazards. The *Washington State Enhanced State Hazard Mitigation Plan* (SHMP) provides policy guidance for hazard mitigation in the state of Washington. The plan identifies hazard mitigation goals, objectives, actions, and initiatives for Washington State government that will reduce injury and damage from natural hazards. The goal of the SHMP is to maximize the disaster resistance of Washington State citizens, communities, businesses, and government through all-hazard planning and budgeting. The SHMP shows how to identify, develop, implement and evaluate strategies to reduce statewide vulnerability to natural hazards.

The SHMP incorporates the information gathered from state agencies, private sector, and the public following disasters and emergencies. State agencies are required to:

- review the SHMP annually.
- coordinate the completion of recommendations for which they have lead responsibility and educate their staff regarding their agencies responsibilities.
- report completed recommendations as soon as possible and provide an annual update, by August 31st of each year, on the progress of recommendations to the EMD Hazard Mitigation Strategist.
- participate on the Hazard Mitigation Survey Team, as needed, following any Presidential Disaster Declaration.
- conduct structural and non-structural hazard analysis of their facilities to identify and mitigate hazardous conditions.

H. PREPAREDNESS ACTIVITIES

Washington State agencies should develop operational capabilities that facilitate response in the event of a disaster or emergency. At a minimum, state agencies should consider the following preparedness activities.

- Conduct resource capabilities and needs assessment for disaster scenarios considering personnel, equipment, facilities, critical business functions and operations and materials for life and family protection safety.
- Develop and maintain a current resource inventory.
- Establish a method for resource coordination and integration among responding agencies, departments and individuals.
- Determine the need for mutual aid and memorandums of agreement, establish written agreements and reference or include these agreements in the agency's internal emergency management program.
- Development of procedures to document and report emergency or disaster-related expenditures to qualify for insurance, state or federal reimbursement.

I. RESPONSE ACTIVITIES - GENERAL

State agencies should establish response strategies and actions to be taken immediately before, during or directly after an emergency occurs to save lives, minimize damage to property and the environment and to enhance the effectiveness of disaster recovery and business resumption. Specific state agency ESF response activities are listed in the CEMP. State agencies should, at the minimum, establish the following response activities.

- Implement notification and activation procedures for the following.
    - Processing emergency calls or information.
    - Activation of emergency operations procedures.
    - Notification of personnel who have response duties.
    - Mobilization or demobilization of services.
    - Continuity of government.
- Implement communications procedures, including data and voice, in support of emergency operations.
- Activate procedures to disseminate and respond to requests for disaster information involving the agency, employees, responders, the public, and the media.
- Implement procedures to authorize, initiate, and accomplish evacuation or sheltering in place.
- Personnel identification and accountability
    - Control access to the area affected by the emergency or disaster.
    - Identify personnel engaged in activities at the incident.

  - Account for personnel engaged in incident activities.
- Implement procedures for providing or requesting mass care for personnel or populations affected by the emergency or disaster.
- Activate procedures to provide for mental health and physical well-being of individuals affected by the emergency or disaster.
- Implement procedures to recover, identify, and safeguard human remains.
- Implement procedures for maintaining the continuity of response activities while initiating and conducting recovery activities.
- Conduct and manage ESF primary and supporting agency responsibilities as reflected in this plan.
- Activate procedures to track and manage personnel time and expenditures related to the event.

1. **Radiological Release "Early Phase Actions" -** actions taken just before and during a radiological release

   a. Facilities provide emergency classification information to state and local jurisdictions and activate an emergency response facility to coordinate initial plan actions that include, but are not limited to, the following.

   - Emergency notification – safeguarding facility and onsite workers.
   - Changes in emergency classifications and/or protective action recommendations (PARs) to local, state, and federal government.
   - Activate initial emergency response resources.
   - Provide dose projection and assessment to the state and affected county (ies).
   - Provide Joint Information Center (JIC) facilities.
     - Identify a designated spokesperson with access to all necessary information.
     - Keep the public and media informed.
     - Coordinate rumor control.

   b. Plume exposure pathway EPZ counties activate EOCs upon notification of specified emergency classification levels (Appendix 4, Notification Forms) from the facility and/or SEOC and take initial planned actions to include the following.

   - Confirm occurrence of a chemical/radiological emergency.
   - Notify selected emergency response personnel to report to the EOC.
   - Assume protective action decision-making authority.
   - Establish communications with emergency facilities/SEOC.
   - Activate initial response and resource requirements.
   - Activate system to warn residents of emergency.
   - Decide upon and implement protective actions.
   - Forward response/resource requirements to the SEOC.
   - Open appropriate Emergency Worker/Assistance Centers (EWACs).

   c. Place ingestion exposure pathway EPZ county EOCs on stand-by.

   d. County health and agricultural authorities should consider issuing an agricultural advisory to advise the agricultural community to take steps to protect their animals and sources of food and water. The radiological dosage that could be encountered off the reservation appears to pose only an increased risk of cancer in the distant future.

   e. SEOC actions focus on the following basic activities.

- Confirm occurrence of a chemical/radiological emergency with facilities.
- Activate the SEOC, if appropriate, using emergency classification levels (ECL) and agency notifications (Appendix 9, Emergency Classification Levels and Emergency Classification System).
- SEOO will notify required agencies to staff the SEOC. Their assistance includes technical advice and information, activating agency resources to commit to response actions and other assistance, as warranted.
- Establish communications with facility, EPZ counties, and other states.
- Confirm federal, state, and county agencies have been notified.
- In coordination with the county(ies) and the facility, identify initial response and resource requirements.
- Coordinate and provide information to the public, government agencies, and the media – including activating the Emergency Alert System (EAS), if a county is unable to activate the system. If incomplete, inaccurate, or ambiguous information is detected in the monitored broadcast, then a correction is broadcast as soon as possible. ESF 15 and rumor control personnel are notified of the problem.
- Recommend use of protective drugs for offsite emergency workers for radiological events.
- Establish radiological exposure tracking system for radiological event.

2. **Radiological Release "Intermediate Phase Actions"** - actions taken after a release has stopped

a. State actions expand upon events begun during the early phase.

- Assume protective action decision (PAD)-making authority.
- For radiological events identify the affected area(s) through field team monitoring, sampling, and computer projections. A federal Aerial Monitoring System flyover also can be used, if available. Field team monitoring and sampling with verification by the Washington State Department of Health.
- Coordinate with the affected counties to establish geopolitical boundaries for relocation and Food Control Area(s) (FCA).
- Carry out Agriculture and Food Control measures (Annex F).
- Authorize re-entry to restricted/relocation areas for essential services.
- Authorize return of residents and workers to areas determined to be unaffected or cleared.
- Initiate re-entry and recovery activities.

b. County actions expand upon early phase actions.

- Establish or reposition Traffic Control Points (TCPs) and Access Control Points (ACPs).
- Propose geopolitical boundaries for relocation and food control area(s) based upon Washington State Department of Health and facility projections and recommendations.
- Continue to advise the public about the status of the event.

c. Facility actions include both onsite and offsite activities.

- Assist state and county activities.
- Initiate long-term onsite repair actions.
- Respond to needs of employees.

3. **Radiological Release "Late Phase Actions" -** initiation of recovery and restoration activities at the conclusion of response and transition into Recovery Activities

   a. The specific type of emergency and the quantity and type of material released will determine recovery actions following a facility emergency.

   b. Washington State Governor's Recovery and Restoration Task Force (RRTF) will be convened or requested by the Director of state EMD. This group will make recovery and restoration recommendations relating to Washington State agencies and counties. Membership and specific responsibilities of the task force are described in the CEMP.

   c. The RTF will determine the extent of economic, social, psychological, and physiological impacts on the citizens and serve as a guidance group to the Governor on a program of continued recovery. The RTF will determine if active protective measures require extension or relaxation.

J. RECOVERY ACTIVITIES

State agencies should establish comprehensive disaster recovery and business resumption strategies and activities to return vital systems to no less than minimum operating standards with additional long-term activities designed to return life and business operations to normal or improved levels. State agencies should conduct a business impact analysis in order to establish short and long-term recovery goals and objectives.

These goals and objectives should recognize but not be limited by the following considerations.

- Health and safety of employees and clients
- Continuity of operations and services
- Environmental impact of disaster
- Economic impact
- Regulatory and contractual requirements
- Conducting and managing ESF 14 – Long-Term Community Recovery, RRTF and/or Washington Restoration Organization (WRO) responsibilities, located in the CEMP

Short-term recovery goals should allow for the following.

- Identifying essential records, vital systems, and operations
- Establishing priorities for reinstatement of systems and operations
- Establishing maximum acceptable downtime before reinstatement to an acceptable system and operational level
- Identifying minimum resources needed to recover business operations

Long-term recovery goals should consider the following.

- Strategic planning, to include, budgeting for structural and nonstructural repairs and mitigation
- Management and coordination of recovery activities
- Managing fiscal operations and recovery funding, to include capturing costs for reimbursement
- Management of volunteer, contractual, mutual aid and agency resources
- Development and implementation of mitigation goals and activities

State agencies should identify recovery tasks and responsibilities to achieve short and long-term goals and objectives. State agencies should at a minimum include the following recovery tasks and responsibilities in their internal emergency management program.

- Organization and staffing for continuity of government
- Essential records maintenance
- Resource procurement
- Restoration of utility services
- Damage assessment documentation and record keeping
- Operation of business with either limited or no utility services in place
- Agency, local jurisdiction, state and community resource coordination
- Debris and waste removal
- Restoration and salvage
- Personnel reunification
- Identification of recovery resources
- Identification of recovery funding sources

State agencies should conduct a post-disaster situation analysis, and an after-action report to review and determine the effectiveness of established operating procedures, assigned tasks, and responsibilities.

III. ORGANIZATIONS AND ASSIGNMENT OF RESPONSIBILITIES

A. ORGANIZATIONS

State Agencies

- Washington State Department of Agriculture (principal responder)
- Washington State Department of Commerce
- Energy Office
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Health (principal responder)
- Office of Radiation Protection
- Office of Environmental Health, Safety, and Toxicology
- Washington State Department of Labor and Industries
- Washington State Military Department
- Emergency Management Division (principal responder)
- National Guard
- Washington State Parks and Recreation Commission
- Washington State Patrol
- Washington State Department of Transportation
- Washington State Utilities and Transportation Commission
- Energy Facility Site Evaluation Council
- Governors' Office of Indian Affairs

County Emergency Management Agencies

- Adams County Emergency Services
- Benton County Emergency Services (principal responder)
- Franklin County Emergency Management (principal responder)
- Grant County Department of Emergency Management
- Kitsap County Department of Emergency Management
- Kittitas County Sheriff's Department of Emergency Management
- Klickitat Department of County Emergency Management
- Snohomish County Department of Emergency Management
- Walla Walla County Department of Emergency Management
- Yakima County Office of Emergency Management

Federal Agencies

- Advisory Team for Environment, Food, and Health
    - EPA Representative
    - HHS Representative
    - USDA Representative
- Federal Emergency Management Agency, Department of Homeland Security Region X Liaison
- U.S. Coast Guard, 13th District
    - Sector Columbia River
    - Sector Puget Sound
- U.S. Department of Energy-Hanford Site
- U.S. Navy
    - Puget Sound Naval Shipyard & Naval Station Bremerton
    - U.S. Naval Base Kitsap Bangor & Submarine Group 9
    - U.S. Naval Station Everett
    - Naval Nuclear Propulsion Program
- U.S. Nuclear Regulatory Commission

Nongovernmental (NGO) and Volunteer Organizations

- American Red Cross
- AREVA NP, Inc., Hanford (principal responder)
- Energy Northwest, Columbia Generating Station (principal responder)
- Perma-Fix NW Hanford
- State of Oregon
- Volunteer Organizations

B. RESPONSIBILITIES

Common Responsibilities

Prepare plans and procedures to carry out the responsibilities outlined in this Plan and NUREG-0654 / FEMA-REP-1 with Revisions and Supplements, as appropriate.

Prepare, coordinate, and maintain plans / procedures with primary responsibilities as detailed in Appendix 8 - Agency Functional Responsibility Matrix.

Respond to emergencies involving releases from Columbia Generating Station, Naval Base Kitsap, Naval Station Everett, and the Hanford Site following this Plan, the Washington State CEMP, and appropriate agency and local jurisdiction plans and procedures.

Washington State Department of Agriculture (WSDA) will expeditiously assemble and issue agricultural advisories to protect the agricultural community in a radiological event. WSDA will inform affected counties of agricultural advisories.

State Agency Specific Responsibilities

1. Washington State Department of Agriculture

- Provide a liaison to the Washington State Emergency Operations Center (SEOC) policy room.
- Provide support by sending liaisons to the Benton County EOC, Franklin County EOC, the SEOC, and the affected facility, and staff to the WSDA Pasco Field Office and the field to implement appropriate protective actions, if needed.
- Provide current information on farms, food crops, food processors and distributors, and other agricultural data under WSDA's authority.
- Provide and update information on the ingestion pathway.
- Provide public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities.
- Assist in the coordination of interstate and international food safety activities through the SEOC Multi-Agency Coordination Group (MACG) and the federal Food and Drug Administration (FDA), as appropriate.
- Prepare and maintain response procedures for radiological emergencies.
- Provide representation to the RRTF in accordance with ESF 14 as a core member.
- Implement (agricultural protection) food control measures in coordination with other agencies.
- Prepare and issue agricultural advisories.
- Prepare and implement plans to reduce the Food Control Area, release food, dispose of contaminated food and conduct embargoes.
- Function as a principal radiological response organization.

2. Washington State Department of Commerce, Energy Office

- Provide a representative for the RRTF.
- Provide public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities.

3. Washington State Department of Ecology

- Serve as the state lead for offsite cleanup of hazardous materials or wastes, including mixed wastes, following a release from the Hanford Site, Naval Base Kitsap or Naval Station Everett.
- Participate as a member of the SEOC policy room for the Hanford Site, Naval Base Kitsap, or Naval Station Everett emergencies.
- Measure ambient air concentrations for particulate materials, carbon monoxide, sulfur dioxide, and other contaminants in support of Hanford Site.
- Coordinate with, and assist the Washington State Department of Health (DOH) and the Washington State Department of Agriculture (WSDA) in developing and implementing procedures for sampling food crops, waterways, and other environmental media that may be contaminated by a release from the Hanford Site, Naval Base Kitsap, or Naval Station Everett.
- Provide public information support to the SEOC.
- Provide field teams, as staff levels allow.
- Provide staff support to the SEOC and the Hanford Site, as necessary.
- Provide a representative for the RRTF.

4. *Washington State Department of Fish and Wildlife*

- Provide a liaison to the SEOC during an Alert, Site Area Emergency, or General Emergency classification level.
- Provide information to the SEOC policy room on the impact of the emergency on fish, aquatic food resources, fish and wildlife habitat, hunting and fishing seasons, and the Department's resources. Make recommendations for preventing public consumption of contaminated food from fisheries or wildlife habitats.
- Provide support to affected counties.
- Provide evacuation verification of department-controlled lands lying within the plume exposure pathway emergency planning zone (EPZ) of a fixed nuclear facility.
- Provide law enforcement support to the Washington State Patrol (WSP)
- Provide traffic control support to the Washington State Department of Transportation (WSDOT) to support evacuations and rerouting vehicle traffic
- Provide air transportation for selected state personnel, and / or samples for laboratory analysis, upon request.
- Provide public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities.
- Support the functional role of the Department of Fish and Wildlife as outlined in the CEMP.
- Support the RTF activities.

5. *Washington State Department of Health*

- Provide technical expertise.
    - Dose projection and assessment
    - Assess data and recommend protective actions for public safety
    - Hazard mitigation
    - Monitoring
    - Take environmental samples
    - Sample agricultural products
    - Analyze samples at the Washington State Public Health Laboratory and assess data
- Set up food control measures in coordination with other state and local agencies.
- Provide technical basis for establishing and reducing food control and relocation areas.
- Conduct Health portion of Emergency Workers Assistance Center (EWAC) operations when requested by a county.
- Specify action levels of determining the need for decontamination (NUREG K.5.a).
- Provide technical consultation on radiological issues to other agencies: federal, state, local, and facilities.
- Certify food as "safe for human consumption" for subsequent release by WSDA.
- Assist with determining levels of contamination in air, soil, water, and crops.
- The Director, Office of Radiation Protection, in coordination with the SEOC Executive Section, is responsible for requesting specialized monitoring and assessment support.
- Prepare and maintain response procedures for radiological emergencies.
- Function as a principal radiological response organization.
- Provide a representative to the RTF.

Office of Radiation Protection

- Office Director represents Health in the SEOC Executive Section for radiological emergencies.
- Assess and minimize the impact to Public Health from the effects of radiological emergencies.
- Review and develop protective actions recommendation on the basis of Protective Action Guides, EPA-400, and FDA derived intervention levels to minimize the impact on Public Health from a radiological emergency.

Office of Environmental Health, Safety, and Toxicology

- Office Director represents Health in the state EOC Executive Section for the Office of Environmental Health Assessments.

- Assess and minimize the impacts to Public Health from the effects of chemical and biological emergencies.
- Review and develop protective actions recommendation on the basis of Protective Action Guides, EPA-400, and FDA derived intervention levels to minimize the impact on Public Health from a chemical or biological emergency.

6. *Washington State Department of Labor and Industries*

- Provide worker safety support according to agency plans.
- Provide specific support in terms of certifying personal protective equipment as such equipment becomes available for use by state and local jurisdictions.
- Provide public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities
- Provide representation to the Washington Restoration Organization and Recovery Task Force, in accordance with ESF 14, as a core member.

7. Washington Military Department

Emergency Management Division

- Serve as the lead state agency for the development and implementation of the state Radiological Emergency Preparedness (REP) Program. Review and analyze this plan against national criteria to ensure compliance with goals, procedures, and benchmarks. Advise and assist other state agencies and local governments in the development of their REP plans and programs which are in compliance with applicable state and / or federal laws, rules, regulations and executive orders.
- Serve as the primary state agency for the development and implementation of the Radiological Emergency Preparedness (REP) Program.
- Establish the state emergency management organization, to include staffing for normal activities and emergencies or disasters, and assist local jurisdictions in developing emergency management organizations.
- Direct and control the state response and recovery organization based on the National Response Framework (NRF) and National Incident Management System (NIMS) involving broad participation from state, private and voluntary relief organizations.
- Establish and maintain a 24-hour per day statewide communications and alert and warning capability and provides warning of impending emergencies or disasters to at risk political subdivisions.
- Assure the continuity of resources (technical, administrative and material) to support 24-hour operations for a protracted period.

- Coordinate state resources to support local jurisdictions in need of supplemental emergency or disaster assistance.
- Appoint a Fixed Nuclear Facility (FNF) / Radiological Emergency Preparedness (REP) planner with responsibility for the development and updating of fixed facility emergency plans and the coordination of the plans with other organizations. Certify plan currency on an annual basis for radiological emergency preparedness. Provide for an annual review following a cycle of drills and exercises.
- Provide training for the individuals responsible for planning.
- Assist other agencies and local jurisdictions with preparation of plans and procedures as needed.
- Facilitate decisions about notification, sheltering, evacuation, establishment, and reduction of relocation and food control areas, return, restoration and recovery.
- Prepare state disaster proclamations and the Presidential Disaster Request for the Governor's signature.
- Provide overall administration and coordination for the processing of applications for federal disaster assistance
- Prepare and coordinate Washington State plans and procedures to ensure that public health and safety are maintained.
- Implement protective measures on the basis of Protective Action Guides, EPA-400, and FDA derived intervention levels for incidents in intermediate phase (J.9).
- Prepare and coordinate procedures to support the actions of the Washington State RTF.

National Guard

- Coordinate military support to civil authorities (CEMP ESF-20, Military Support to Civil Authorities).
- Provide limited air, land, and water transport of personnel and equipment.
- Provide supplemental security forces to assist local governments and the WSP in patrolling damaged areas, establishing roadblocks and directing traffic for the preservation of law and order.
- Supplement state communications systems, within capabilities.
- Provide aerial reconnaissance, photographic missions, and radiological and / or chemical monitoring, as requested and within capabilities.
- Provide radiological and chemical agent data from military and mobilization sites, as requested and within capabilities.

8. *Washington State Parks and Recreation Commission*

- Make state park facilities available as assembly, relocation and dispatch areas for emergency or disaster operations, mass care and temporary housing.

- Provide enforcement personnel and equipment to the WSP for special assignments in support of ESF 13.
- Support the SEOC telecommunications systems requirements, within capabilities, in accordance with ESF 2.
- Provide public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities.

9. *Washington State Patrol*

- The WSP provides support and assistance to local, state, and federal agencies. This support and assistance include, but are not limited to, the following.
    - Law enforcement
    - Traffic and access control
    - Telecommunications
    - Coordination of transportation issues with the Military Department and WSDOT
    - Assistance to local authorities with law enforcement operations and the evacuation of persons and property
    - Personnel to support the SEOC
    - Coordination of sample transfers with Health
    - Liaison(s) to local jurisdiction(s), as necessary
    - Support DOH and WSDA at Food Control Points
    - Intelligence and information sharing through the Washington State Fusion Center
    - Situational awareness through fixed wing aerial photography and video
    - Public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities
    - Representative to the Washington Restoration Organization and Recovery Task Force, in accordance with ESF 14, as needed

10. *Washington State Department of Transportation*

- Coordinate ground, air, rail, and marine traffic, as outlined in ESF 1.
- Coordinate with WSP and local jurisdictions.
    - Provide traffic control to support evacuations
    - Provide traffic control on the Washington State Transportation System to prevent entrance of unauthorized persons into sheltered/evacuated areas
    - Assist in promptly identifying and removing impediments to any evacuation effort

    - Provide barricades, road signs, and highway rerouting information necessary to redirect traffic from relocation and food control areas, provided resources are available
- Coordinate with WSP in rerouting vehicle traffic.
- Provide a liaison to the SEOC to coordinate WSDOT resources, as requested.
- Assess damage to the Washington State Transportation System.
- Coordinate transportation missions, except those items that are the responsibility of the Logistics Chief of the SEOC.
- Provide a public information officer support to the Office of the Governor, ESF 15 or the lead state agency during response and recovery activities.
- Provide representation to the Washington Restoration Organization and Recovery Task Force, in accordance with ESF 14, as a core member, if required.

11. *Washington State Utilities and Transportation Commission, Energy Facility Site Evaluation Council*

- Provide information to support the SEOC policy room during fixed facility nuclear events.
- Support the development of Protective Action Recommendations (PARs) and Protective Action Decisions (PADs).
- Support the Nuclear Regulatory Commission (NRC) Liaison Officer, when requested.
- Support the development of public information.
- Provide representation to the Washington Restoration Organization in accordance with ESF 14, for an event at the Columbia Generating Station, if required.

12. Governor's Office of Indian Affairs

- Provide coordination by state agencies and counties with Indian governments that may be affected by the emergency
- Ensure actions are taken to protect cultural resources of the Indian Nations and their members.

County Emergency Management Agencies

1. Adams County Department of Emergency Management

- Prepare a contingency plan for the release of radioactive or other hazardous materials from Columbia Generating Station and/or the Hanford Site.
- Provide information and education to the public.
- Support other jurisdictions when there is an offsite threat that does not threaten Adams County.
- Recommend and implement appropriate protective actions to the public when there is an offsite release that affects the county.
- Establish an Agricultural Control System to contain contaminated products.
- Establish and maintain an EOC.
- Establish and maintain an Emergency Communications System to include Alert and Warning of all segments of the transient and resident population.
- Recommend geopolitical boundaries for Food Control Areas (FCAs).

2. Benton County Emergency Services

- Prepare a contingency plan for the release of chemical, radiological or other hazardous materials from Columbia Generating Station, and/or the Hanford Site.
- Provide information and education to the public.
- Support other jurisdictions when there is an offsite threat that does not threaten Benton County.
- Recommend to the public protective actions to be taken when there is an offsite release that affects the county.
- Establish an Agricultural Control System to contain contaminated products.
- Establish and maintain an EOC.
- Establish and maintains an Emergency Communications System to include Alert and Warning of all segments of the transient and resident population.
- Recommend geopolitical boundaries for relocation and Food Control Areas (FCAs) in a radiological event.
- Coordinate with adjacent county(ies) in the development of relocation and FCAs.
- Manage a safe and efficient evacuation process, including traffic control, transportation, and evacuation assistance.
- Project traffic capacities of evacuation routes under emergency conditions when Energy Northwest periodically updates the evacuation time studies.
- Maintain current maps of evacuation routes, evacuation areas, relocation centers, reception centers, decontamination facilities, and shelter areas.
- Develop a means to control access to evacuated areas and identify the organizations responsible for access control in a radiological event.

- Identify means to deal with potential impediments to the use of evacuation routes, and calculates time estimates for evacuation.
- Provide evacuation assistance to facilities (Hanford Site and Columbia Generating Station) and prepare to coordinate with other organizations to expedite evacuation of onsite personnel.
- Establish Emergency Worker Assistance Centers (EWACs) in a radiological event.
- Establish relocation centers compliant with NUREG criteria, including provisions for location outside of the plume exposure EPZ; evacuee tracking; staffing requirements; students; service animals; evacuee placement; and radiological monitoring of evacuees, vehicles, and service animals (NUREG J.10h).
- Reference in the county fixed facility hazard plan all necessary letters of agreement or Memoranda of Understanding (MOU) between local officials and other public or private groups.
- Function as a principal radiological response organization in a radiological event.

3. *Franklin County Emergency Management*

- Prepare a contingency plan for the release of radioactive or other hazardous materials from Columbia Generating Station and/or Hanford Site.
- Provide information and education to the public.
- Support other jurisdictions when there is an offsite threat that does not threaten Franklin County.
- Recommend to the public protective actions to be taken when there is an offsite release that affects the county.
- Establish an Agricultural Control System to contain contaminated products
- Establish and maintain an EOC.
- Establish and maintain an Emergency Communications System to include Alert and Warning of all segments of the transient and resident population.
- Recommend geopolitical boundaries for relocation and Food Control Areas (FCAs) in a radiological event.
- Coordinate with adjacent county(ies) in the development of relocation and FCAs.
- Manage a safe and efficient evacuation process, including traffic control, transportation, and evacuation assistance.
- Project traffic capacities of evacuation routes under emergency conditions when Energy Northwest periodically updates the evacuation time studies.
- Maintain current maps of evacuation routes, evacuation areas, relocation centers, reception centers, decontamination facilities, and shelter areas.

- Develop a means to control access to evacuated areas and identify the organizations responsible for access control in a radiological event.
- Identify means to deal with potential impediments to the use of evacuation routes, and calculates time estimates for evacuation.
- Provide evacuation assistance to facilities (Hanford Site and Columbia Generating Station) and prepare to coordinate with other organizations to expedite evacuation of onsite personnel.
- Establish Emergency Worker Assistance Centers (EWACs) in a radiological event.
- Establish relocation centers compliant with NUREG criteria, including provisions for location outside of the plume exposure EPZ; evacuee tracking; staffing requirements; students; service animals; evacuee placement; and radiological monitoring of evacuees, vehicles, and service animals (NUREG J.10h).
- Reference in the county fixed facility hazard plan all necessary letters of agreement or Memoranda of Understanding (MOU) between local officials and other public or private groups.
- Function as a principal radiological response organization during a radiological event.

4. *Grant County Department of Emergency Management*

- Prepare a contingency plan for the release of radiological or other hazardous materials from Columbia Generating Station and/or the Hanford Site.
- Provide information and education to the public.
- Support other jurisdictions when there is an offsite threat that does not threaten Grant County.
- Recommend to the public protective actions to be taken when there is an offsite release that affects the county.
- Establish an Agricultural Control System to contain contaminated products.
- Establish and maintain an EOC.
- Establish and maintains an Emergency Communications System to include Alert and Warning of all segments of the transient and resident population.
- Recommend geopolitical boundaries for relocation/food control areas.
- Develop a means for conducting relocation actions.
- Project traffic capacities of evacuation routes under emergency conditions.
- Develop a means to control access to evacuated areas and identifies the organizations responsible for access control.
- Identify means to deal with potential impediments to the use of evacuation routes, and calculates time estimates for evacuation.

- Provide evacuation assistance to facilities and coordinates with other organizations to expedite evacuation of onsite personnel.
- Function as a principal radiological response organization.

5. *Kitsap County Department of Emergency Management*

- Establish a Joint Operation Center (JOC).
- Coordinate with state of Washington and Naval Nuclear Propulsion Program radiological response personnel.
- Coordinate with Naval Nuclear Propulsion Program personnel to provide information to the public in the event of a potential or actual release of radioactivity.
- Recommend and implement appropriate protective actions to the public, if necessary, when there is an offsite release from a Naval Nuclear Propulsion Program facility that affects the county.

6. *Kittitas County Sheriff's Office, Emergency Management Division*

- Be prepared to receive information and/or protective action decisions from the state or surrounding jurisdictions on hazards resulting from an emergency at the Columbia Generating Station or Hanford Site.

7. *Klickitat County Department of Emergency Management*

- Be prepared to receive information and/or protective action decisions from the state or surrounding jurisdictions on hazards resulting from an emergency at the Columbia Generating Station or Hanford Site.

8. *Snohomish County Department of Emergency Management*

- Establish an EOC.
- Coordinate with state of Washington and Naval Nuclear Propulsion Program radiological response personnel.
- Coordinate with Naval Station Everett personnel to provide information to the public in the event of an incident or emergency.

- Recommend and implement appropriate protective actions to the public, if necessary, when there is an offsite release from a Naval Station Everett that affects the county.

9. *Walla Walla County Department of Emergency Management*

- Prepares a contingency plan for the release of radioactive or other hazardous materials from Columbia Generating Station or the Hanford Site.
- Provides information and education to the public.
- Support other jurisdictions when there is an offsite threat that does not threaten Walla Walla County.
- Recommend to the public protective actions to be taken when there is an offsite release that affects the county.
- Establish an Agricultural Control System to contain contaminated products.
- Establish and maintain an EOC.
- Establish and maintain an Emergency Communications System to include Alert and Warning of all segments of the transient and resident population.
- Recommend geopolitical boundaries for FCAs.

10. *Yakima Valley Office of Emergency Management*

- Prepare a contingency plan for the release of radioactive or other hazardous materials from Columbia Generating Station and/or the Hanford Site.
- Provide information and education to the public.
- Support other jurisdictions when there is an offsite threat that does not threaten Yakima County.
- Recommend to the public protective actions to be taken when there is an offsite release that affects the county.
- Establish an Agricultural Control System to contain contaminated products.
- Establish and maintain an EOC.
- Establish and maintain an Emergency Communications System to include Alert and Warning of all segments of the transient and resident population.
- Recommend geopolitical boundaries for FCAs.

Federal Agencies

1. *Advisory Team for Environment, Food, and Health*

- Provide direct support to the Coordinating Agency on matters dealing with the environment, food, and health and usually co-locates with the Federal Radiological Monitoring and Assessment Center (FRMAC). If there is no FRMAC the functions may be accomplished by the Lead Federal Agency response facility in Washington, DC.
- Consist of representatives from the Environmental Protection Agency (EPA), Human Health Services (HHS), and the United States Department of Agriculture (USDA)
- Provide a mechanism for timely, interagency coordination of advice to the Coordinating Agency, states, and other federal agencies concerning matters related to the following areas.
    - Conducting environmental assessments (field monitoring) required for developing recommendations
    - Protective Action Guides (PAGs) and their application to the emergency
    - Protective Action Recommendations (PARs) using data and assessment from the FRMAC
    - Conducting / participating in protective actions to prevent or minimize contamination of milk, food, and water and to prevent or minimize exposure through ingestion
    - Providing recommendations for minimizing losses of agricultural resources from radiation effects
    - Conducting inspections of food, animal feed, and water supply to assure wholesomeness
    - Assisting in relocation, re-entry, and other radiation protection measures prior to recovery
    - Assisting in recommendations for recovery, return, and cleanup issues
    - Providing health and safety advice or information for the public and for workers
    - Estimating effects of radioactive releases on human health and the environment
    - Providing guidance on the use of radioprotective substances (e.g., thyroid blocking agents), including dosage and projected radiation doses that warrant the use of such drugs
    - Providing assistance on other matters, as requested by the Coordinating Agency

2. Federal Emergency Management Agency, Department of Homeland Security, Region X Liaison

- Review and evaluates plans and procedures for Columbia Generating Station.
- Evaluate ability of facilities and offsite agencies to carry out plans and procedures for Columbia Generating Station.

- Evaluate, tests, and approves alert/notification systems for Columbia Generating Station.
- Evaluate and assesses state and local performance for planning and preparedness; training, drills, public education and information programs for Columbia Generating Station.
- Coordinate the federal agencies providing non-radiological response to peacetime radiological emergencies.
- Participates as part of the federal response in accordance with the National Response Framework (NRF) and Federal Radiological Monitoring and Assessment Center (FRMAC).

3. *U. S. Coast Guard, 13thDistrict*

The U. S. Coast Guard, 13th District, Sector Columbia River and Sector Puget Sound is responsible for enforcing maritime laws, river access, river traffic control, river evacuation, and river evacuation verification on the affected navigable waterways. For Site Area or General Emergencies, the Coast Guard may establish a Safety Zone on the Columbia River within the 10-Mile EPZ and broadcast a river closure notice to mariners. The Safety Zone provides authority for USCG and Sheriff's Office patrol craft to control river access within the EPZ, and:

- direction and control of waterway traffic.
- evacuate navigable waterways as recommended.
- maintain access control to affected navigable waterways.
- assist in public notification on and along affected navigable waterways.
- provide search and rescue services on, and along the affected navigable waterway, seeking local assistance when required .

4. *U. S. Department of Energy – Hanford Site*

- Develop and maintain emergency plans,procedures, and maps to provide for the safety of the public and onsite personnel.
- Maintain MOUs with federal, state, and local response organizations.
- Train and exercise personnel, plans, procedures, and equipment essential for emergency response.
- Mitigate potential consequences to workers, the public, and the environment. Take necessary actions to recover from an emergency.
- Function as a primary radiological response organization for a Hanford Site event.
- Coordinate requests for federal radiological response assets. See Appendix 1- Population Distribution to Annex A.

5. *Naval Base Kitsap and Naval Station Everett*

- Assess the nature and extent of the emergency at Naval Base Kitsap or Naval Station Everett and make appropriate emergency classifications and notifications to Kitsap or Snohomish County and the State. If the emergency involves offsite in-transit Naval Nuclear Propulsion Program radiological materials, notify the State and affected County.
- Activate and staff the PSNS Emergency Control Center (PSNS and Submarine Group NINE in Bangor utilize the PSNS Emergency Coordination Center (ECC) as the primary ECC and the Submarine Base Bangor ECC as an alternate ECC).
- Develop initial Protective Action Recommendations (PARs) for the affected public at the appropriate emergency classification level.
- Conduct harbor and land (perimeter and offsite) monitoring and collect offsite TLD's.
- If requested, provide representative(s) to the State EOC and Kitsap or Snohomish County EOCs. Later, provide a senior representative to the Recovery Task Force at the SEOC.
- Control access to Naval Base Kitsap and Naval Station Everett, if warranted.
- Assist with dose assessment and PAR development with Washington State and Kitsap or Snohomish Counties for offsite areas.
- Provide a spokesperson and staff to the Joint Information Center (JIC).
- Coordinate with State and local representatives to ensure timely dissemination of accurate information to the public regarding a radiological emergency involving facilities, vessel, or personnel.
- Develop and maintain emergency plans, procedures, and maps.
- Train and exercise personnel, plans, procedures, and equipment essential for emergency response.
- Mitigate potential consequences to workers and the environment by taking necessary actions to recover from an emergency.
- Provide updates of the affected facility's/vessel's status along with meteorological and radiological data to the State and Kitsap or Snohomish County EOC's.
- Prepare and maintain an accurate and complete record of events, decisions, and actions to document and provide review capabilities.
- Train PSNS/Naval Station Bremerton, Submarine Group NINE, Submarine Base Bangor, and Naval Station Everett response personnel.
- Provide field team coordination with the State of Washington teams in support of PSNS/Naval Station Bremerton, Submarine Base Bangor, or Naval Station Everett emergencies or off yard transportation accidents.
- Provide National Atmospheric Release Advisory Capability (NARAC) data-based plots to State and County authorities.

- Lead organization for radiological emergency planning at Naval Station Bremerton, Submarine Base Bangor, and Naval Station Everett.
- Function as the primary radiological response organization inside the shipyard, Naval Station Bremerton, Submarine Base Bangor, and Naval Station Everett. In addition, dispatch teams to offsite locations to conduct radiological monitoring until relieved by State or Federal monitoring teams.
- Function as the primary Naval Nuclear Propulsion Program radiological response organization to assist State and local responders at the site of an offsite transportation accident involving a shipment of Naval Nuclear Propulsion Program or other radioactive materials in the State of Washington. Provide radiological personnel and equipment assets upon request from State or County agencies in accordance with the National Response Framework.

6. *Naval Nuclear Propulsion Program*

- Radiological regulatory authority for Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS & IMF), /Naval Station Bremerton, Submarine Base Bangor, and Naval Station Everett.
- Serve as the lead federal Agency under the NRF for radiological emergencies at Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS & IMF), /Naval Station Bremerton, Submarine Base Bangor, and Naval Station Everett.
- Provide emergency response personnel and equipment from Bettis and Knolls Atomic Power Laboratories.
- Provide emergency response personnel and equipment from Naval Nuclear Propulsion Program Headquarters, other naval shipyards, submarine bases, naval stations, and prototypes.
- Request DOE Radiological Assistance Program (RAP) Teams and FRMAC assistance.
- Request DOE Aerial Measuring System (AMS).
- Provide NRF coordination with other Federal agencies.

7. *U.S. Nuclear Regulatory Commission*

- Provide assistance to the state and Energy Northwest following NRC directives.
- Evaluate the ability of the Energy Northwest to carry out its plans and procedures.
- Participate as part of the federal response in accordance with the National Response Framework (NRF).

Nongovernmental (NGO) and Volunteer Organizations

1. *American Red Cross*

- Operate assistance centers / shelters in coordination with other agencies and local jurisdictions.
- Provide support to victims and workers.

2. AREVA NP, Inc., Hanford

- Develop and maintains emergency plans, procedures, and maps to provide for the safety of the public and onsite personnel.
- Assess the nature and extent of the incident or emergency at the facility and make appropriate emergency classifications and notifications of counties and state.
- Meet preparedness requirements of their site certification agreement.

3. *Energy Northwest, Columbia Generating Station*

- Develop and maintains emergency plans, procedures, and maps to provide for the safety of the public and onsite personnel.
- Maintain MOUs with federal, state, and local response organizations.
- Meet preparedness requirements of their site certification agreement.
- Make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density, and specific radiological conditions.
- Assess the nature and extent of the incident or emergency at the affected Energy Northwest facility and make appropriate emergency classifications and notifications of counties and states.

4. *Perma-Fix NW Richland, Inc.*

- Develop and maintains emergency plans and procedures to provide for the safety of the public and onsite personnel.
- Assess the nature and extent of the incident or emergency at the facility and make appropriate emergency classifications and notifications of counties and state.

- Meet preparedness requirements of their site certification agreement.

5. *State of Oregon*

- Notify the affected county EOCs and the Washington State EOC.
- Coordinate response activities in an emergency to minimize conflicting instruction to the public.
- Coordinate evacuation routes, control / checkpoints, and emergency services.
- Coordinate re-entry and recovery activities.
- Coordinate public information with all jurisdictions to ensure consistent messages are provided to the public.

6. *Washington Voluntary Organizations Active in Disasters (WAVOAD)*

- Provide a framework for coordination among voluntary agencies providing resources before, during and after disasters.
- Serve in the SEOC during activations as a liaison to voluntary agencies.
- May be requested to participate in the SEOC activities to coordinate the activities of their organization in each affected jurisdiction.
- The SEOC will make every effort to provide the volunteer support required by responding local governments.

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IV. DIRECTION, CONTROL, AND COORDINATION

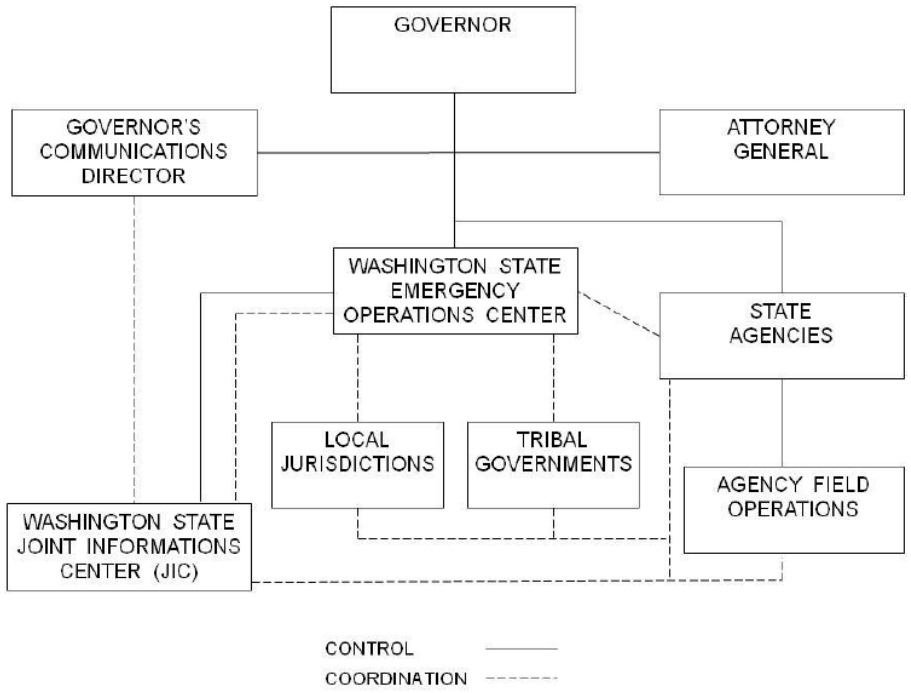
A. PURPOSE

Provide for the effective direction, control and coordination of emergency management activities undertaken in accordance with the *Washington State Comprehensive Emergency Management Plan* (CEMP). Ensure continued operation and continuity of state and local governments and their functions during and after emergencies or disasters. Ensure the preservation of public and private records essential to the continued operations of government and the private sector.

B. DIRECTION AND CONTROL

Direction and control of emergency management is the responsibility of the Governor, other elected state officials, and the executive heads of political subdivisions of the state, who may delegate operational functions to state and local jurisdiction emergency management directors or selected state emergency management personnel. The Governor usually delegates to the Director of the Washington State Military Department the responsibility for direction and control when proclaiming a disaster or emergency. The Director of the Washington State Military Department carries out these responsibilities in cooperation and collaboration with state agencies, local jurisdictions, volunteer organizations and the private sector. Figure 0-5 - Emergency Management Operational Structure depicts the control and coordination channels used during disasters and emergencies in Washington State.

Figure 0-5 - Emergency Management Operational Structure



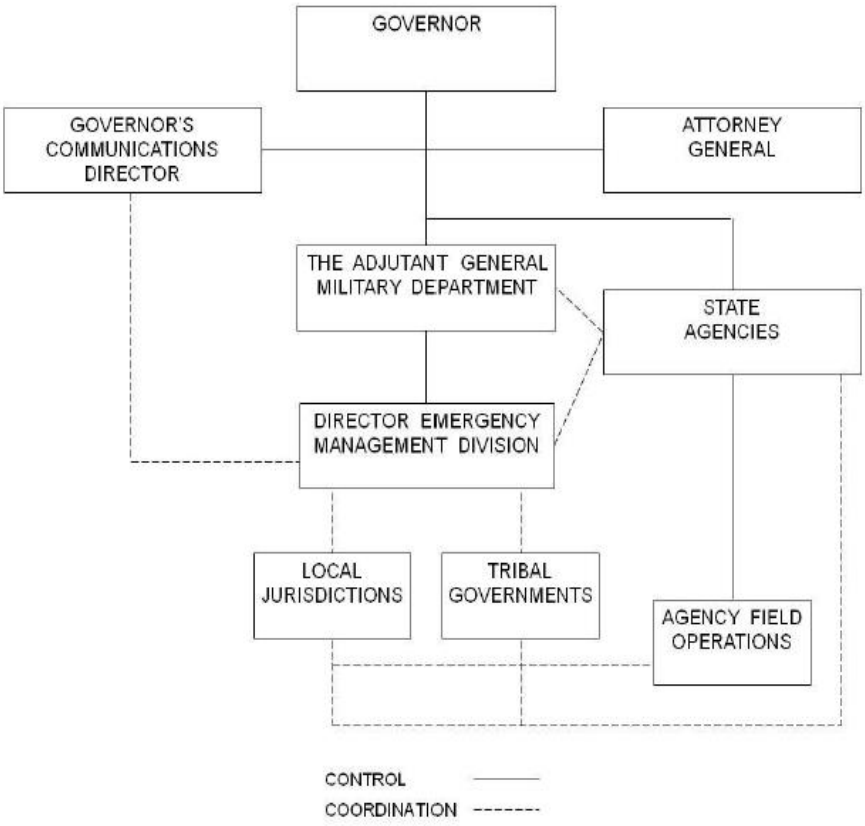
State agency and local government services and facilities may be used during the time of a disaster or emergency as described in RCW 38.52.110. The Governor or designee, directors of selected state agencies or their designees and other key individuals may operate during disasters and emergencies from the primary state Emergency Operations Center (EOC), a designated alternate state EOC or other site designated by the Governor.

Direction and control can be conducted using the existing emergency management communications systems or communications specifically established for disaster or emergency operations. See Emergency Support Function (ESF) 2 - Communication, Information and Warning Systems.

C. COORDINATION

State and local jurisdiction emergency management directors provide the means for coordinating capabilities, resources and assets necessary to alleviate the impact of disasters or emergencies on citizens and public entities. The day-to-day structure for coordinating these emergency management activities and mitigation and preparedness programs is depicted in Figure 0-6 - Emergency Management Organizational Structure.

Figure 0-6 - Emergency Management Organizational Structure



The Governor, through the Director of the Washington State Military Department, provides liaison to federal agencies, using the ESF concept. Liaison is provided to British Columbia, other states and other entities based upon the scope of the disaster or emergency.

Refer to the specific organization, responsibilities, and concepts contained in this plan's Concept of Operations and Organizations and Assignment of Responsibilities sections for detailed information and graphics.

Washington State Emergency Management Division (EMD) coordinates licensee, state, and local resources to support the federal response (NUREG C.1). EMD provides communication capability to federal representatives working in the SEOC, including access to WebEOC, telephone, fax, and radio communications (described in BP V Communications). Other resources and facilities will be coordinated as needed for incident response.

V. COMMUNICATIONS

A. PURPOSE

Describe the Emergency Support Function (ESF) 2 - Communication, Information and Warning Systems supporting both the State Emergency Operations Center's (SEOCs) and local jurisdictions' phased response to disasters and emergencies involving fixed nuclear facilities. This section also summarizes statewide application of WebEOC as a communications, collaboration and coordination resource.

B. ESF 2 ORGANIZATION

ESF 2 staffing normally consists of an ESF Lead, Telecommunications and Information Technology Support Staff, WebEOC Technician, and a Radio Amateur Civil Emergency Services (RACES) Officer. Additional radio operators will augment the ESF 2 staff as dictated by the situation and associated communications challenges. Radio and telephone communications administrators/engineers from state agencies and the telecommunications industry may be required to augment ESF 2 during major incidents. The State RACES Station will be established per direction of the ESF 2 Lead.

C. CONCEPT OF OPERATIONS

ESF 2 will be the main point of contact for any telecommunications issues and requests concerning the disaster/emergency.

State and local radio communications systems will operate under previously approved licenses. Requests for new licenses may be submitted to the SEOC, which will forward requests to the FCC and/or appropriate frequency coordinator for approval, as required.

State agency personnel responding to the SEOC to support the states response during Phase III and Phase IV activations must be prepared to establish radio communications with their parent organization if commercial telephone is not available.

D. RESPONSIBILITIES

State Alert and Warning Center (AWC)

The notification of a Fixed Nuclear Facility incident will be received either on a dedicated phone or the emergency line.

- Complete the appropriate Classification Notification Form (CNF) and follow the procedures listed in each procedure.
    - CGS - C-4A (pink)
    - DOE-HANFORD – C-4B (blue)
    - AREVA NP – C-4D (gold)
    - NAVY NUCLEAR PROPULSION PROGRAM EVENT – C-4E (green)

ESF 2

- Operate and maintain telecommunications and automation systems in support of the SEOC during all phases of operation.
    - Ensure telecommunications capabilities (commercial telephone, cellular or mobile radio) are provided to support deployed liaison personnel.
    - Ensure toll-free number(s) are established for disaster/emergency operations and information.
- Coordinate and direct assistance to local government in support of their telecommunications needs.
- Coordinate the employment, integration and operation of the state, federal, commercial, local and private telecommunications systems to support the event.
- Continually assess the disaster's impact on state, local or commercial communications systems and make recommendations to decision makers concerning possible fixes.
- Coordinate and monitor restoration/provisioning status of telecommunications systems.
- Coordinate and prioritize requests for federal and/or commercial telecommunications support/assistance.
- Coordinate allocation, deployment and location of mobile/transportable telecommunications systems provided from state, commercial or federal resources.

ESF 2 Support Agencies

- Be prepared to provide staff to augment the SEOC ESF 2 staff during Phase III and Phase IV operations.
- Be prepared to provide technical assistance to restore and provision emergency management and local circuits through agency owned systems.
- Be prepared to identify and provide mobile, portable and/or transportable telecommunications equipment to support the emergency.

E. COMMUNICATIONS CAPABILITIES

SEOC Communications Capabilities

Figure 0-7 - SEOC Communications Capabilities

Commercial Telephone	Private lines, Centrex, Scan and Lakewood business lines
CEMNET	Comprehensive Emergency Management Network, VHF low band 2-way radio system
NAWAS	National Warning System, national to state/state to local, voice only
ACCESS	A Central Computerized Enforcement Service System, data circuit
SECURE	State Emergency Communications Using Radio Effectively, HF point-to-point radio using 8 discrete frequencies
RACES	Radio Amateur Civil Emergency Services
EAS	Emergency Alert System, national, local, state
Satellite Telephone	Telephone and radio through AMSC Satellite
FNARS	FEMA National Radio System, voice and teletype, federal to state
US DOE-RL	Commercial Crash Call line.
Columbia Generating Station (CGS)	Dedicated Crash Call circuit (point-to-multipoint), CGS Dial-Up (point-to-point), PIO Dial-up (point-to-point), and Dedicated facsimile. All are outside the public switch network.
HF/VHF/UHF Radios	STARC, GA 800 MHz, DOT 800 MHz, FEMA MERS Ops, Ground/Air
Local Area Network	SUN Based Server
PC Workstations	LAN and WAN connectivity and Internet access
Specific to fixed nuclear facility	

Disaster/Emergency Communications Frequencies

Figure 0-8 - Disaster / Emergency Communications Frequencies

Law Enforcement Radio Net (LERN)	155.370
National Law Enforcement Emergency Channel (NLEEC)	155.475
On-Scene Command and Coordination Radio (OSCCR)	156.135
Search and Rescue (SAR)	155.160
Hospital Emergency Administrative Radio (HEAR)	155.340, 155.280
Medical Emergency Delivery System (MEDNET)	462.950 - 468.175
Fire Communications (FIRECOM)	153.830
Comprehensive Emergency Management Network (CEMNET)	45.200, 45.360, 45.480
NOAA Weather Radio	162.550, 162.475, 162.400

WebEOC

The state of Washington maintains a crisis information management system, commonly referred to as WebEOC, to manage large-scale disasters and emergencies and to support and increase public safety information sharing. One of the primary objectives of WebEOC is to provide the State Emergency Operations Center (SEOC) with a platform to receive, process and manage information from the counties, cities, state agencies, tribal and federal governmental entities. WebEOC also serves as a collaborative tool for each entity to provide local incident commanders, command level personnel and senior leadership one common operating picture to maintain situational awareness of public safety operations and sensitive information.

WebEOC is also used as a gateway to share information among county/city EOCs, the SEOC and state, federal and local public safety entities. This information sharing allows authorized users to make informed decisions regarding public safety operations during disasters/emergencies and supports statewide collaboration. WebEOC is also a means of communication between county/city EOCs and the SEOC.

The Washington Military Department (WMD) maintains access control to the State WebEOC site and limits such access to key personnel involved in emergency operations and/or those who have a need to communicate with a county/city EOC and/or the SEOC. All users are required to sign a User Agreement and attend the standard WebEOC class (webinar, classroom, or tutorial) prior to accessing and using the State WebEOC application. All users shall comply with the User Agreement. The WebEOC Administrator works with emergency

managers statewide to create accounts for their own users. The State WebEOC Administrator is the only entity authorized to create or delete WebEOC user accounts. The WMD reserves the right to terminate use of the WebEOC system or an individual user at any time due to violations of policy, operational security or negligent use.

VI. ADMINISTRATION, FINANCE, AND LOGISTICS

A. PURPOSE

To provide guidance to state agencies, local jurisdictions and organizations on administrative, financial and logistical matters necessary to support operations during radiological disasters or emergencies and to preserve vital records.

B. CONCEPT OF OPERATIONS

State agencies, local jurisdictions and organizations with emergency management responsibilities will establish, maintain and protect vital records in accordance with the record retention program as defined in RCW 40.10.010. Records include, but are not limited to, files of directives and forms. Reports are required from state agencies, local jurisdictions and organizations to provide the Governor, Washington State Military Department, Emergency Management Division (EMD) and other governmental officials with information concerning the nature, magnitude and impact of a radiological disaster or emergency and for use in evaluating and providing the most efficient and appropriate distribution of resources and services during the response to and recovery from a radiological disaster or emergency. The required reports should include, but are not limited to the following.

- Situation Reports
- Proclamations of Emergency and requests for Proclamations of Emergency
- Requests for Assistance
- Damage Assessment Reports

The EMD will use emergency workers as outlined in state law. "Emergency Worker" is defined in RCW 38.52.010(4) while the rules and regulations concerning coverage, classification and registration of workers are outlined in RCW 38.52.310. Chapter 118.04 WAC covers the Emergency Worker Program in detail.

The state EOC Mission Numbers (Disaster Incident or Search and Rescue Number Series) are assigned to local jurisdictions for all actions taken with the intent of protecting life, property and/or the environment during the incident period of any given event. The mission number will be used by each local jurisdiction for the duration of the incident and the recovery period.

Equipment and vehicles should only be used by trained, qualified personnel. Personal property which is not relevant to the mission will not be considered for compensation coverage. Repair and restoration of damaged facilities, which are new facilities or an expansion of or addition to an existing facility may require an environmental impact study or

permit prior to final project approval. The following statutes and regulations apply but are not limited to the following.

- Chapter 75.20 RCW, Construction Projects in State Waters
- Chapter 76.09 RCW, Forest Practices
- Chapter 86.16 RCW, Flood Plain Management
- Chapter 173-14 WAC, Permits for Substantial Developments on Shorelines of the State
- WAC 197-11-880, Guidelines Interpreting and Implementing the State Environmental Policy Act

In instances where emergency work is performed to protect life and property, requirements for environmental review and permits may be waived or orally approved as per the following statutes and regulations.

- Construction Projects in State Waters (Hydraulic Projects or Other Works) RCW 75.20.100
- Forest Practices Act (Application for Forest Practices) RCW 76.09.060
- Flood Plain Management (Processing of Permits and Authorizations for Emergency Water Withdrawal and Facilities to be Expedited) RCW 86.16.180
- Shorelines Management Act (Shorelines Permit) WAC 173.14.040.(2).(3)
- State Environmental Policy Act (SEPA), (Exceptions for Emergency Actions) WAC 197.10.180

Many structures, archaeological sites or properties of historical significance are protected by law. Non-time-critical missions and recovery actions affecting such protected areas will be coordinated with the Department of Archaeology and Historic Preservation.

The state's program of non-discrimination in disaster assistance will be carried out in accordance with Title 44 CFR, Section 206.16. This program will encompass all state and local jurisdiction actions to the Federal/State Agreement.

- Federal financial assistance to the states or their political subdivisions is conditional on full compliance with Title 44 CFR, Part 206.
- All personnel carrying out federal major disaster or emergency assistance functions, including the distribution of supplies, the processing of applications, and other relief and assistance activities, shall perform their work in an equitable and impartial manner, without discrimination on the grounds of race, religion, sex, color, age, economic status, or national origin.
- As a condition of participation in the distribution of assistance or supplies under PL 93-288, government bodies and other organizations shall provide a written assurance of their intent to comply with regulations relating to nondiscrimination promulgated by the

President or the administrator of the Federal Emergency Management Agency (FEMA), and shall comply with such other regulations applicable to activities within an area affected by a major disaster or emergency as the administration of FEMA deems necessary for the effective coordination of relief efforts.

- The provisions of Title 44 CFR, Section 206.16 concerning nondiscrimination in disaster assistance shall be included in this document by reference.
- The provisions of Chapter 49.60 RCW, "Discrimination - Human Rights Commission," shall be included in this document by reference.

C. FINANCIAL MANAGEMENT

Emergency expenditures are not normally integrated into the budgeting process of state and local jurisdictions. Nevertheless, events occur on a periodic basis requiring substantial and necessary unanticipated obligations and expenditures. State agencies will follow emergency procedures outlined in RCW 43.88.250, Emergency Expenditures. Whenever an emergency necessitates expenditures for the preservation of peace, health or safety or to carrying out of the necessary work required by law of any state agency for which insufficient appropriations have not been made, the head of such agency shall submit to the Governor's designee duplicate copies of a sworn statement setting forth the facts constituting the emergency and the estimated amount of money required. If the Governor's designee approves such estimates, in whole or in part, the designee shall endorse each copy of the statement, together with a statement of the amount approved as an allocation from any appropriation available for allocation for emergency purposes and transmit one copy to the head of the agency thereby authorizing the emergency expenditures.

Emergency purchases by state agencies shall be made in accordance with RCW 43.19.200.

Local jurisdictions will incur disaster-related obligations and expenditures in accordance with the provisions of RCW 38.52.070(2) and the following state statutes.

- Cities under 300,000 population - Chapter 35.33 RCW
- Cities over 300,000 population - Chapter 35.32A RCW
- Counties - Chapter 36.40 RCW

Records will be kept in such a manner to separately identify incident or event related expenditures and obligations from general programs and activities of state agencies and local jurisdictions or organizations. Complete and accurate records are necessary to document requests for assistance, for reimbursement under approved applications pertaining to declared emergencies or major disasters and for audit reports, detailed records will be kept from the onset of an incident or event to include, but are not limited to the following.

- Work that is performed by force account

  - Appropriate extracts from payrolls, with any cross references needed to locate original documents
  - A schedule of equipment used on the job
  - Invoices, warrants, and checks issued and paid for materials and supplies used on the job
- Work that is contracted out
  - Copies of requests for bids
  - The contract that is let
  - Invoices submitted by the contractor
  - Warrants authorizing check issuance
- Work done under inter-community agreements and mutual aids

Disaster-related expenditures and obligations of state agencies, local jurisdictions and organizations may be reimbursed under a number of federal programs. The federal government may authorize reimbursement of approved costs for work performed in the restoration of certain public facilities after a major disaster declaration by the President of the United States under the statutory authority of certain federal agencies.

Audits of state and local jurisdiction emergency expenditures will be conducted in the normal course of state and local government audits. Audits of projects approved for funding with federal disaster assistance funds are necessary to determine the eligibility of the costs claimed by the applicant.

D. LOGISTICS

The majority of today's consumables are distributed through just-in-time supply chains managed by the private sector. These supply chains may be disrupted as a result of damage to the transportation and communication infrastructure during a disaster or emergency. The affected areas will therefore be in need of emergency resources as well as everyday goods and services. While efforts are underway to reestablish private sector supply chains, governmental emergency logistics will be implemented to meet immediate disaster needs.

Emergency logistics will provide resource support through Emergency Support Function (ESF) 7 – Logistics Management and Resource Support to Tribal and local governments once they have exhausted their supplies and capacity for the provision of services, personnel and commodities during the response and recovery phases of a disaster or emergency. The State Emergency Operations Center (SEOC) Logistics Section will coordinate emergency logistics activities through ESF 7 with the support of numerous regional and state agencies.

Resource requests will be tracked throughout their entire lifecycle, from the time they are submitted to the Logistics Section until they are filled. Elements of the emergency supply

chain, such as state and local staging areas, reception and integration centers, a movement coordination center and movement control points will be activated as appropriate to the situation. State and local staging areas will serve as intermittent storage areas for the movement of resources to affected areas. Reception and integration centers will provide reception, integration, onward movement and accountability for out-of-state resources. The movement coordination center and movement control points will coordinate and track the flow of disaster relief convoys through and to affected areas, providing security escorts where needed. Out-of-state mutual aid resources will be requested through the Emergency Management Assistance Compact (EMAC) or the Pacific Northwest Emergency Management Arrangement (PNEMA).

ESF 7, Resources describes the concept of operations as well as the roles and responsibilities of the lead and support state agencies during the mitigation, preparedness, response and recovery phases. The reception and integration, state staging areas and movement coordination elements of the emergency supply chain are described in detail in separate appendices to ESF 7.

VII. PLAN DEVELOPMENT AND MAINTENANCE

The 2014 version of the *Washington State Fixed Nuclear Facility Protection Plan* was coordinated among all stakeholders listed on the Record of Distribution and replaces the 2008 *Washington State Integrated Fixed Facility Radiological and Chemical Protection Plan.* It removes all references to the Chemical Stockpile Emergency Program (CSEPP) and incorporates concepts set forth in the National Incident Management System (NIMS), Incident Command System (ICS), Homeland Security Exercise and Evaluation Program (HSEEP), the National Response Framework (NRF), and the Planning Standards in NUREG-0654 / FEMA-REP-1. NUREG-0654 / FEMA-REP-1 Planning Standards specifically apply to Energy Northwest, Columbia Generating Station and are directive in nature; however, they provide a general approach to fixed nuclear facilities preparedness for the State.

Each agency and organization identified in the Record of Distribution has specific responsibilities in support of this Plan. The EMD Director has the overall authority and responsibility for radiological emergency response planning within Washington State.

The EMD Radiological Preparedness Program Manager is responsible for program management and coordinating activities between stakeholders and partners from local, state, tribal, federal, and non-governmental organizations. The Hazards and Functional Analysis Program Manager annually reviews and as needed updates, coordinates, publishes, and distributes the plan. The Exercise and Training Coordinator is responsible for planning and coordinating training and exercises. The one-time training regimens for these individuals are listed in Figure 0-9 - Training for REP Planners (P.1). The Hazards and Functional Analysis Program Manager reviews and updates as needed the plan and agreements annually and as needed. This review considers process changes resulting from exercises. Content review and update includes maps and ingestion pathway information, which are available from the facilities, counties, and Department of Agriculture (NUREG P.4).

Figure 0-9 - Training for REP Planners

	Classroom Courses	Pre-requisite Courses
Radiological Preparedness Program Manager	L-304 – REP Exercise Evaluation L-339 – REP Core Concepts L-340 – REP Plan Review	IS-3 Radiological Emergency Management IS-120 – An Introduction to Exercises IS-130 – Exercise Evaluation and Improvement Planning IS-139 – Exercise Design IS-146 – HSEEP IS-235 – Emergency Planning IS-331 Introduction to Radiological Emergency Preparedness (REP Exercise Evaluation)
Hazards and Functional Analysis Program Manager	L-339 – REP Core Concepts L-340 – REP Plan Review	IS-3 Radiological Emergency Management IS-235 – Emergency Planning
Exercise and Training Coordinator	L-304 – REP Exercise Evaluation L-339 – REP Core Concepts	IS-3 Radiological Emergency Management IS-120 – An Introduction to Exercises IS-130 – Exercise Evaluation and Improvement Planning IS-139 – Exercise Design IS-146 – HSEEP IS-331 Introduction to Radiological Emergency Preparedness (REP Exercise Evaluation)

A. *Plan Reviews and Updates*

1. The state and county fixed facility emergency plans and implementing procedures require an annual review. The state's review is verified in the Annual Letter of Certification (ALC) to the FEMA Region X. Plan reviews are performed to ensure compatibility and compliance among the concepts and commitments stated in the state and county plans, federally recommended criteria, and state regulatory requirements. Changes are addressed during the next scheduled revision, or immediately, depending on the seriousness of the item. Updated demographic data and programs, including maps, are incorporated into these plans in the year following their availability; the Emergency Management Division obtains this information from the responsible agency or organization. Notification lists are to be kept current as changes occur, and updated not less than quarterly. Telephone contact lists are kept separate from the plans and procedures.

2. Plan revisions may be made at any time to correct deficiencies identified during training, drills, graded exercises, real events, or review cycle. ***Revised pages are***

dated and the text marked using side bars or gray highlighting to show where changes were made. The Plan is available to the public and all plan holders on the Washington State Emergency Management Division (EMD) website http://www.emd.wa.gov/. Plan changes are posted to the Record of Changes, distributed to plan holders, and made available on the EMD website as part of the Plan.

3. Notwithstanding the EMD Planning, Analysis, and Logistics Section staff will review the Plan on an annual basis and collate suggested updates from other sources such as local, state, and federal agencies.

4. Memoranda of Understanding (MOU) among program participants are reviewed annually and updated as per the individual MOU duration and modification schedule.

5. Authorities and references are reviewed as part of the annual review process and updated as appropriate.

VIII. AUTHORITIES AND REFERENCES

A. AUTHORITIES

1. Chapter 38.52 Revised Code of Washington (RCW), Emergency Management
2. Chapter 43.06.222 RCW – Governor's Proclamation Order
3. Chapters 43.06.270, 43.43.030, 47.48.031, and 70.136 RCW, Washington State Patrol
4. Chapter 47 RCW, Public Highways and Transportation
5. Chapter 69.04 RCW, Embargoes
6. Chapter 70.98 RCW, Department of Health
7. Chapter 70.105 RCW, Department of Ecology
8. Washington Administrative Code (WAC) Chapter 118.30
9. Homeland Security Presidential Directives (HSPD)-5 & 8
10. Presidential Policy Directive (PPD) -8: National Preparedness
11. 44 CFR 350, Federal Emergency Management Agency (FEMA)

B. REFERENCES

1. Washington State Comprehensive Emergency Management Plan (CEMP)
2. Washington State Hazards Identification and Vulnerability Analysis (HIVA)
3. Washington State Emergency Operations Center (SEOC), Emergency Operations Plan (EOP)
4. Washington State Enhanced State Hazard Mitigation Plan (SHMP)
5. Washington State Military Department Continuity of Operations Plan (COOP)
6. Washington State Emergency Operations Officer (SEOO) Standard Operating Procedures (SOP)
7. Washington State Department of Health, Office of Radiation Protection, Radiological Emergency Response Plan and Procedures, Rev. 9, September 2012
8. Washington State Department of Agriculture, Radiological Emergency Procedure, June 2009
9. National Incident Management System (NIMS)
10. National Response Framework (NRF)
11. Homeland Security Exercise Evaluation Program (HSEEP)
12. NUREG-0654 / FEMA-REP-1 with Revisions and Supplements
13. Program Manual: Radiological Emergency Preparedness, June 2013
14. FEMA Comprehensive Preparedness Guide (CPG) 101: Developing and Maintaining Emergency Operations Plans, Version 2.0, November 2010
15. Mass Casualty Incident and Disaster Control Hospital Plan: Version - October 12, 2012 (Tri-Cities Area)

16. Columbia Generating Station Development of Evacuation Time Estimates – Final Report, Rev 1; KLD TR-497; October 2012;KLD Engineering, P.C., Hauppauge, NY

ANNEX A –COLUMBIA GENERATING STATION, ENERGY NORTHWEST

I. INTRODUCTION

The Columbia Generating Station, is a commercial nuclear power station located on the United States Department of Energy Hanford Site, 12 miles NW of Richland, Washington. Its site covers 1,089 acres of Benton County, Washington.

This plant is owned and operated by Energy Northwest. Energy Northwest's original name was the Washington Public Power Supply System (WPPSS). Construction began in late 1975, and the NRC issued an operational license for the plant to begin producing power in March, 1984.

In 2000, WPPSS changed its name to Energy Northwest, and later the plant's name was changed from WNP-2 (Washington Nuclear Power unit number 2) to Columbia Generating Station (CGS). Washington has only one commercial nuclear reactor and it provides approximately 4% of the state's electrical generation capacity (1,150 MW).

Energy Northwest, Columbia Generating Station operates under license from the Nuclear Regulatory Commission and meets the emergency planning standards set forth in NUREG-0654/FEMA-REP-1 which requires a basis for classifying emergencies according to severity, assigning responsibilities and outlining the most effective course of action to safeguard the public and plant personnel in the event of an incident.

II. PURPOSE

The purpose of this Plan is to document the actions necessary for effective use of available resources for protection of people and property of Washington State during any declared/classified emergency at the Columbia Generating Station. The Plan is implemented upon notification of a classified emergency at the Columbia Generating Station.

While this Plan documents a preplanned emergency response, it is not intended to replace the use of good professional judgment in the face of situations that may be more effectively managed by using methods not yet established as procedure. Deviation from the procedures by SEOC staff activated in response to a Columbia Generating Station emergency are encouraged, as long as the deviations are approved by MACG or Disaster Manager and are thoroughly documented within an appropriate emergency response log.

A. *EMERGENCY CLASSIFICATIONS*

A description of the characteristics of each emergency classification and a summary of the prescribed response activities are presented in Appendix 7 – Emergency Classification Levels and Agency Notifications and Appendix 9 – Emergency Classification System and Emergency Classification Levels.

B. *EMERGENCY PLANNING ZONES*

There are two emergency planning zones associated with the Columbia Generating Station used as the basis for this Plan. These are the Columbia Generating Station Plume Exposure Pathway Emergency Planning Zone and the Columbia Generating Station Ingestion Exposure Pathway Emergency Planning Zone (see Appendix 2 – Maps).

1. The Columbia Generating Station 10-Mile Emergency (Plume) Planning Zone or EPZ is an area where the principle danger is from whole body external exposure to gamma radiation resulting from the decay of radioactive materials in a plume or from internal exposure resulting from inhaling or ingesting radioactive particulates or iodine from a plume released during an emergency. The Washington State role in the 10-Mile EPZ is to assist the affected jurisdiction(s) by assessing the scope of the incident, making recommendations for protective actions, making provisions for health physics support of radiological monitoring and providing other emergency response assistance upon request by the county. Figure 1-1 depicts the 10-Mile EPZ for the Columbia Generating Station. The 10-Mile (Plume) EPZ includes Benton and Franklin Counties.

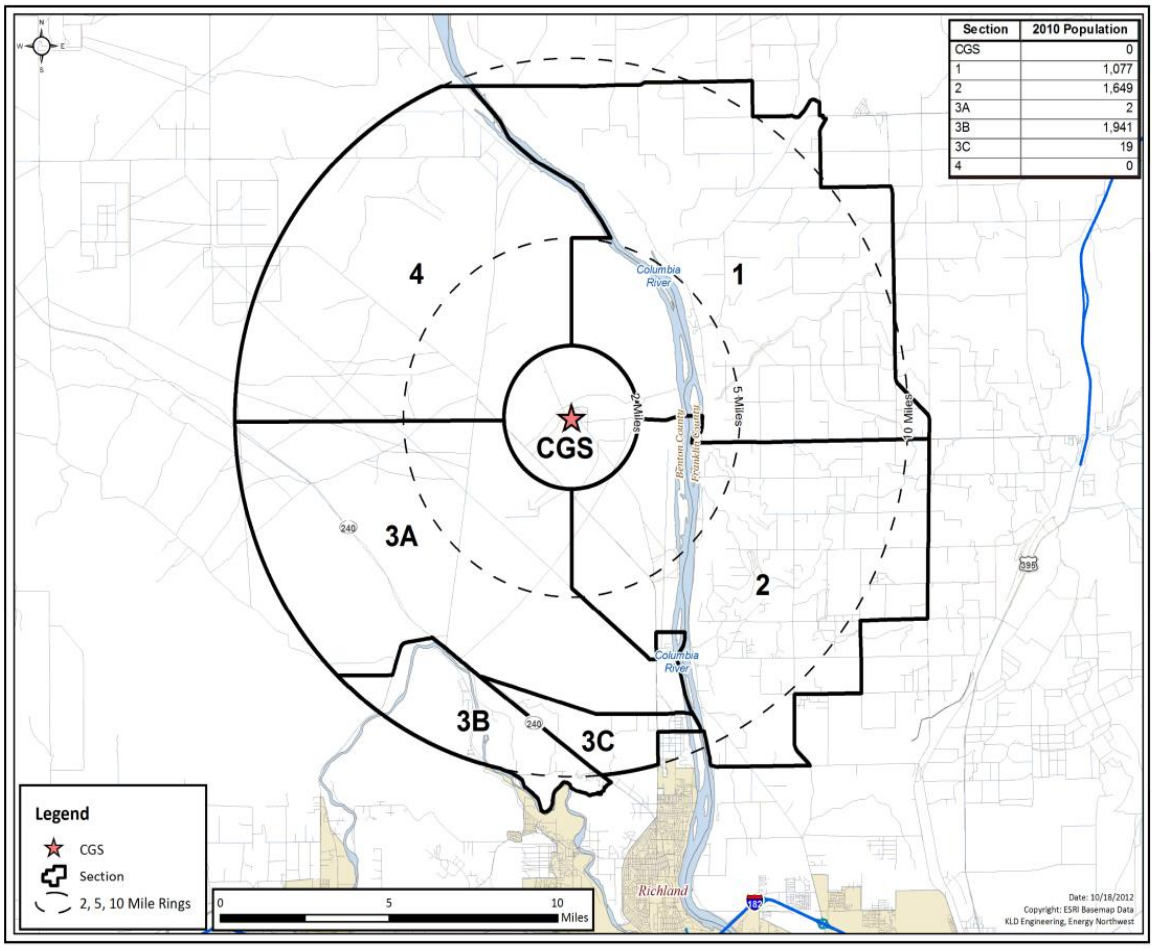
2. The 50-Mile Emergency Planning Zone (Ingestion) or EPZ is larger than the plume exposure EPZ. The principal danger to human and animal life to be avoided in the Ingestion EPZ is the incorporation of radioactive isotopes into the tissues of animals and humans through the consumption of food products contaminated by radioactive materials released during an emergency event at the Columbia Generating Station. Washington State has the responsibility to make Protective Action Decisions (PADs), assist with implementing protective measures and to develop emergency response plans and procedures for the Ingestion Exposure EPZ. Page 3, Appendix 2 depicts the 50-Mile Emergency Planning Zone for the Columbia Generating Station. This 50-Mile (Ingestion) EPZ includes portions of Adams, Benton, Franklin, Grant, Kittitas, Klickitat, Walla Walla, and Yakima Counties.

ANNEX A: APPENDIX 1 – POPULATION DISTRIBUTION

PLANNING STANDARDS J.2, J.10.A, J.10.B, J.10.H, J.10.I, J.10.J

Source: *Columbia Generating Station Development of Evacuation Time Estimates – Final Report, Rev 1; # KLD TR-497; October 2012*; KLD Engineering, P.C., Hauppauge, NY

Figure A-0 - CGS EPZ



SECTION BOUNDARIES

CGS

County: Benton

Includes the following areas: The Columbia Generating Station site. (Includes a two mile radius around the plant.)

Section 1

County: Franklin

Includes the following areas: (1) north of Eltopia West Rd., west of Glade North Rd., south of West Klamath Rd. and east of the Columbia River; (2) north of West Klamath Rd., west of Far Way Rd., south of Basin Hill Rd. and west of the Columbia River; (3) north of Basin Hill Rd., west of Wahluke Rd., south of Hollingsworth Rd. and east of the Columbia River. A portion of section 1 extends west of the Columbia River to Columbia Generating Station but there are no permanent residents in this area.

Section 2

County: Franklin

Includes the following areas: (1) north of West Sagemoor Rd., west of Glad North Rd., south of Eltopia West Rd. and east of the Columbia River; (2) north of Alder Rd., west of Dayton Rd., south of West Sagemoor Rd. and east of the Columbia River; (3) north of Selph Landing Rd., west of Taylor Flats Rd., south of Alder Rd. and wast of the Columbia River. A portion of section 2 extends west of the Columbia River to Columbia Generating Station but there are not permanent residents in this area.

Section 3A

County: Benton

Includes the following areas: This area is entirely on the Hanford Site and is southwest of the Columbia Generating Station.

Section 3B

County: Benton

Includes the following areas: south of SR 240, west of Kingsgate Way and north of West Richland and east of SH 225. It includes the Innovation Center Apartments and those homes and businesses that are accessed from Harrington Rd., Yakima River Dr., Snively Rd., Twin Bridges Rd. and Weidle Rd. It also includes the Rattlesnake Mountain Shooting Facility and the Horn Rapids Park.

Section 3C

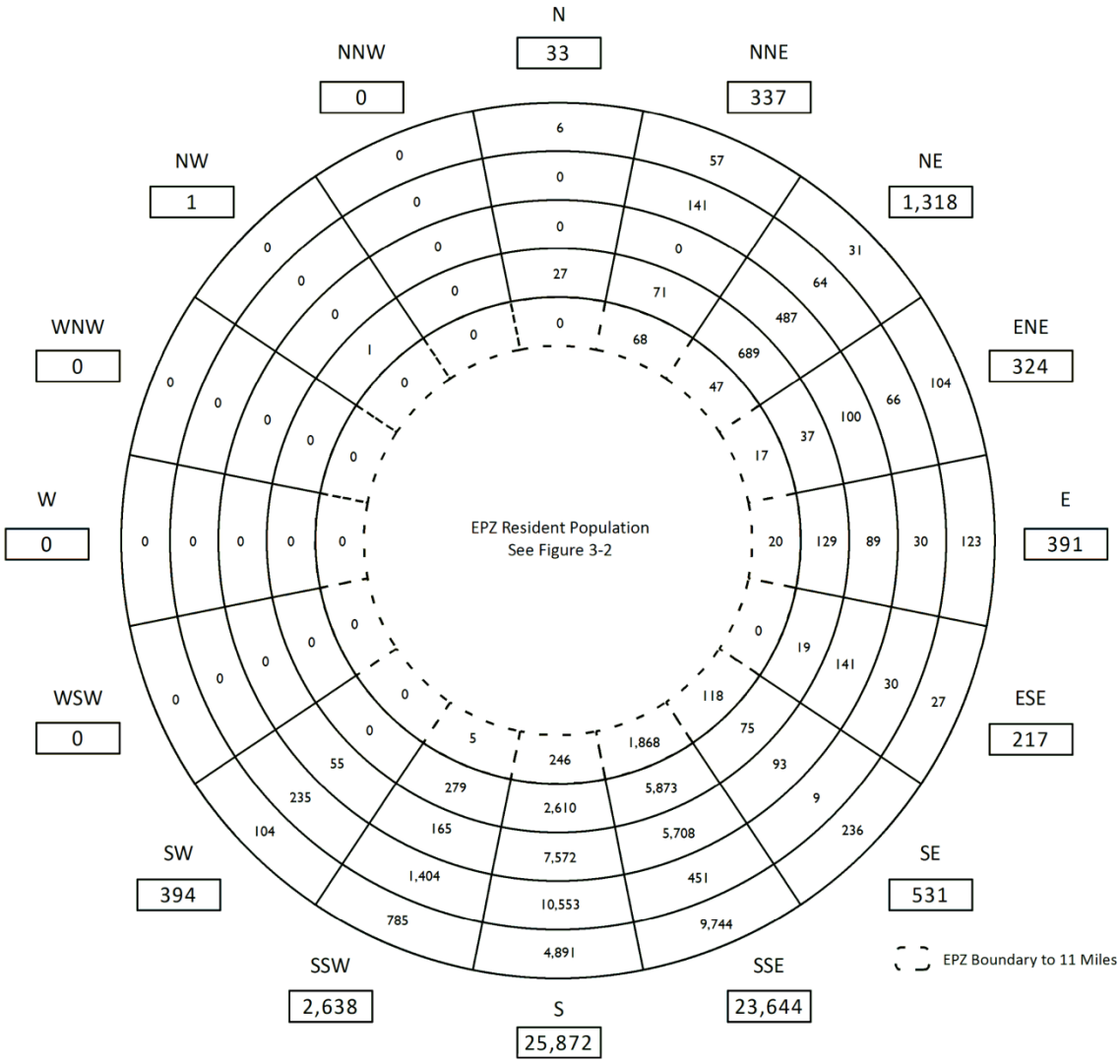
County: Benton

Includes the following areas: south of the Hanford Site and north of Battelle Blvd. between Stevens Dr. and the Columbia River. It also includes the area west of Stevens Dr. between SR 240 and the Hanford Site. It includes the Horn Rapids Off-road Vehicle Park and the Richland Landfill. It does not include businesses or parks accessed from Logston Blvd., Sullivan Blvd., and Robertson Dr. or businesses on the west side of Stevens Dr. south of Curie St.

Section 4 County: Benton

Includes the following areas: This section is the Hanford Site and under jurisdiction of the Department of Energy. There are no permanent residents in this area. Hanford workers would be notified if any protective actions are necessary.

Figure A-1 - Shadow Population by Sector



Shadow Population

Miles	Subtotal by Ring	Cumulative Total
EPZ - 11	2,389	2,389
11 - 12	9,810	12,199
12 - 13	14,410	26,609
13 - 14	12,983	39,592
14 - 15	16,108	55,700
	Total:	55,700

Figure A-2 - EPZ Permanent Resident Population

Section	2000 Population	2010 Population
CGS	4	0
1	1,255	1,077
2	1,476	1,649
3A	0	2
3B	1,048	1,941
3C	3	19
4	0	0
TOTAL	**3,786**	**4,688**
EPZ Population Growth:		**23.8%**

Figure A-3 - Permanent Resident Population and Vehicles by Section

		2010
CGS	0	0
1	1,077	455
2	1,649	697
3A	2	1
3B	1,941	819
3C	19	8
4	0	0
TOTAL	**4,688**	**1,980**

Figure A-4 - Shadow Population and Vehicles by Section

Section	Population	Evacuating Vehicles
N	33	14
NNE	337	142
NE	1,318	556
ENE	324	137
E	391	163
ESE	217	91
SE	531	226
SSE	23,644	9,967
S	25,872	10,903
SSW	2,638	1,109
SW	394	165
WSW	0	0
W	0	0
WNW	0	0
NW	1	0
NNW	0	0
TOTAL	**55,700**	**23,473**

Figure A-5 - Percent of Section Population Evacuating for Each Region

Region	Description	Section						
		CGS	1	2	3A	3B	3C	4
R01	2-Mile Radius	100%	20%	20%	20%	20%	20%	20%
R02	5-Mile Radius	100%	100%	100%	100%	20%	20%	100%
R03	Full EPZ	100%	100%	100%	100%	100%	100%	100%
Evacuate 2-Mile Radius and Downwind to 5 Miles								
Region	Wind Direction From:	Section						
		CGS	1	2	3A	3B	3C	4
R04	SSE, S, SSW	100%	100%	20%	20%	20%	20%	100%
R05	SW, WSW	100%	100%	20%	20%	20%	20%	20%
R06	W, WNW	100%	100%	100%	20%	20%	20%	20%
R07	NW	100%	20%	100%	20%	20%	20%	20%
R08	NNW, N, NNE	100%	20%	100%	100%	20%	20%	20%
R09	NE	100%	20%	20%	100%	20%	20%	20%
R10	ENE, E, ESE	100%	20%	20%	100%	20%	20%	100%
R11	SE	100%	20%	20%	20%	20%	20%	100%
Evacuate 2-Mile Radius and Downwind to the EPZ Boundary								
Region	Wind Direction From:	Section						
		CGS	1	2	3A	3B	3C	4
N/A	SSE, S, SSW	Refer to Region						
N/A	SW, WSW	Refer to Region						
N/A	W, WNW	Refer to Region						
N/A	NW	Refer to Region						
R12	NNW, N	100%	20%	100%	100%	100%	100%	20%
R13	NNE, NE, ENE	100%	20%	20%	100%	100%	100%	20%
R14	E, ESE	100%	20%	20%	100%	100%	100%	100%
N/A	SE	Refer to Region						
Staged Evacuation - 2-Mile Radius Evacuates, then Evacuate Downwind to 5 Miles								
Region	Wind Direction From:	Section						
		CGS	1	2	3A	3B	3C	4
R15	SSE, S, SSW	100%	100%	20%	20%	20%	20%	100%
R16	SW	100%	100%	20%	20%	20%	20%	20%
R17	WSW, W, WNW	100%	100%	100%	20%	20%	20%	20%
R18	NW	100%	20%	100%	20%	20%	20%	20%
R19	NNW, N, NNE	100%	20%	100%	100%	20%	20%	20%
R20	NE	100%	20%	20%	100%	20%	20%	20%
R21	ENE, E, ESE	100%	20%	20%	100%	20%	20%	100%
R22	SE	100%	20%	20%	20%	20%	20%	100%
Shelter-in-Place until 90% ETE for R01, then Evacuate			Section(s) Shelter-in-Place			Section(s) Evacuate		

Figure A-6 - Region R01

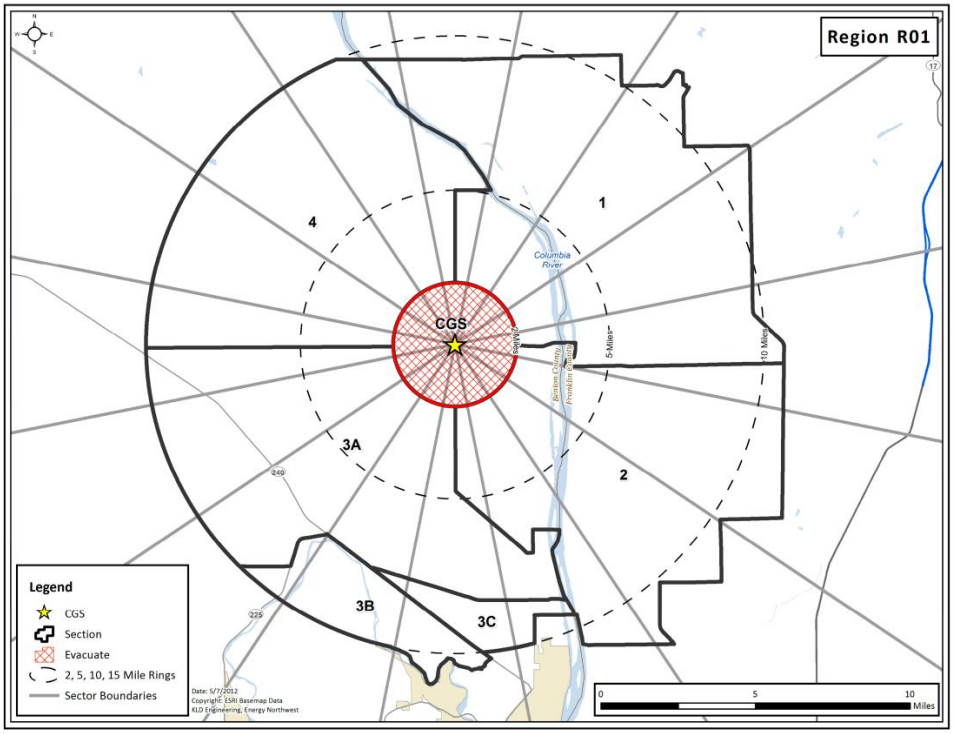


Figure A-7 - Region R02

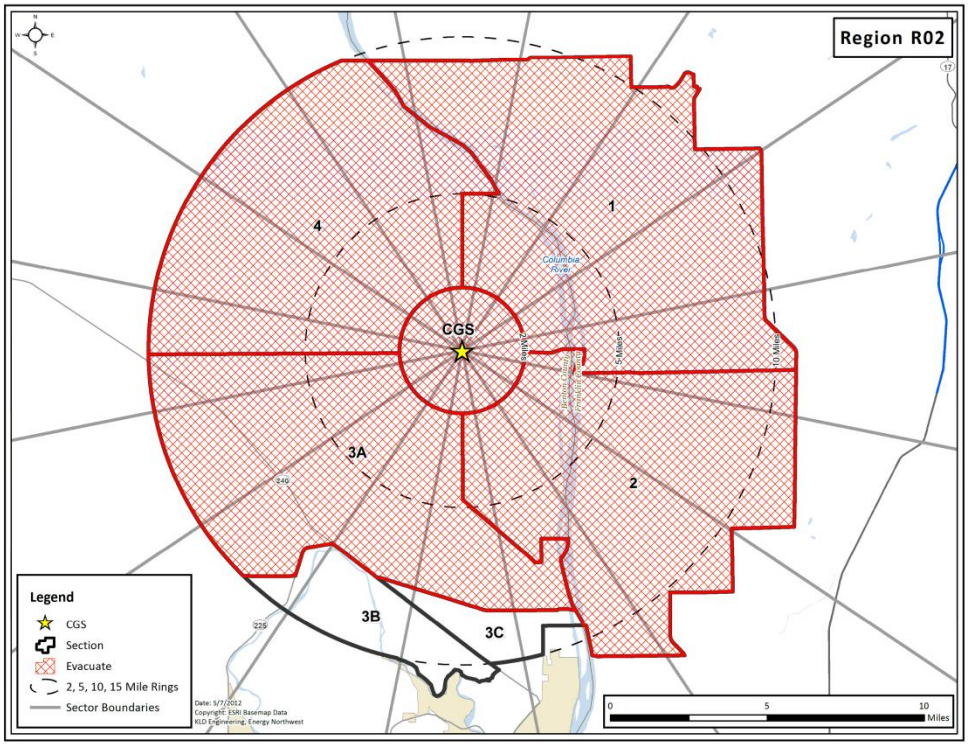


Figure A-8 - Region R03

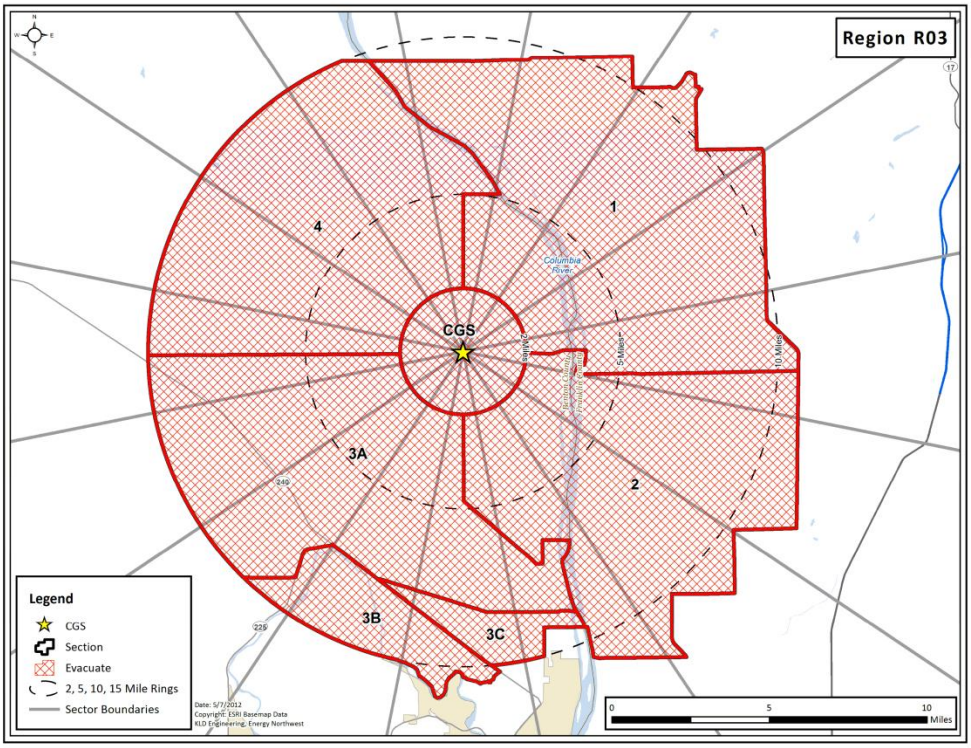


Figure A-9 - Region R04

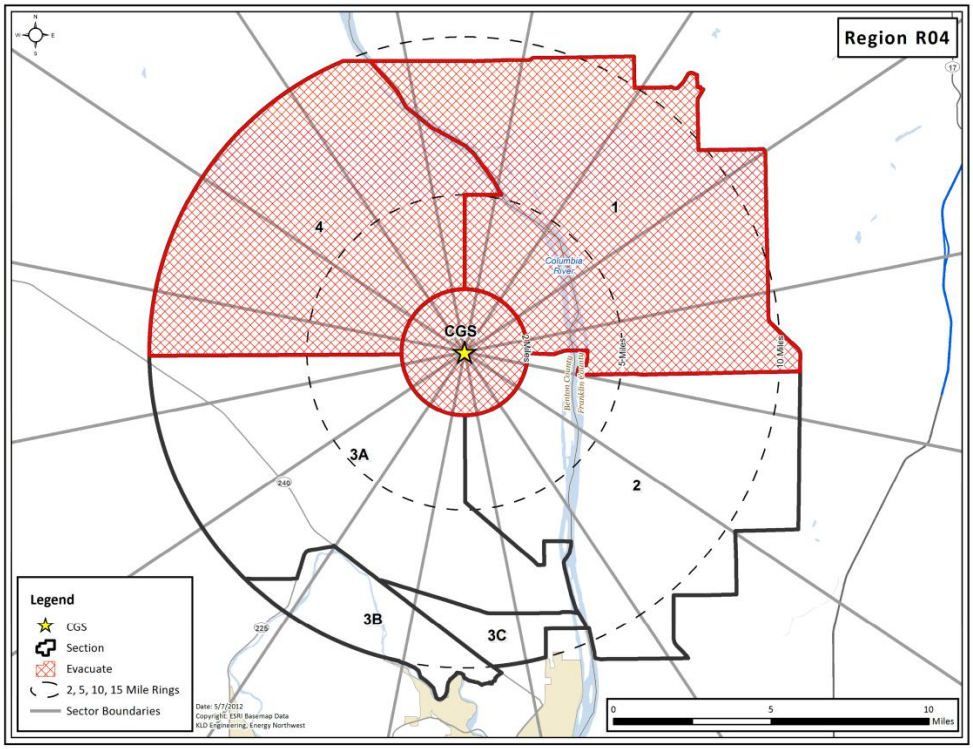


Figure A-10 - Region R05

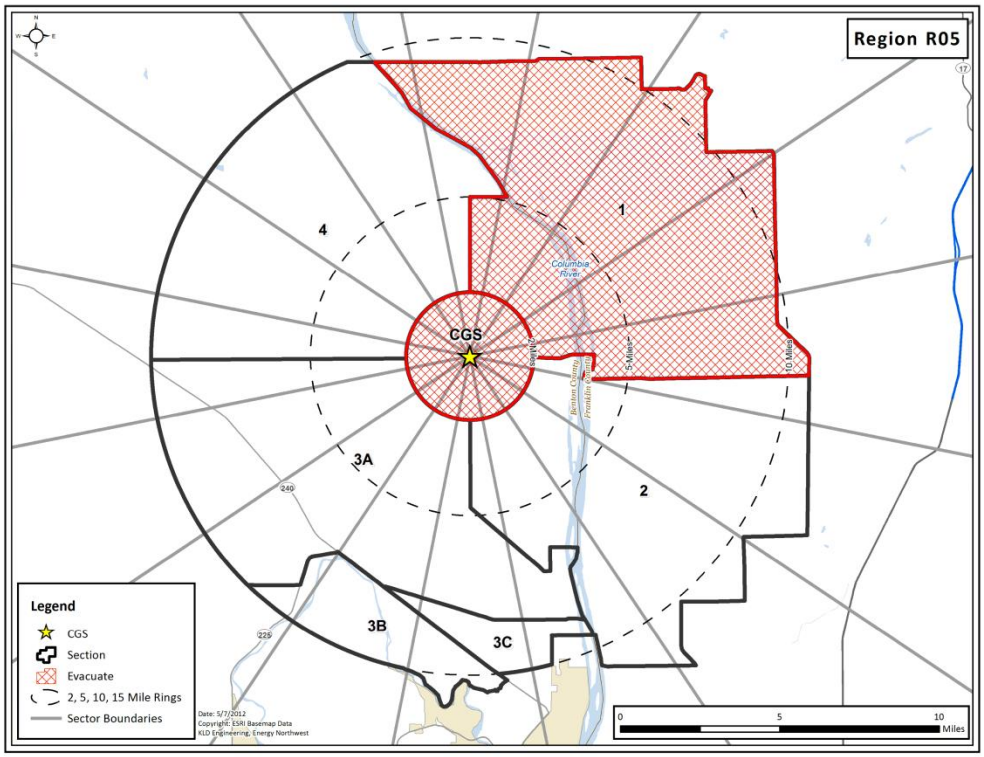


Figure A-11 - Region R06

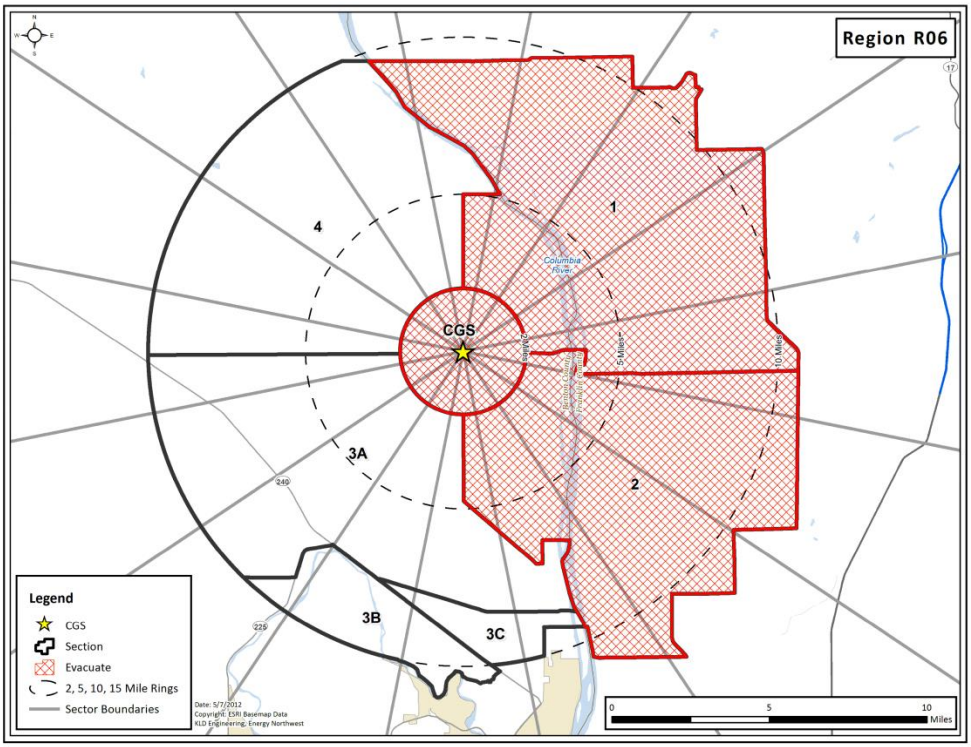


Figure A-12 - Region R07

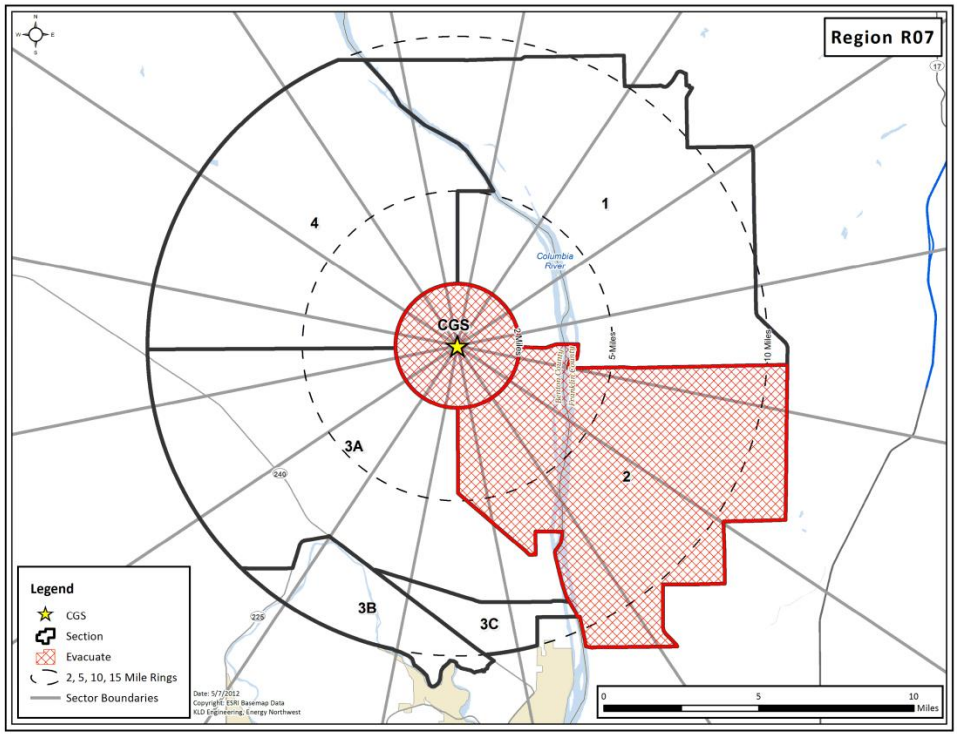


Figure A-13 - Region R08

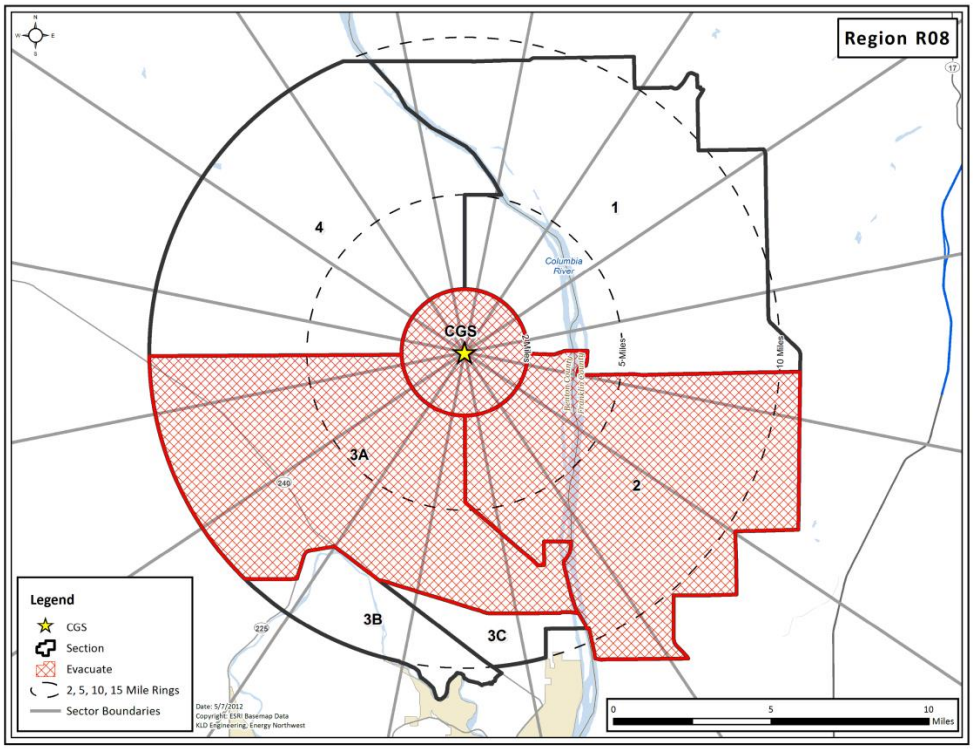


Figure A-14 - Region R09

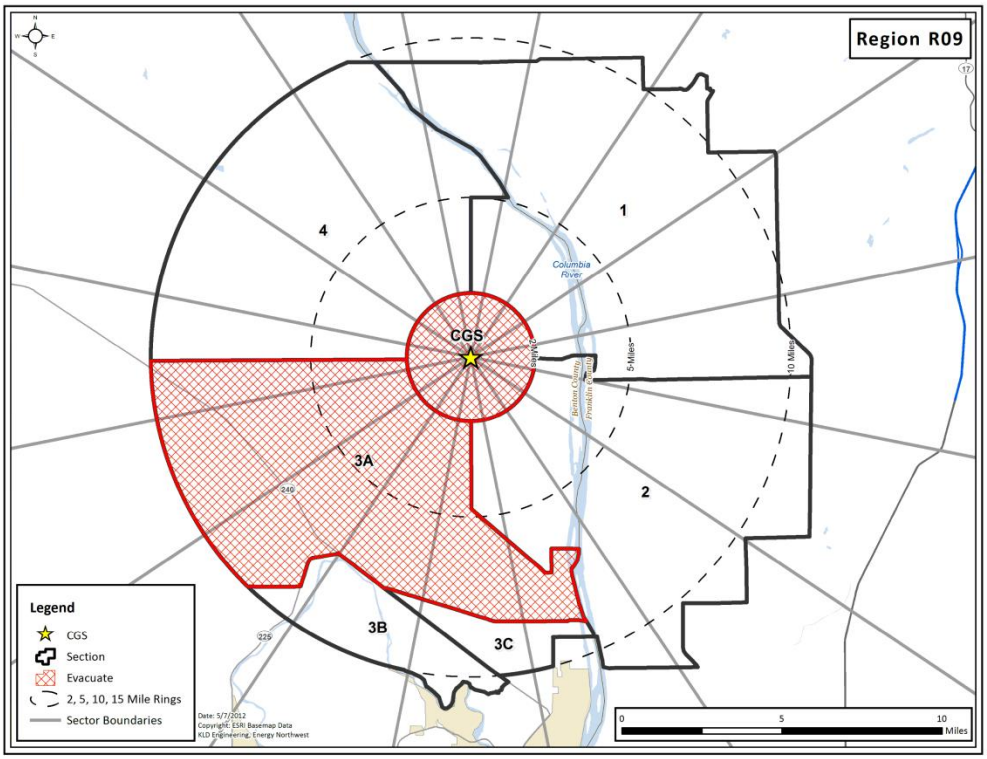


Figure A-15 - Region R10

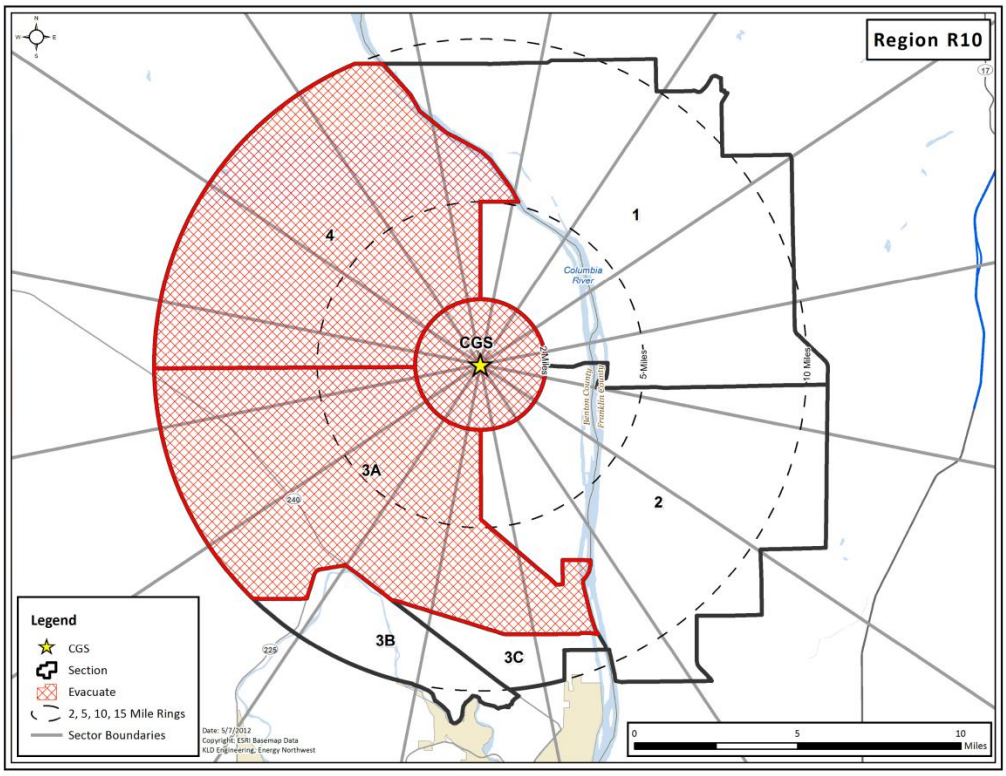


Figure A-16 - Region R11

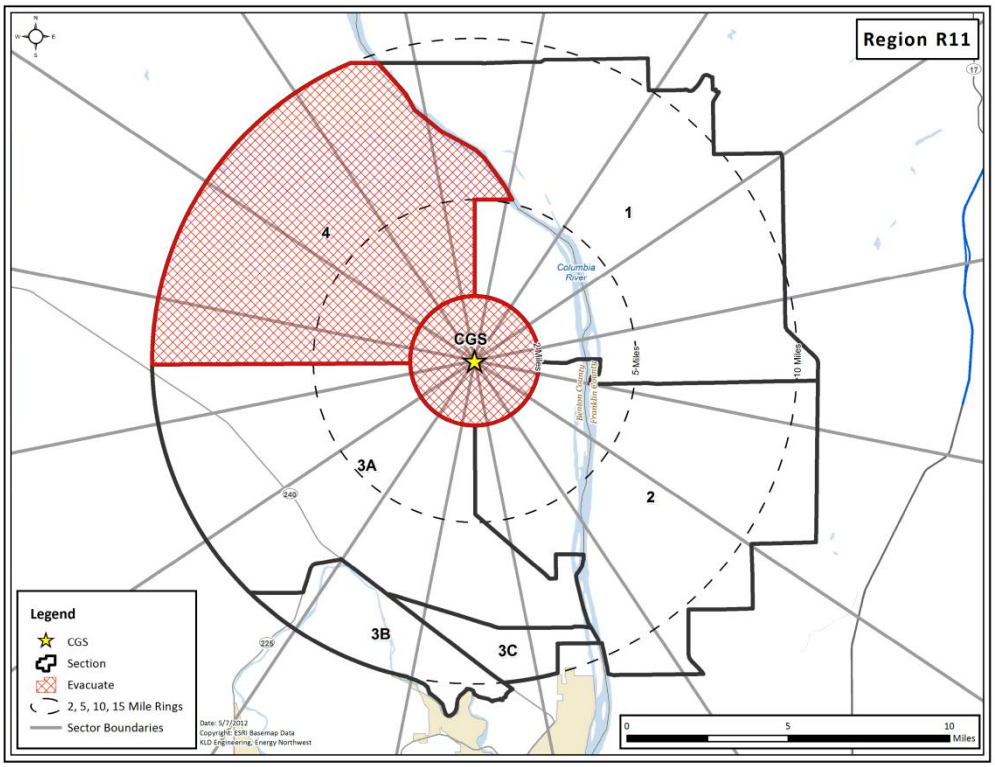


Figure A-17 - Region R12

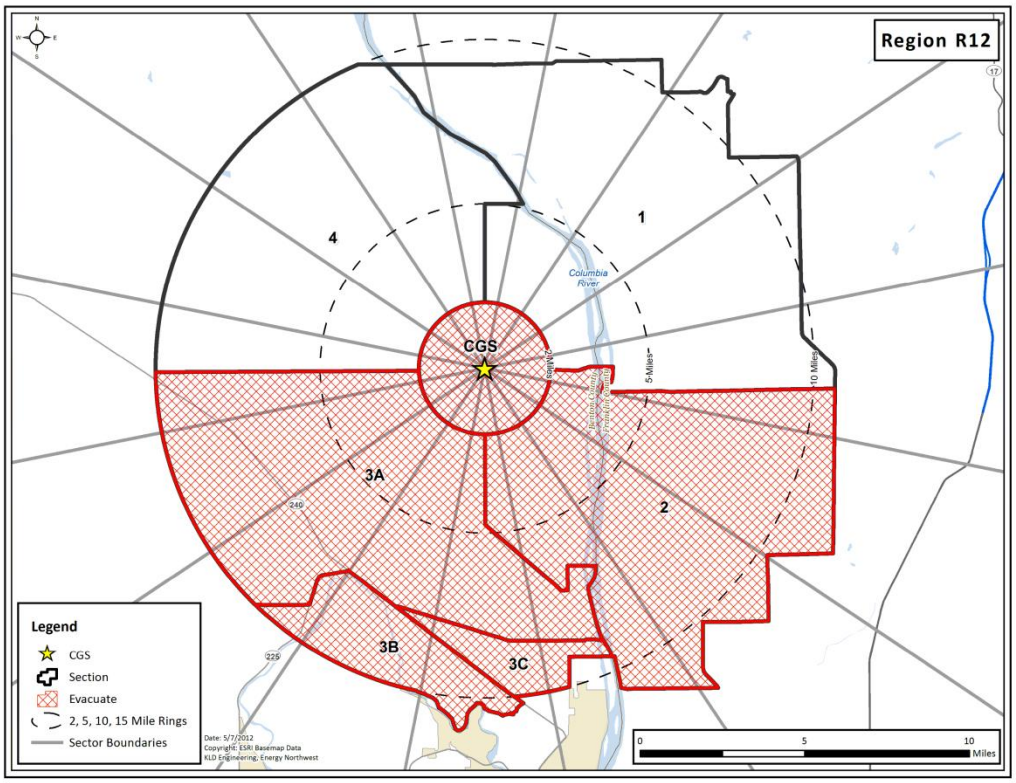


Figure A-18 - Region R13

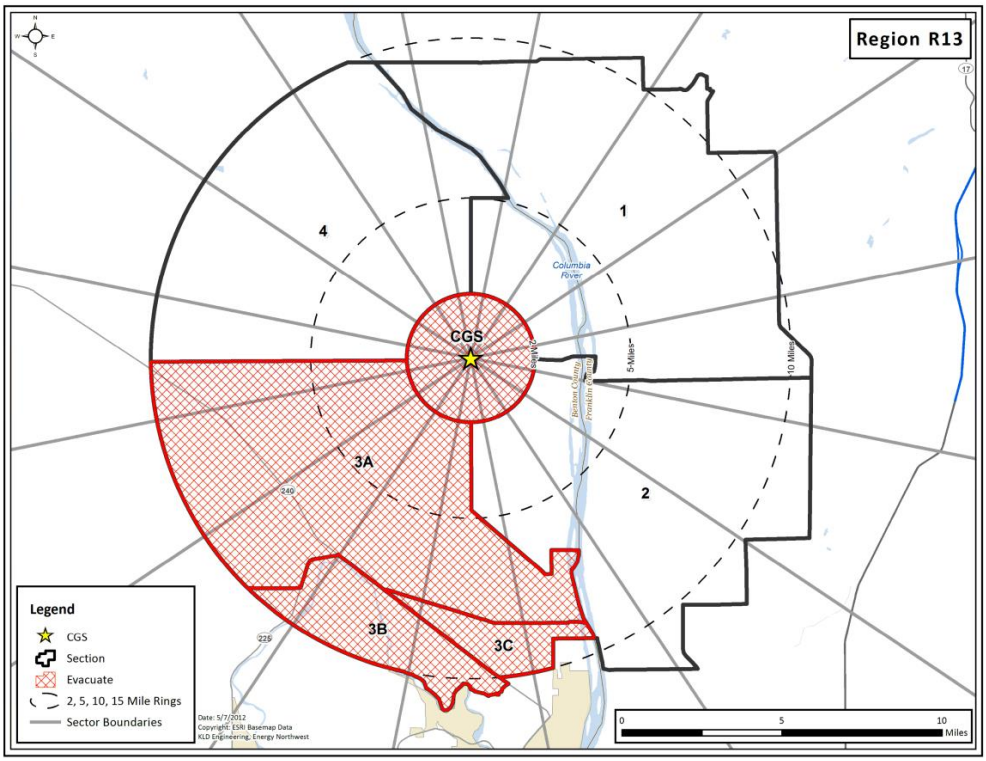


Figure A-19 - Region R14

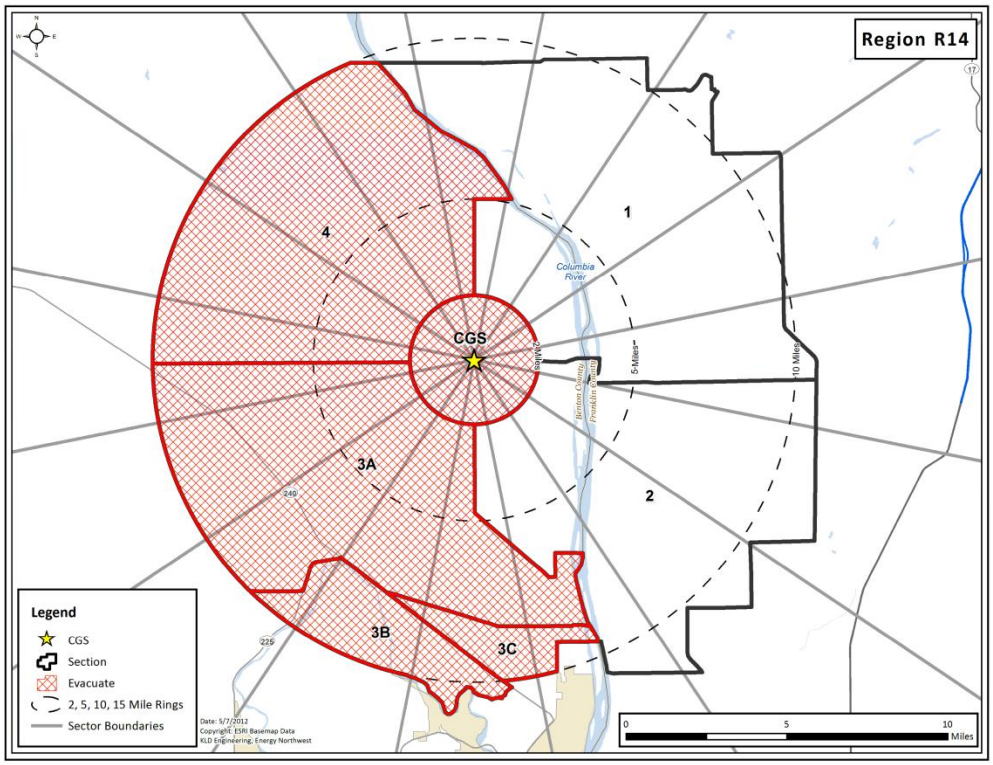


Figure A-20 - Region R15

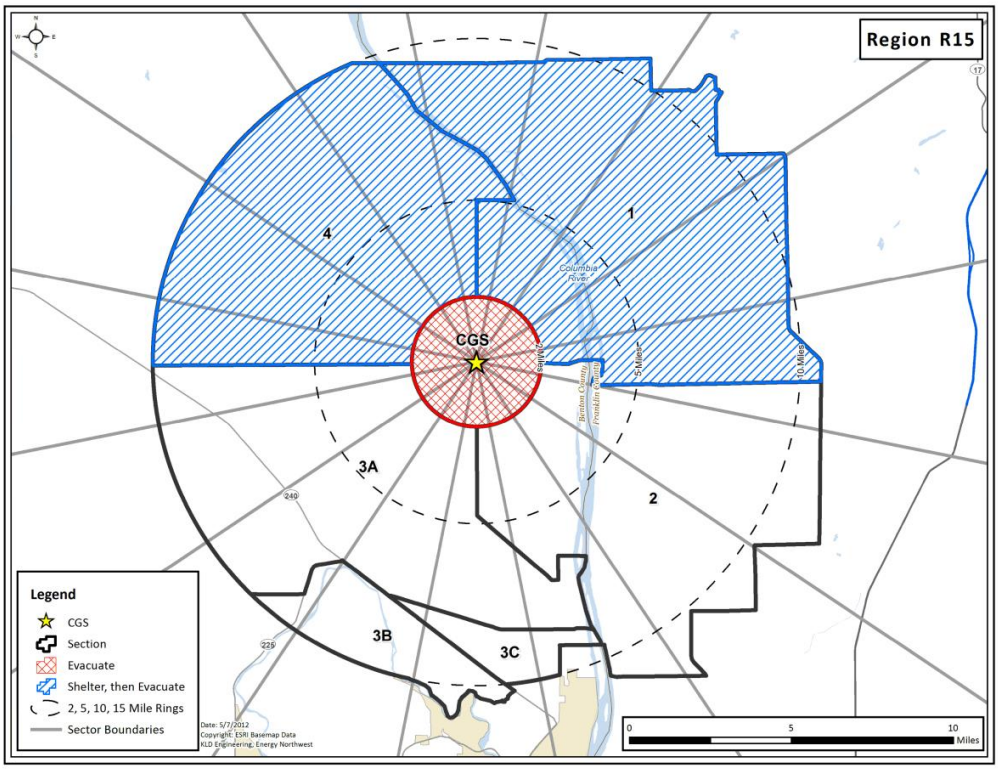


Figure A-21 - Region R16

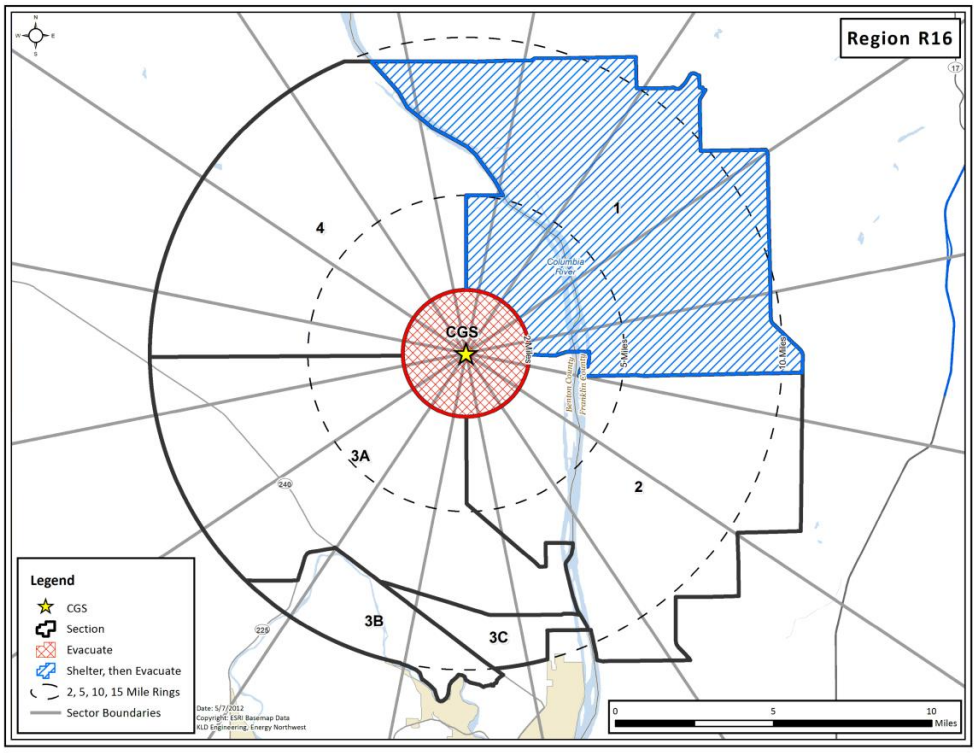


Figure A-22 - Region R17

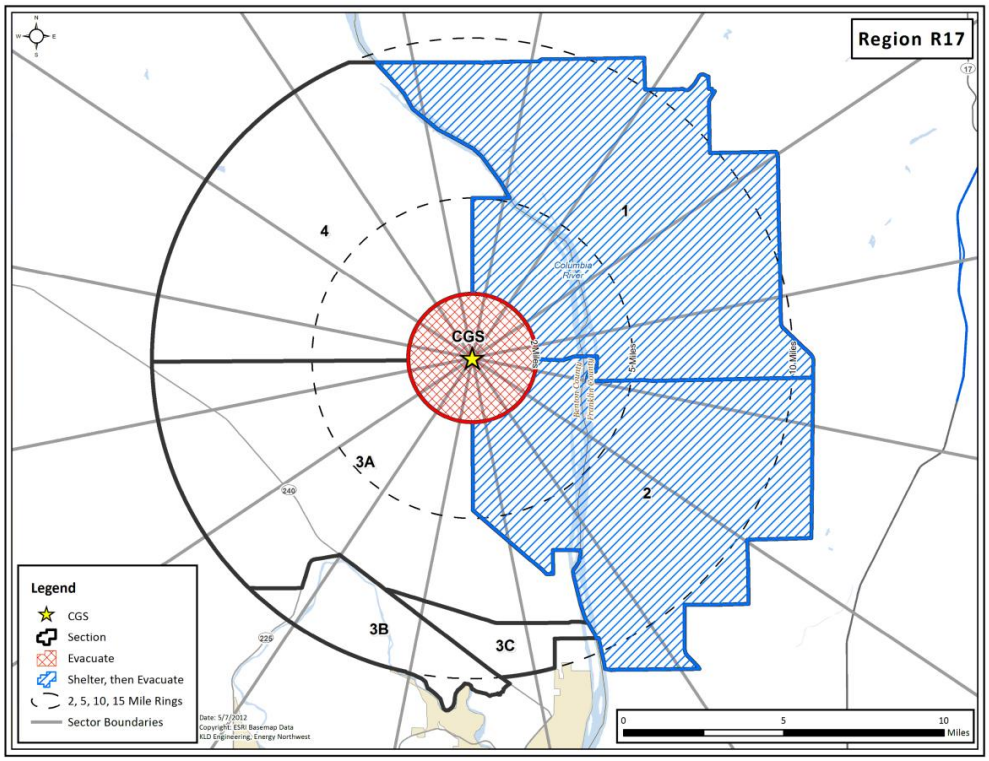


Figure A-23 - Region R18

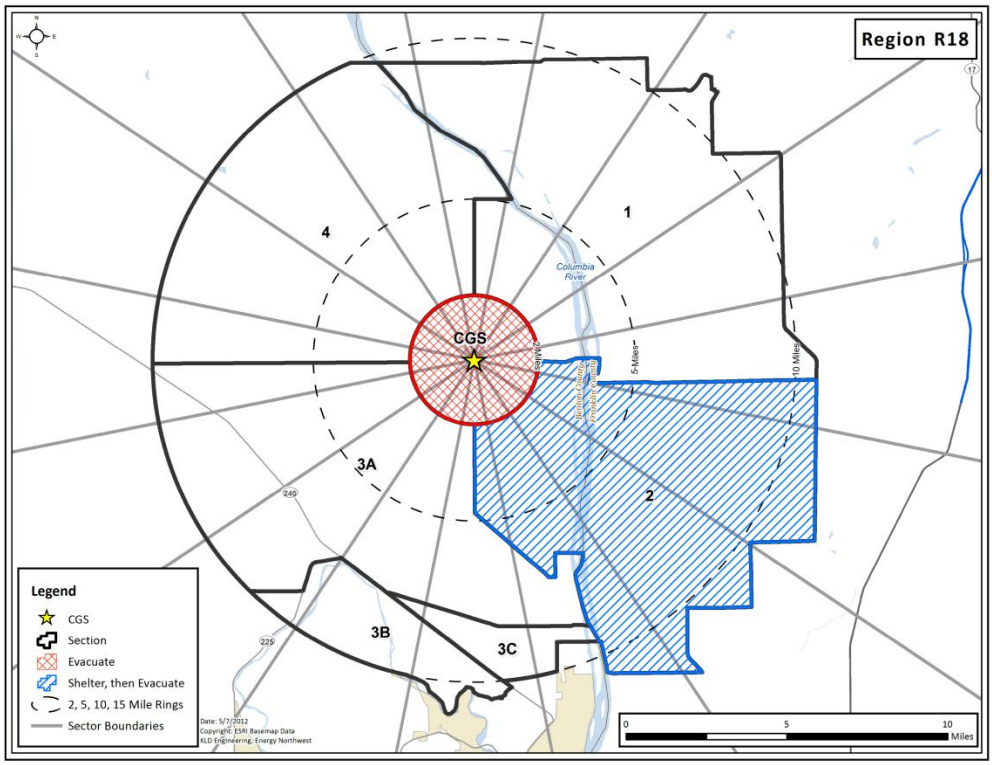


Figure A-24 - Region R19

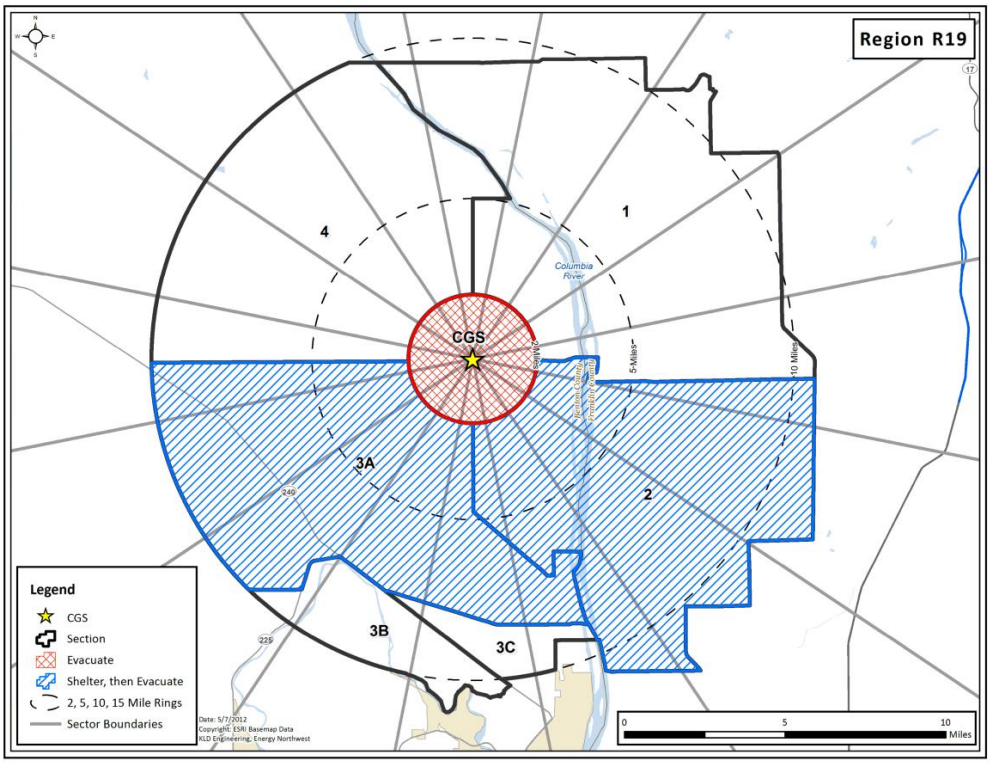


Figure A-25 - Region R 20

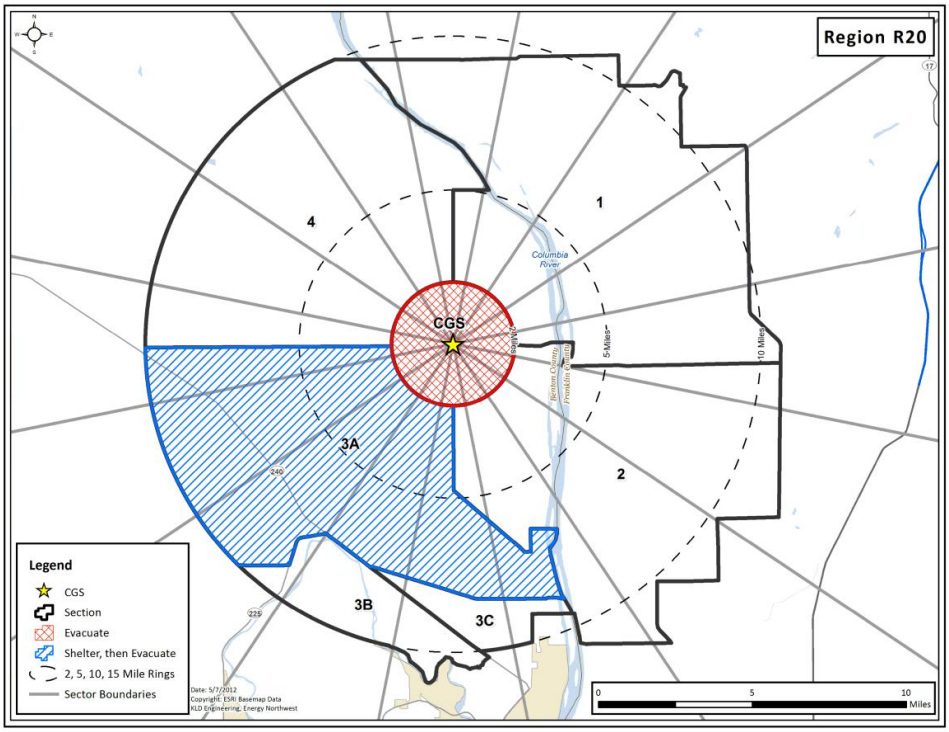


Figure A-26 - Region R21

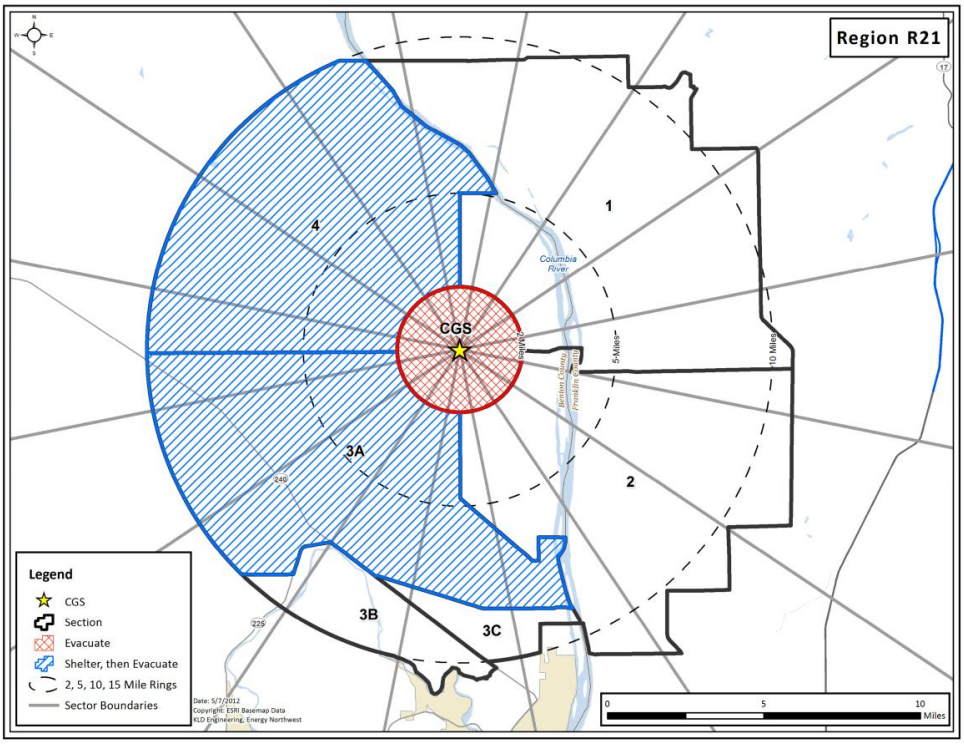


Figure A-27 - Region R22

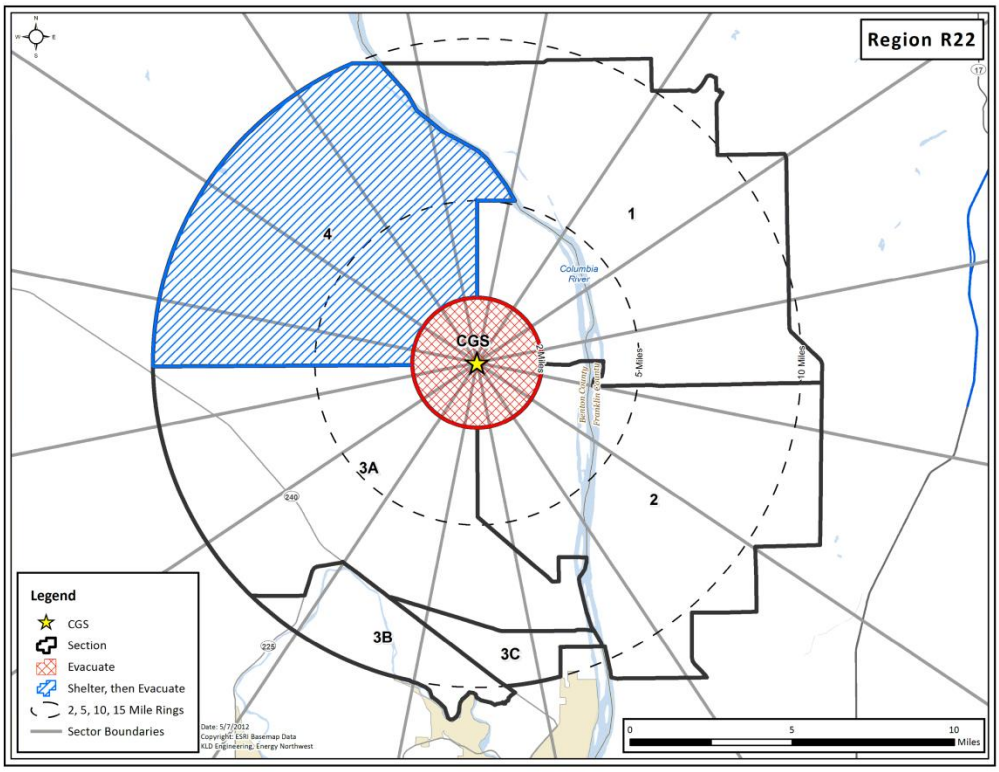


Figure A-28 - General Population Assistance Centers

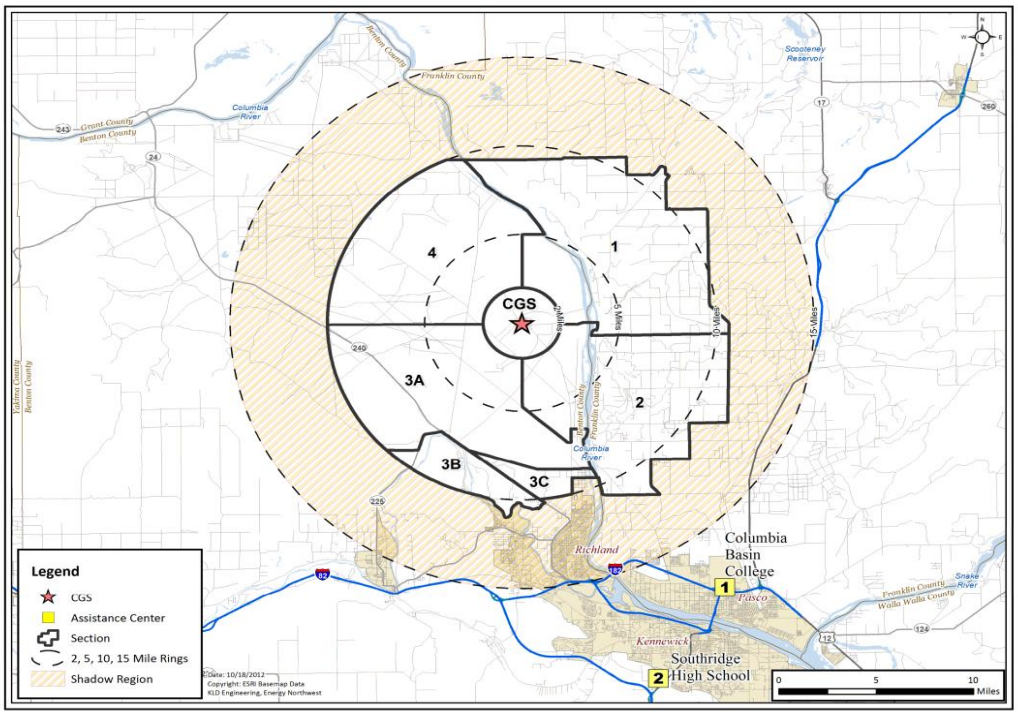


Figure A-29 - Evacuation Route Map

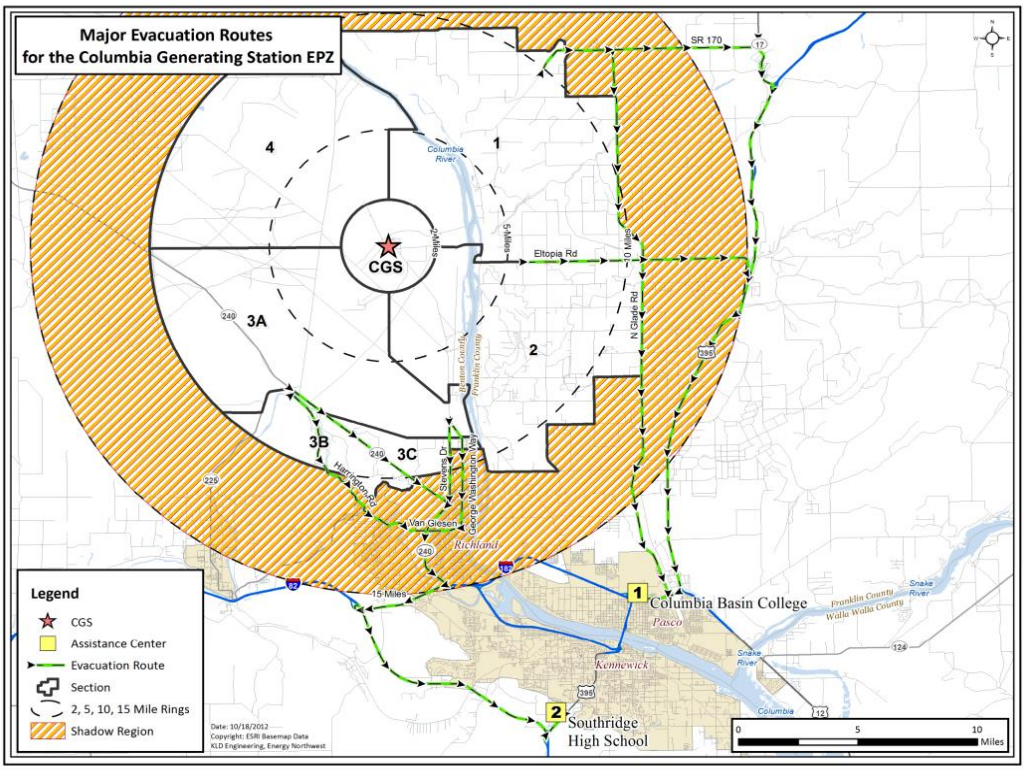


Figure A-30 - Schools within the EPZ

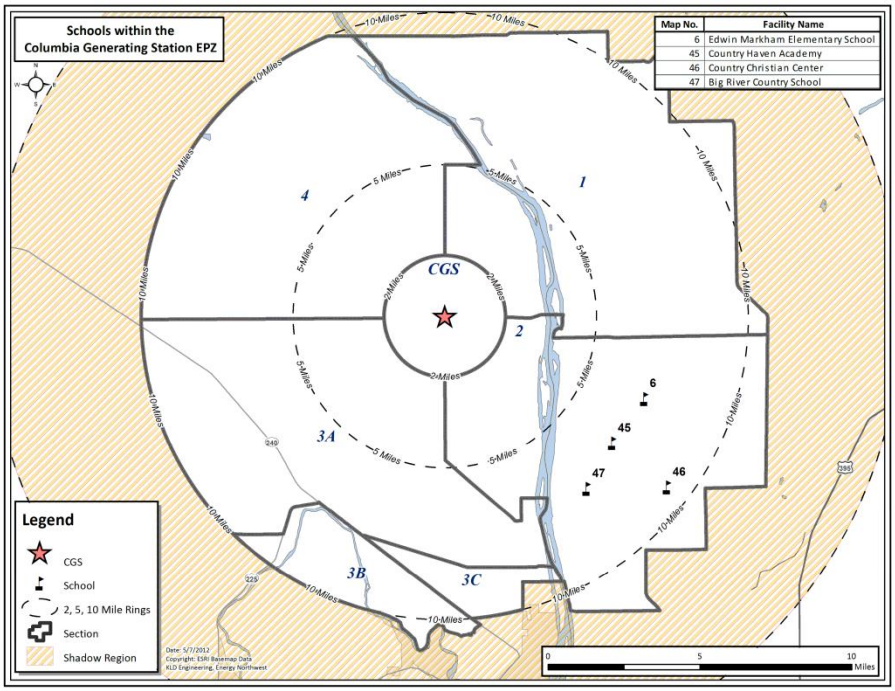


Figure A-31 - School Population Demand Estimates

			Buses Required	Vans Required
2	Big River Country School	13	1	-
2	Country Christian Center	25	1	-
2	Country Haven Academy	6	-	1
2	Edwin Markham Elementary School	280	4	-
	TOTAL:	**324**	**6**	**1**

Figure A-32 - School Assistance Centers

School	Assistance Center
Big River Country School	Columbia Basin College
Country Christian Center	Columbia Basin College
Country Haven Academy	Columbia Basin College
Edwin Markham Elementary School	Columbia Basin College

Figure A-33 - Recreational Areas within the EPZ

	Distance (miles)	Dire-ction						
BENTON								
3B	7.9	SW	Horn Rapids County Park	Horn Rd	Richland	509-531-7016	500	160
3B	7.9	SW	Horn Rapids County Park	Horn Rd	Richland	509-967-2582	150	48
			Horn Rapids County Park Overnight Seasonal					
3B	10.0	S	Horn Rapids Golf Club	2800 Clubhouse Lane	Richland	509-375-4714	25	6
3B	9.8	SW	Rattlesnake Mountain Shooting Area	98204 N SR 225	Benton City	509-588-4770	300	96
3C	10.8	SSE	Babe Ruth Ball Diamonds	N/A	Richland	N/A	500	160
			Horn Rapids ORV Park Boat Race Area					
3C	8.4	S	Horn Rapids ORV Park Go Carts	3323 Twin Bridges Rd	Richland	509-496-2958	200	64
3C	8.0	S	Horn Rapids ORV Park Motocross	3323 Twin Bridges Rd	Richland	509-496-2958	1,500	479
3C	8.4	S	Horn Rapids ORV Park Overnight	3323 Twin Bridges Rd	Richland	509-531-7016	1,000	319
3C	8.4	S	Horn Rapids ORV Park RC Airport	3323 Twin Bridges Rd	Richland	509-496-2958	50	16
3C	10.0	S	Horn Rapids RV Resort	2640 Kingsgate Way	Richland	509-375-9913	704	675
						Benton County Subtotal:	*7,049*	*2,700*
FRANKLIN								
1	4.5	NE	Ringold Fishing Area	N/A	N/A	N/A	1,000	319
1	8.1	NNW	Wahluke Hunting Area	N/A	N/A	N/A	500	160
2	8.6	SSE	Columbia and Yakima River	N/A	Pasco	N/A	1,000	319
						Franklin County Subtotal:	*2,500*	*798*
						TOTAL:	**9,549**	**3,498**

Figure A-34 - Recreational Areas within the EPZ

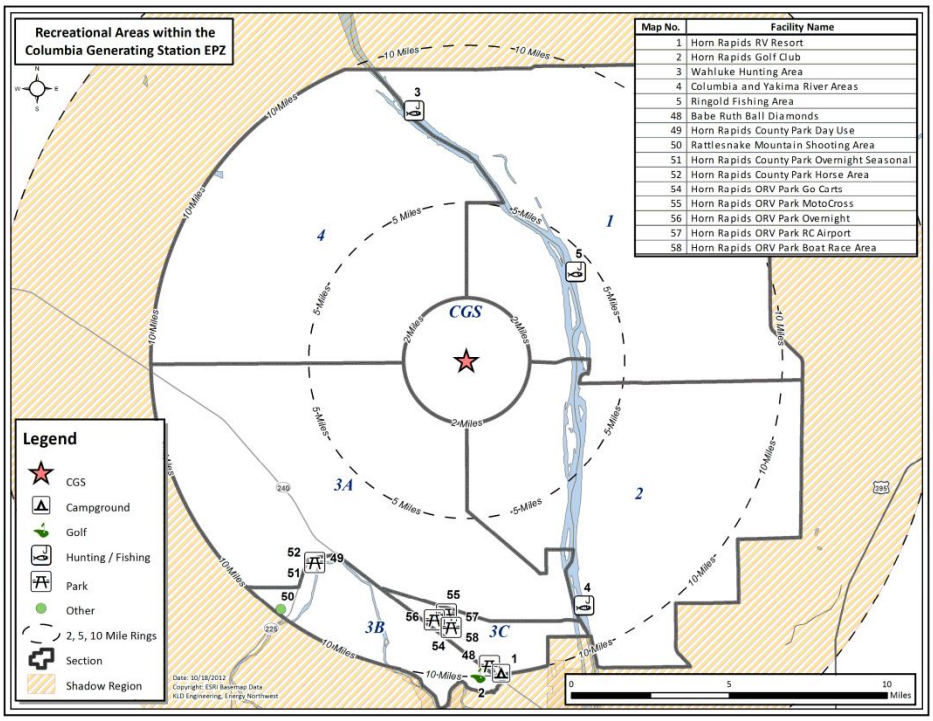


Figure A-35 - Congestion Patterns at 30 Minutes after Advisory to Evacuate

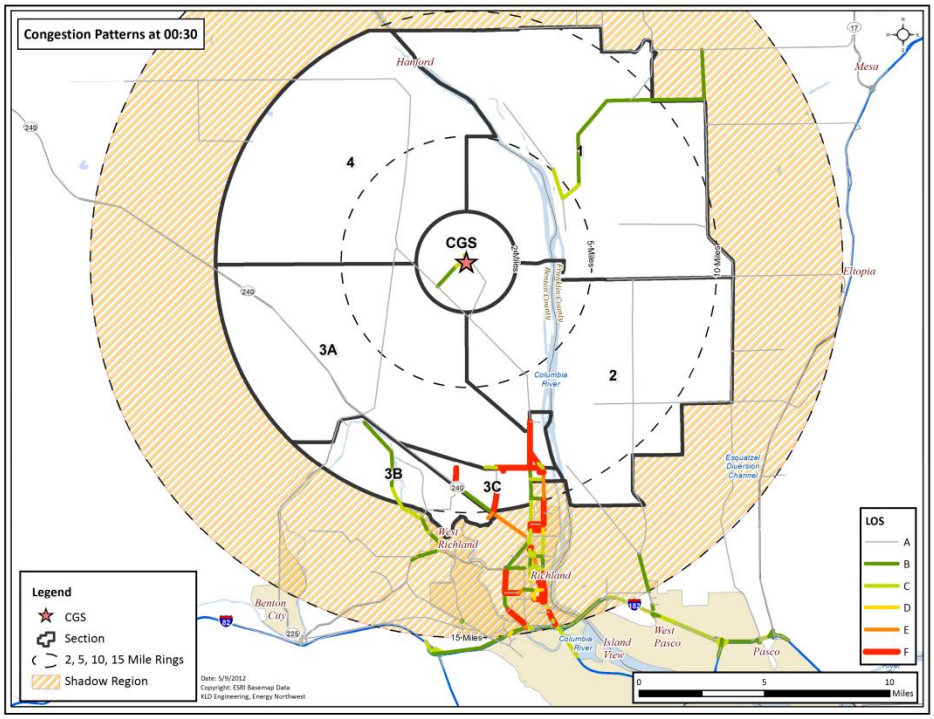


Figure A-36 - Congestion Patterns at 1 Hour after Advisory to Evacuate

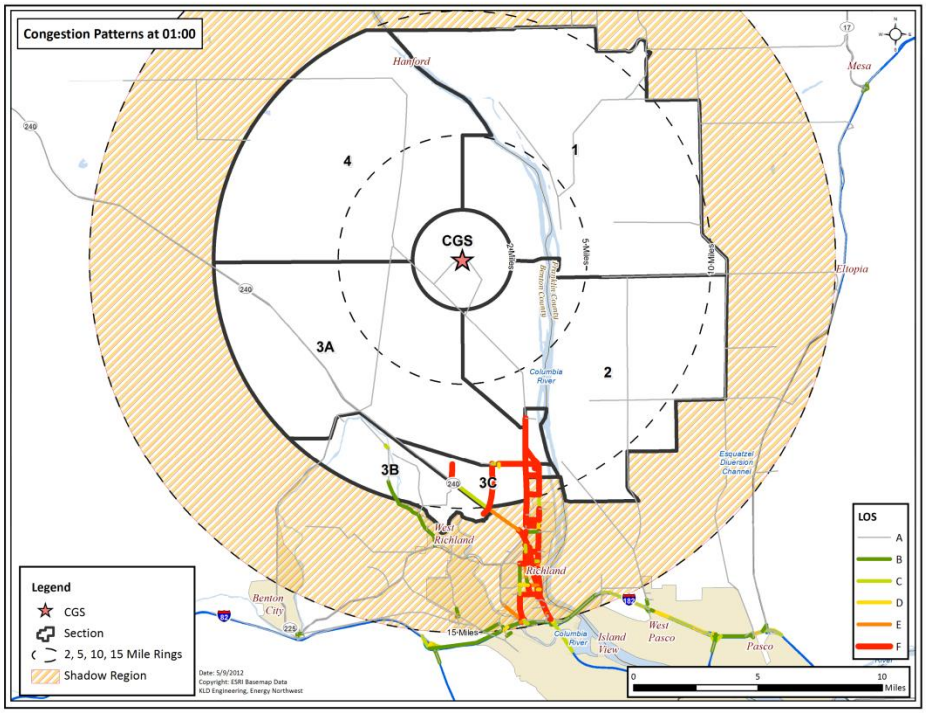


Figure A-37 - Congestion Patterns at 1 Hour and 30 Minutes after Advisory to Evacuate

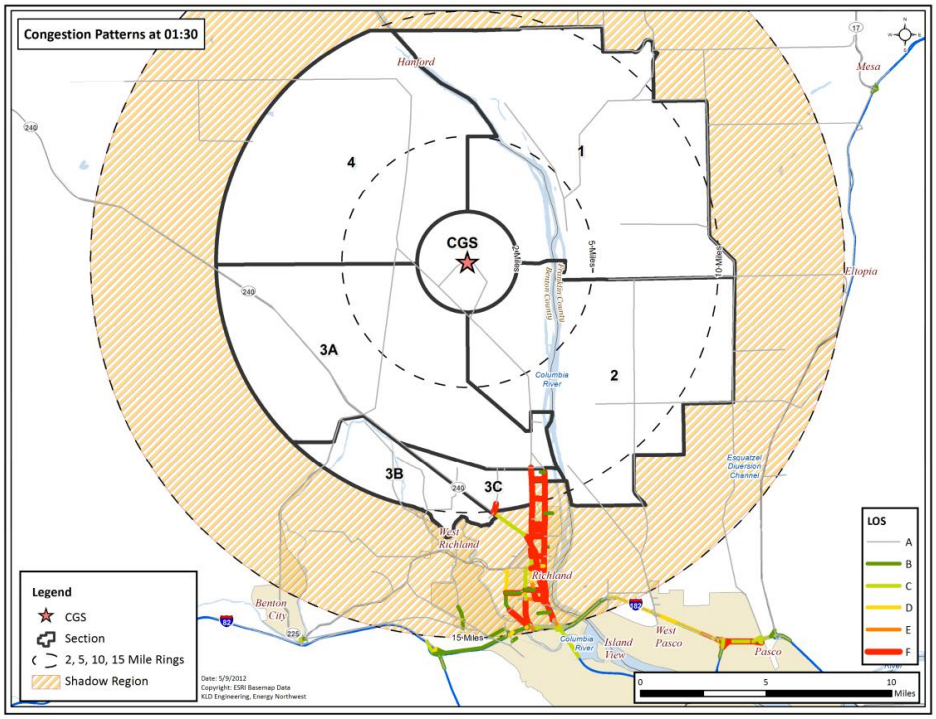


Figure A-38 - Congestion Patterns at 2 Hours and 30 Minutes after Advisory to Evacuate

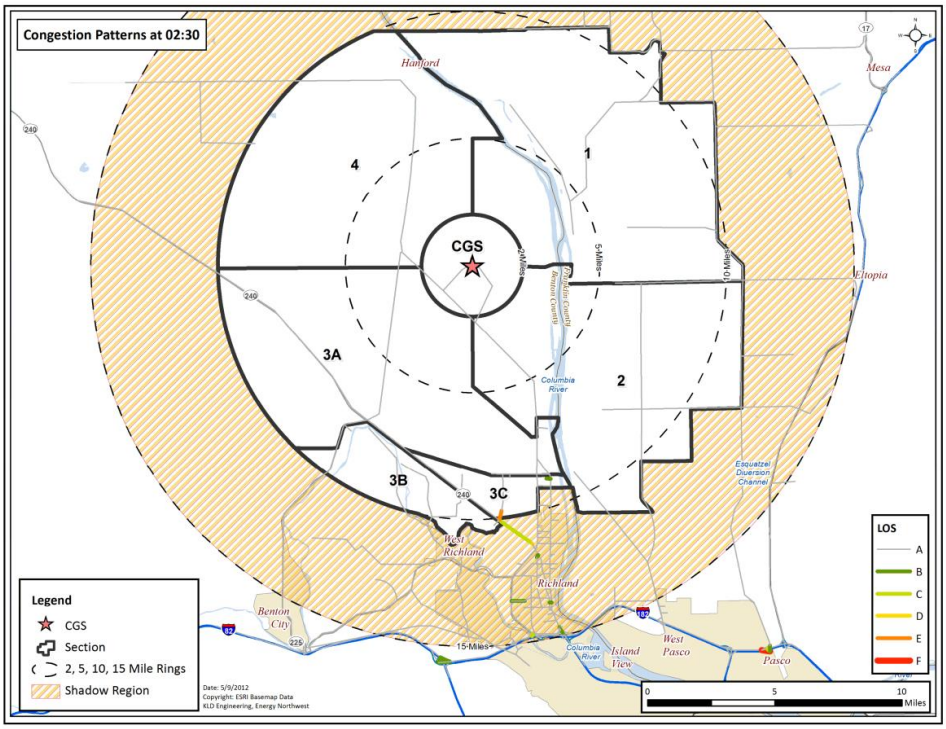


Figure A-39 - Time to Clear Indicated Area of 90% of Affected Population

	Summer		Summer		Summer	Winter			Winter			Winter	Winter	Summer
	Midweek		Weekend		Midweek Weekend	Midweek			Weekend			Midweek Weekend	Weekend	Midweek
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Region	Midday		Midday		Evening	Midday			Midday			Evening	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Special Event	Roadway Impact
Entire 2-Mile Region, 5-Mile Region, and EPZ														
R01	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05
R02	1:25	1:25	1:30	1:30	1:40	1:30	1:30	1:40	1:35	1:35	2:05	1:45	1:35	1:25
R03	1:50	2:05	1:40	1:45	1:35	1:50	2:00	2:05	1:30	1:30	1:50	1:35	2:00	1:55
2-Mile Ring and Keyhole to 5 Miles														
R04	1:40	1:40	1:30	1:35	1:45	1:40	1:40	2:00	1:40	1:40	2:05	1:45	1:40	1:40
R05	1:40	1:40	1:30	1:35	1:45	1:40	1:40	2:00	1:40	1:40	2:05	1:45	1:40	1:40
R06	1:45	1:50	1:35	1:40	1:45	1:50	1:50	2:15	1:45	1:45	2:15	1:50	1:45	1:45
R07	1:45	1:45	1:45	1:45	1:50	1:50	1:50	2:15	1:50	1:50	2:15	1:55	1:50	1:45
R08	1:25	1:25	1:35	1:35	1:40	1:25	1:25	1:35	1:35	1:35	2:05	1:40	1:35	1:25
R09	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:10	1:05	1:05	1:05	1:05	1:05	1:05
R10	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:10	1:05	1:05	1:05	1:05	1:05	1:05
R11	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05
2-Mile Ring and Keyhole to EPZ Boundary														
R12	1:50	2:10	1:40	1:45	1:30	1:50	2:00	2:05	1:25	1:30	1:45	1:35	2:00	1:55
R13	1:50	2:10	1:40	1:45	1:25	1:50	2:00	2:05	1:20	1:25	1:35	1:25	2:05	1:50
R14	1:50	2:10	1:40	1:45	1:25	1:50	2:00	2:05	1:20	1:25	1:35	1:25	2:05	1:50
Staged Evacuation - 2-Mile Ring and Keyhole to 5 Miles														
R15	1:40	1:40	1:35	1:35	1:45	1:40	1:40	2:00	1:40	1:40	2:05	1:45	1:40	1:40
R16	1:40	1:40	1:35	1:35	1:45	1:40	1:45	2:05	1:40	1:40	2:05	1:45	1:40	1:40
R17	1:45	1:50	1:40	1:40	1:50	1:50	1:50	2:15	1:45	1:45	2:15	1:50	1:45	1:45
R18	1:45	1:45	1:45	1:45	1:50	1:50	1:50	2:15	1:50	1:50	2:15	1:55	1:50	1:45
R19	1:25	1:25	1:35	1:35	1:40	1:25	1:25	1:35	1:35	1:40	2:05	1:45	1:35	1:25
R20	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:10	1:05	1:05	1:05	1:05	1:05	1:05
R21	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:10	1:05	1:05	1:05	1:05	1:05	1:05
R22	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05	1:05

Figure A-40 - Time to Clear Indicated Area of 100% of Affected Population

	Summer		Summer		Summer	Winter			Winter			Winter	Winter	Summer
	Midweek		Weekend		Midweek Weekend	Midweek			Weekend			Midweek Weekend	Weekend	Midweek
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Region	Midday		Midday		Evening	Midday			Midday			Evening	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Special Event	Roadway Impact
Entire 2-Mile Region, 5-Mile Region, and EPZ														
R01	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55	1:55
R02	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R03	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10
2-Mile Ring and Keyhole to 5 Miles														
R04	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R06	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R07	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R08	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R09	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R10	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R11	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
2-Mile Ring and Keyhole to EPZ Boundary														
R12	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10
R13	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10
R14	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10	5:10
Staged Evacuation - 2-Mile Ring and Keyhole to 5 Miles														
R15	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R16	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R17	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R18	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R19	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R20	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R21	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05
R22	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05	5:05

ANNEX B - U.S. DEPARTMENT OF ENERGY HANFORD SITE

I. INTRODUCTION

The United States Department of Energy's Hanford Site sits on 586 square miles in the desert of southeastern Washington State. The area is home to nine former nuclear reactors and their associated processing facilities that were built beginning in 1943. The reactors were used to produce plutonium, a man-made, radioactive, chemical element which was needed for atomic weapons associated with America's defense program during World War II and throughout the Cold War. Plutonium from Hanford was used in the Fat Man bomb which was dropped on Nagasaki, Japan in August of 1945 and helped to end World War II.

The Hanford Site facilities operate under license from the U.S. Department of Energy, in collaboration with the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency. The Hanford Site employs response procedures and processes to address the full spectrum of operational emergencies, natural phenomenon, transportation events, and safeguard and security emergencies. In place are procedures for quickly identifying and classifying events and alerting the public. Specific details on the incident identification, classifying, and notifications are in the following areas of this Plan.

II. REFERENCES

- Appendix 2 – Maps
- Appendix 4 – Facility Notification Forms
- Appendix 7 – Emergency Classification Levels and Agency Notifications
- Appendix 9 – Emergency Classification System and Emergency Classification Levels

ANNEX C - AREVA NP, INC.

Richland Engineering and Manufacturing Facility

I. INTRODUCTION

The AREVA Richland Engineering and Manufacturing Facility (EMF) consists primarily of an office building complex, four main processing buildings, a product development test facility, process chemical and waste storage tank system, materials warehouses, and ancillary buildings (Figure 1-4 - AREVA NP, Inc., Land Use within One Mile).

The operations conducted under United States Nuclear Regulatory Commission (USNRC) Special Nuclear Materials (SNM) License No. SNM-1227 and Washington State Radioactive Materials License No. WN-I062-1 are related to the development and fabrication of UO_2 fuels for commercial nuclear reactors. This includes receipt, possession, storage, transfer, and all operational steps from UF_6-UO_2 conversion to packaging finished fuel elements, associated uranium scrap recycling, and waste treatment and disposal.

II. EMERGENCY PLANNING ZONES / OFFSITE PROTECTIVE ACTION RECOMMENDATIONS

Emergency Planning Zones (EPZs) have been established by AREVA and state / local authorities. EPZ sections are shown in Figure C-1 - Emergency Planning Zone Sections and Figure 1-13 - AREVA NP, Inc., Emergency Planning Zone Sections, below. EPZ sections extend approximately 12-15 miles around the AREVA Richland EMF.

Offsite protective action recommendations (PARs) would be required whenever the projected dose exceeds 1 rem effective dose equivalent (EDE), or the projected HazMat concentration exceeds Emergency Response Planning Guideline (ERPG-3) at the site boundary. Evacuation and sheltering constitute the two types of PARs for the public that might be made to local authorities. Generally, if airborne plume travel time permits, evacuation is the preferred PAR. Fortunately, because the vicinity of the plant is so lightly populated and traveled, a PAR out to 1.0 mile can be implemented with little impact.

III. USNRC EVENT CLASSIFICATION SYSTEM

Fuel cycle and materials facilities (like the AREVA Richland EMF) do not present nearly the degree of radiological hazard (by orders of magnitude less) that nuclear power plants do. The NRC classification system at the fuel facility requires the use of only two

emergency classification levels, Alert and Site Area Emergency. Alert represents the least severe condition and Site Area Emergency the most severe.

An Alert is defined as an incident that has led or could lead to a release to the environment of radioactive material or other hazardous material, but the release is not expected to require a response by an offsite response organization to protect persons offsite. An Alert reflects mobilization of the facility's emergency response organization, either in a standby mode that will activate some portions of the facility's emergency response organization or full mobilization, but does not indicate an expectation of offsite consequences. However, an Alert may require offsite response organizations to respond to an onsite condition.

A Site Area Emergency is defined as an incident that has led or could lead to a significant release to the environment of radioactive or other hazardous material and that could require a response by an offsite organization to protect persons offsite. A Site Area Emergency reflects full mobilization of the facility's emergency response organization and may result in requests for offsite organizations to respond to the site.

Emergency Action Levels (EALs) are established specific initiating conditions relative to particular events or changes in instrument sensors that require emergency response measures to be performed. A list of EALs is contained in the facility's Emergency Plan. These EALs were developed according to the guidance found in USNRC Regulatory Guide 3.67, Standard Format and Content for Emergency Plans for Fuel Cycle and Materials Facilities, Appendix A, Examples of Initiating Conditions.

IV. HAZARDOUS CHEMICALS CLASSIFICATION SYSTEM

A classification system involving potential or actual releases of non-radioactive hazardous materials has been coordinated with the Local Emergency Planning Committee (LEPC) established under the provisions of Section 301(c) of the Emergency Planning and Community Right-To-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499). This hazardous chemicals classification system designed for oil, non-radioactive hazardous materials, and dangerous waste incidents is used by request of Benton County Emergency Management (BCEM). The different classification levels are described below.

Level I – Potential Emergency Condition (no notification offsite required) – An incident or threat of a release that can be controlled by the first response personnel and does not require evacuation of other than the involved structure or the immediate outdoor area. The incident is confined to a small area and does not pose an immediate threat to

life or property. EAL: Elevated hazardous material concentration(s) onsite but ≤ERPG-2 level(s) at the site boundary.

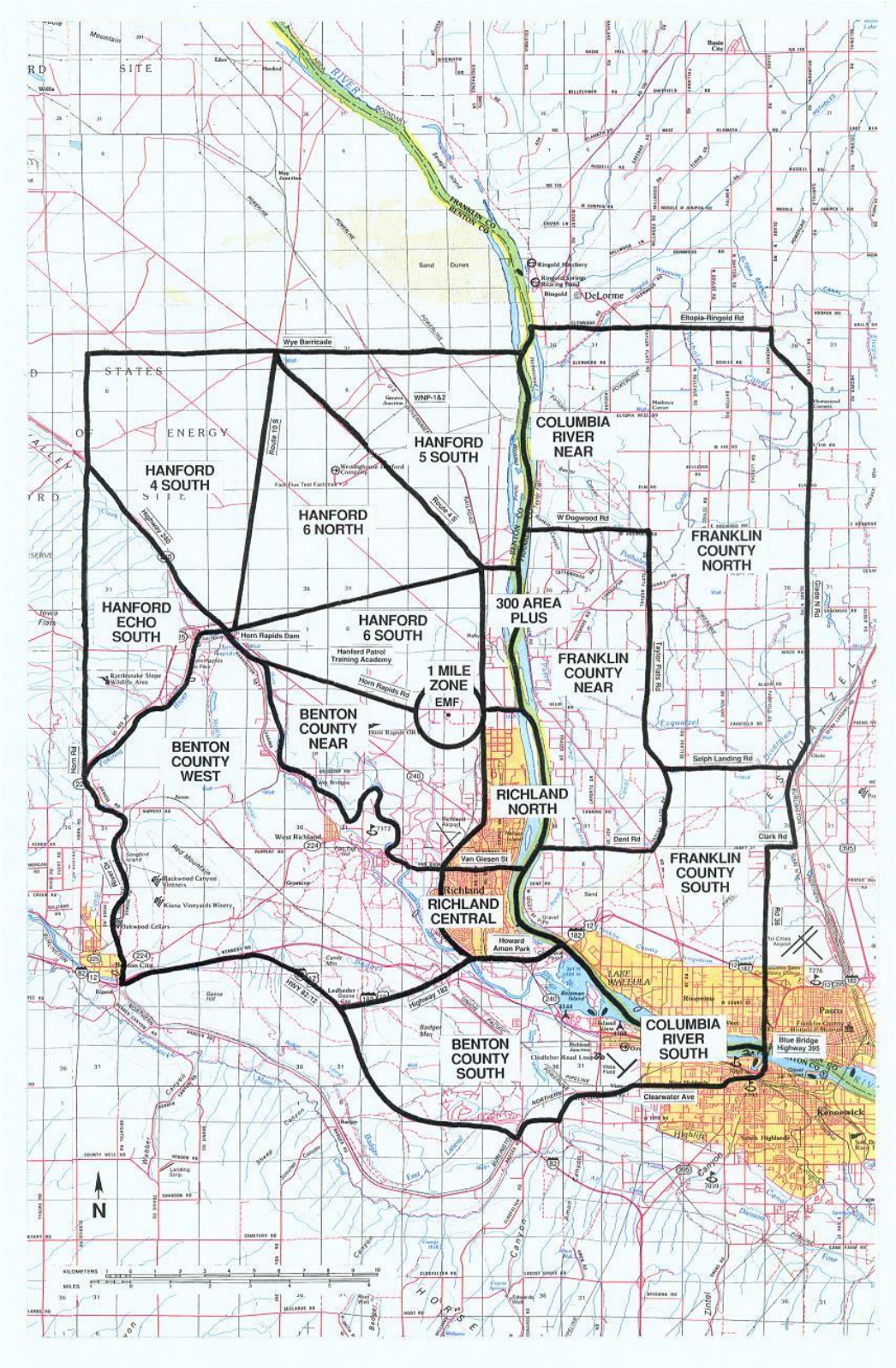
Level II – Limited Emergency Condition – An incident involving a greater hazard or larger area that poses a potential threat to life or property and which may require a limited evacuation of the surrounding area. EAL: >ERPG-2 level offsite but is not >ERPG-3 offsite.

Level III – Full Emergency Condition – An incident involving a severe hazard or a large area that poses an extreme threat to life and property and will probably require a large-scale evacuation; or an incident requiring the expertise or resources of county, state, federal or private agencies/organizations. EAL: ERPG-3 exceeded offsite.

V. AUTHORITIES AND REFERENCES

1. Section 301(c) of the Emergency Planning and Community Right-To-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499)
2. United States Nuclear Regulatory Commission Special Nuclear Materials License No. SNM-1227
3. Washington State Radioactive Materials License No. WN-I062-1
4. AREVA NP Richland Emergency Plan and Implementing Procedures, Version 9, 8/13/2013
5. Figure C-1 - Emergency Planning Zone Sections

Figure C-1 - Emergency Planning Zone Sections



ANNEX D - NAVAL NUCLEAR PROPULSION PROGRAM

I. INTRODUCTION

The Naval Nuclear Propulsion Program (NNPP) is a joint Department of Energy / Department of Navy organization which is tasked with the responsibility to design, build, operate, maintain and manage the nuclear-powered warships and facilities which support the U.S. nuclear-powered Naval fleet. The Program utilizes the resources of both DOE and the Navy and the Director is assigned responsibilities in both agencies to provide for a fully integrated approach.

II. NAVAL NUCLEAR PROPULSION PROGRAM (NNPP) AREA OF PLANNING ATTENTION

Emergency Planning Zones (EPZs) established by NUREG 0654 / FEMA REP-1 are not applicable to NNPP nuclear propulsion facilities in Washington. Because of differences in the design and operation of naval nuclear propulsion plants when compared to commercial nuclear power plants, the exposure to the public would be localized and not severe in the highly unlikely event of a release of radioactivity from a ship. Therefore, there is no need for Kitsap and Snohomish Counties to have special emergency response plans as are required for the counties where commercial nuclear power plants are located.

To assist state and local authorities in assessing the need for any preplanning in the vicinity of naval bases or shipyard where nuclear powered vessels are berthed, the Naval Nuclear Propulsion Program has designated Areas of Planning Attention (APA). The APA extends 0.5-miles around every location where nuclear-powered vessels are normally berthed (i.e. from the actual dock or pier, not the shipyard or naval base property boundary). The 0.5-mile distance is based on detailed, conservative analysis of worst-case, highly unlikely scenarios. The actual radius of the impacted downwind area will most likely be smaller.

For Naval Base Kitsap-Bremerton and Naval Station Everett, only small portions (e.g. a few city blocks) of the APA cross over the Federal Government property boundaries. For Naval Base Kitsap-Bangor, the APA is completely within Federal Government property boundaries except for areas in the Hood Canal (Appendix 2 – Maps) Kitsap and Snohomish Counties are responsible for developing and implementing Protection Action Decisions (PADs) and implementing appropriate protective measures to protect person(s) within their jurisdiction, but outside of the Naval Nuclear Propulsion Program facility's boundary. The Washington State role is to assist the county through technological assessment of the incidents, making recommendations for protective measures and other emergency response assistance when requested by the county.

III. NAVAL NUCLEAR PROPULSION PROGRAM DOSE BASED EVENT CLASSIFICATION METHODOLOGY

The Naval Nuclear Propulsion Program (NNPP) uses the four classes of Emergency Classification Levels (ECLs) specified in NUREGS-0654/FEMA REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in the Support of Nuclear Power Plants. While the NNPP uses the same four classes as commercial nuclear power plants, the ECLs are different. Because of the differences in the design and operation of NNPP nuclear propulsion plants, the NRC/FEMA guidance is not applicable to Naval nuclear propulsion plants. ECLs are normally classified based on a conservative estimate of total radiation exposure to a hypothetical member of the public located near the Federal government property boundary (or nearest public residence) in terms of dose to the whole body or to the thyroid during the plume phase. The NNPP uses the Protective Action/Guides (PAGs) specified by the EPA 400-R-92-001 of October 1991, Manual of Protective Action Guides and Protective Actions (1 rem TEDE, 5 rem committed dose equivalent (CDE) thyroid). The dose thresholds for the lower tier event classes (i.e., Site Emergency, Alert, and Unusual Event) were then established using fractions of the EPA PAGs.

Figure D- 1- Naval Nuclear Emergency Classification Doses

Event Classification	Radiation Dose	Radioiodine Dose
Unusual Event	<0.01 Rem	<0.05 Rem
Alert	>0.01 to <0.1 Rem	>0.05 to <0.5 Rem
Site Area Emergency	>0.1 to <1.0 Rem	>0.5 to <5.0 Rem
General Emergency	> 1.0 Rem	> 5.0 Rem

Normally based on exposure levels of a hypothetical person located at the Federal Government property boundary or the nearest public residence.

Dose estimates are made using actual field survey data taken near the Federal Government property boundary and a two-hour release is assumed if the duration of the release is unknown. Because field survey data will not be immediately available, the NNPP will normally assign an initial event classification of "Alert" if an event involves actual or potential for reactor core damage and there is an actual or potential for a release to the environment using the current NNPP Event Classification / Notification Form (Figure 4-6 - Naval Nuclear Propulsion Program Civil Authority Notification Form, Page 1 of 2 and Figure 4-7 - Naval Nuclear Propulsion Program Civil Authority Notification

Form, Page 2 of 2). An initial event classification of "Unusual Event" will be normally assigned if a reactor core is not involved (e.g. facility fire involving radioactive materials), and a release to the environment has occurred with potential for measurable dose to a hypothetical member of the public near federal property boundary.

IV. EMERGENCY CLASSIFICATION LEVEL (ECL) ACTIONS

Figure D-1 - Emergency Classification Level (ECL) Actions

V. REFERENCES

1. Appendix 2 – Maps
2. Appendix 4 – Facility Notification Forms
3. Appendix 7 – Emergency Classification Levels and Agency Notifications
4. Appendix 8 - Agency Functional Responsibility Matrix
5. Appendix 9 – Emergency Classification System and Emergency Classification Levels
6. Appendix 10 – DOE Emergency Response Assets

Figure D-1 - Emergency Classification Level (ECL) Actions

Unusual Event	**Washington State Emergency Operations Center Operational Level – Phase I**
Description	Unusual Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant. No release of radioactive material requiring off-site response or monitoring is expected unless further degradation of safety systems occurs.
Action	Immediately notify appropriate state and local authorities and provide current information of the event. Confirm that no specific action by civil authorities or the public is required. Dispatch facility off-site monitoring personnel, if appropriate.
Alert	**Washington State Emergency Operations Center Operations Level – Phase II**
Description	Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the EPA Protective Action Guide (PAG) exposure levels near the federal government property boundary.
Action	Immediately notify appropriate state and local authorities to stand by and provide current information on the event. Confirm that no specific protective actions are required at this time for the public. Dispatch facility off-site monitoring personnel.
Site Area Emergency	**Washington State Emergency Operations Center Operational Level – Phase III**
Description	Events are in progress or have occurred which involve actual or likely major failure or plan functions needed for protection of the public. Any releases are not expected to exceed EPA PAG exposure levels beyond the federal government property boundary.
Action	Immediately notify appropriate state and local authorities and provide current information on the event. Recommend steps be taken to control access and warn the general public. Recommend preparatory steps be taken for directing the general public in specific sectors to evacuate or take shelter. Dispatch facility off-site monitoring personnel.
General Emergency	**Washington Emergency Operations Center Operational Level – Phase III or IV**
Description	Unusual events are progressing or have occurred which involve action or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases may exceed EPA PAG exposure levels near the federal government property boundary.
Action	Immediately notify appropriate state and local authorities and provide current information on the event. Recommend steps be taken to control access. Recommend preparatory steps be taken for directing the general public in specific sectors to evacuate or take shelter. Dispatch facility off-site monitoring personnel.

ANNEX E – EMERGENCY PUBLIC INFORMATION

PLANNING STANDARDS G1, G2, G3A, G4A, G4B, G4C, G5

I. RESPONSIBILITY

A. PRIMARY AGENCY

- Washington State Military Department
  - Emergency Management Division

B. SUPPORT AGENCIES

- Washington State Department of Agriculture
- Washington State Department of Ecology
- Washington State Department of Enterprise Services
- Washington State Department of Fish and Wildlife
- Washington State Department of Health
- Washington State Parks and Recreation Commission
- Washington State Patrol
- Washington State Department of Transportation
- Adams County
- Benton County
- Franklin County
- Grant County
- Kitsap County
- Kittitas County
- Klickitat County
- Snohomish County
- Walla Walla County
- Yakima County
- AREVA NP, Inc.
- Energy Northwest, Columbia Generating Station
- Naval Nuclear Propulsion Program
- United States Department of Energy, Hanford Site

II. INTRODUCTION

A. *PURPOSE*

This Annex establishes procedures and protocols for Emergency Public Information Emergency Support Function (ESF) 15, or External Affairs, which supports state incident management during emergencies and declared disasters through a Joint Information System (JIS) or Joint Information Center (JIC) in support of AREVA NP, Energy Northwest, Columbia Generating Station (CGS), US DOE Hanford Site (DOE-RL), and the Naval Nuclear Propulsion Program (NNPP) sites located in Washington. Washington State's intent for ESF 15 is to unite all internal and external communications within External Affairs in order to provide consistent and coordinated information. ESF 15 integrates the Joint Information Center, Business Coordination, Legislative Affairs, Tribal Affairs, International Affairs, and Community Relations.

B. *SCOPE*

Washington State emergency public information actions before, during, and after any emergency will be determined by the severity of the emergency as indicated by the local, tribal or state agencies which are involved, or as perceived by the public. Support of this plan requires a significant emergency public information response and will involve many city, county, and state agencies.

III. POLICIES

Emergency Public Information activities supporting AREVA NP, CGS, DOE-RL, and NNPP installations are to be coordinated using the JIS/JIC so as to provide accurate, timely, and consistent messaging to public and private sector stakeholders so that informed business decision can be made in support of response and recovery activities.

IV. SITUATION AND ASSUMPTIONS

A. *SITUATION*

See the Basic Plan of the Washington State Fixed Nuclear Facility Protection Plan.

B. *ASSUMPTIONS*

1. An event has occurred, or public perception is such that people believe they have been placed in danger by a natural or technologically-caused emergency or disaster.

2. The event requires responding agencies to provide information and instructions to the public about the incident and actions people should take to save and protect lives, property, economy, and the environment. Responding agencies also would provide information to reduce public concerns about the incident and response activities.

V. CONCEPT OF OPERATIONS

A. GENERAL

1. Local jurisdictions are responsible for providing their citizens with information on the incident and what immediate protective actions they should take, such as taking shelter or evacuating (NUREG E.5).

2. When the Washington State Emergency Operations Center (SEOC) activates, the organization and scope of ESF 15 operations establishes in accordance with the needs and requirements of the response. The organization of ESF 15 reflects NIMS principles for Emergency Public Information, especially the principle that the Public Information Officer supports Incident Command and "represents and advises the Incident Commander on all public information matters relating to the management of the incident."

B. ORGANIZATION

1. **State Information Support Structure.** The Washington SEOC, ESF-15 Public Information Officer (PIO) coordinates the management of the state's emergency public information response through all phases of natural or technological events. This is accomplished at the direction of and in collaboration with the Governor's Communications Office.

2. **Local Jurisdiction Information Support Structure.** In accordance with the NIMS and ICS, the local jurisdiction should designate a public information function to provide information and instructions to its citizens before, during, and after an emergency or disaster. This function, or person assigned to the public information role, should coordinate its emergency public information actions with the state and have access to all necessary information (NUREG G.4.a).

VI. PROCEDURES

State emergency public information organizes according the principles of NIMS and ICS. State emergency public information will be coordinated through the ESF15 External Affairs organization in the SEOC and via the Joint Information System with local jurisdictions. If a JIC is established, state-level emergency public information will be provided to the media and the public through that facility. The state's EOC ESF 15 pod will collaborate with and support locating and managing the operation of such a center.

State agencies with specific Emergency Support Functions 15 or other response roles are notified to provide staff support for the state's emergency public information efforts. This support is provided when requested by the Governor's Communications Office or the ESF 15 External Affairs Manager in the SEOC.

The state will coordinate via the Joint Information System with federal agencies to provide federal-level information to the public following a natural or man-made disaster or emergency, as necessary. The state's ESF 15 will collaborate with and support locating and managing the operations of a JIC or Joint Field Office.

VII. MITIGATION, PREPAREDNESS, RESPONSE, AND RECOVERY ACTIVITIES

A. ALL SUPPORT AGENCIES

1. Identify and train appropriate staff to implement the public information responsibilities outlined in this plan, including required National Incident Management System (NIMS) training courses.
2. Prepare and coordinate public information resource materials for use in an emergency or disaster.
3. Participate in training and exercise programs to test emergency public information and joint information system-joint information center (JIS-JIC) programs and procedures.
4. Collaborate with and support locating and managing the operations of a JIC, if requested.

B. RESPONSIBILITIES

1. General

a. Support for public information will be provided by the SEOC / JIC the facility, or the county emergency management agency. AREVA NP, Energy Northwest – Columbia Generating Station, DOE-RL Hanford Site, and the Naval Nuclear Propulsion Program may also provide support to state and county agencies with emergency response duties.

b. During an emergency, the state and counties will coordinate their public information functions to ensure residents and transient populations are informed of the necessary protective actions to take; see references 7 and 8. When established, the Joint Information Center (JIC) is the primary location for the identification of a designated spokesperson, coordination and timely exchange of information, and release of public information. The county serves as the authoritative source of information for local actions, while the state is the authoritative source for communicating state actions. Issuers of public information must be able to monitor the broadcasts of official information messages at the EOC or JIC and do so in accordance with the facility's or agency's procedure (NUREG G.4.c). If incomplete, inaccurate, or ambiguous information is detected in the monitored broadcast, then a correction is broadcast as soon as possible and PIOs and rumor control personnel are notified of the problem. When the information release impacts multiple organizations, the PIOs within the JIC determine which agency or organization would best represent the information to the media and public (NUREG G.2, G.4).

c. To support this effort SEOC communications consist of the following: telephone, cell phone, facsimile, computer electronic, video, teleconferencing, webinars, EAS if a county is unable to activate their system, DOE-RL or CGS "Crash Phones," and social media (NUREG G.4.b, G.4.c).

2. Washington State Emergency Operation Center / Joint Information Center (JIC)

a. Coordinate public information activities to support the fixed nuclear facilities to maximize resources and mitigate misinformation and rumor. Ensure two-way communications are maintained between the SEOC (External Affairs Section Chief/Deputy) and the affected facility's JIC via WebEOC, telephone, and email. The ESF 15 Lead within the SEOC is responsible for ensuring the information exchange takes place between PIO staff at the JIC and other locations using the aforementioned methods (NUREG G.4.b).

b. Dispatch a PIO to the JIC of the facility experiencing an emergency when the decision to activate a JIC is made. This PIO (Deputy Section Chief - JIC) will

normally come from the Washington State Emergency Operations Center, but other agencies may be asked to provide the person (NUREG G.3.a).

The following facilities are identified as JICs. Additional information regarding the physical description of each JIC is available in the relevant facility or county plan.

The CGS JIC serves as an alternate location for the Hanford Site JIC. The Hanford Site JIC serves as an alternate location for the CGS JIC.

1. Columbia Generating Station – JIC
   3000 George Washington Way
   Richland, WA 99352
   Contact: JIC Manager (NUREG G.3.a)

2. Hanford Site – JIC
   825 – Jadwin Avenue
   Richland, WA 99352
   Contact: JIC Manager (NUREG G.3.a)

3. Kitsap County – JIC
   1200 NW Fairgrounds Road
   or
   911 Carver
   Bremerton, WA 98311
   Contact: JIC Manager (NUREG G.3.a)

4. Snohomish County – JIC
   3509 109th Street. NW
   Everett, WA 98204
   Contact: JIC Manager (NUREG G.3.a)

The PIO accesses information through official notification forms, crash calls, SEOC or JIC briefings, state liaisons in affected counties, representatives of state agencies in the SEOC or JIC, WebEOC, conversations with other PIOs, and the websites of responding agencies. The PIO then verifies this information with what is available from the SEOC or another credible source.

c. The SEOC maintains one dedicated telephone line each for media and public inquiries. Phone teams are assigned to monitor these lines and maintain records of the inquiries and responses in accordance with External Affairs procedures. Phone teams record key facts from incoming calls to display on large boards; a spokesperson briefs and posts information in response to the call topics. Members of media and the public may also submit inquiries online at http://www.wadisasternews.com.

The CGS and Hanford Site JICs have predetermined public and media phone lines and teams to monitor them. Phone teams look for trends in incoming communications with the media and public to identify needed information and rumors. The phone team supervisor/manager tracks trends in inquiries and brings them to the attention of the JIC manager. The JIC manager discusses trends, misinformation, and other important questions with the PIOs to control rumors and determine when and how to brief the information. Briefings are coordinated between the state and local JIC spokespersons (NUREG G.3.a, G.4.c).

d. The State PIO ensures that information is coordinated amongst other entities within and outside the JIC before it is released. State public information staff coordinate the review and approval of information prior to release with a check-off sheet that requires the signature or initials of the representatives of reviewing organizations. In the case of sensitive information, the JIC coordinates with the law enforcement PIO at the ICP to review and approve before release to ensure sensitive information does not reach unauthorized persons (NUREG G.4.a). Press releases and news conferences list the contact numbers for public inquiries and media information (NUREG G.4.c.2).

3. Support Agencies

State

a. Coordinate public information messaging with ESF 15 at the SEOC or JIC, if activated.

b. Provide public information and personnel to the SEOC or JIC, as directed by the Governor's Communications Director, or at the request of the ESF 15 lead at the SEOC.

Counties

a. Provide information and education to the public.
b. Ensure appropriate people receive initial and recurring training.

Facilities

a. *AREVA NP* Support requests for assistance from state and county agencies.
b. *Energy Northwest, Columbia Generating Station* Support requests for assistance from state and county agencies.
c. *Naval Nuclear Propulsion Program* Support requests for assistance from state and county agencies.
d. *United States Department of Energy- Hanford Site* Support requests for assistance from state and county agencies.

VIII. NOTIFICATION

A. *FACILITY*

A facility experiencing a radiological emergency is responsible for notifying the state(s) and plume county agencies of the occurrence.

Energy Northwest conducts an annual media briefing on behalf of the state and local jurisdictions that covers emergency plans, information concerning radiation, and points of contact for release of public information in an emergency. Media members who are not able to attend receive a media packet that addresses the information covered during the briefing (NUREG G.5).

B. *STATE*

1. Washington State Emergency Operations Center is responsible for verifying messages then notifying other state agencies, the remaining ingestion county agencies, and verifies that the state of Oregon is notified.
2. The Washington State Department of Agriculture makes available an agricultural protective action leaflet at Food Control Points (FCPs) (NUREG G.1).
3. The Washington State Department of Agriculture or the local office of the Washington State University Cooperative Extension will provide information directly to food producers.
4. Washington State Departments of Agriculture, Health, and the Military Department disseminate, at least annually, information to the public regarding notification and emergency actions (NUREG G.1).

C. *JOINT INFORMATION CENTER*

The JIC for the incident will be the primary point for release of general public information.

D. *COUNTIES*

1. Plume county emergency management agencies initiate emergency public notification actions--sirens and radio announcements--for transient and resident populations (not applicable to Naval Nuclear Propulsion Program facilities) (NUREG E.5, G.2).
2. Each plume county establishes administrative and physical means, and the time required for notifying and providing prompt instruction to the public within the plume exposure pathway EPZ (NUREG E.6).
    a. States the Alert and Notification System (ANS) is capable of meeting the 15-minute design objective.
    b. Describes primary and backup physical means of alert and notification.
    c. Describes the title of the organizations or individuals responsible for the decision to activate the ANS and activating the ANS.

d. Describes the ANS activation procedures and the time required to implement them.
e. Discusses how the requirements for periodic siren testing are accomplished.

3. Counties disseminate emergency information and instructions to the public. Included in this responsibility are the following activities (NUREG E.5, E.7).
   a. Ensure notification of special populations whose mobility is impaired, such as people in jails, hospitals, and nursing homes.
   b. Identify broadcast partners and document their commitments, capabilities, points of contact, and broadcast intervals.
   c. Identify alternate broadcast partners.
   d. Provide written messages consistent with the licensee's classification scheme.
   e. Maintain message templates for EAS broadcasts.
   f. Make provisions for special news broadcasts to supplement the EAS message.
   g. Provide for foreign language translations of EAS messages and special news broadcasts.
   h. Define a process for selecting, modifying, approving, and releasing messages.
   i. Define the methodology and frequency for rebroadcasting EAS messages.
4. Disseminate, at least annually, information to the public regarding notification and emergency actions. Descriptions and distributions of such information are included in relevant county plans (NUREG G.1).
5. Disseminate written information for locations frequented by adult transient populations within the 10-mile EPZ. Descriptions and distributions of such information are included in relevant county plans.
6. County emergency managers in conjunction with the Washington State Department of Agriculture and University Cooperative Extension should provide (References 6-8):
   a. Specific release information identifying the affected area,
   b. Agricultural protective action information at Emergency Worker Assistance Centers (EWACs) and other locations for residents residing in the Plume and Ingestion pathway, and
   c. Specific information to home gardeners at EWACs and other locations for those areas in the Plume and Ingestion Pathway.

IX. RESOURCE REQUIREMENTS

Resource requirements are identified in supporting plans and procedures.

X. REFERENCES

1. Basic Plan, Authorities, of the Washington State Fixed Nuclear Facility Protection Plan.
2. Radiological Emergency Preparedness (REP) Program Manual, June 2013
3. Washington State Comprehensive Emergency Management Plan (CEMP)
4. Washington State Emergency Operations Plan (EOP)

5. Washington State Department of Health, Office of Radiation Protection, Radiological Emergency Response Plan, September 2012
6. Washington State Department of Agriculture, Radiological Emergency Procedures, June 2009
7. Washington State Departments of Health and Agriculture and Military Department, Radiological Emergency Information for Farmers, Food Processors and Distributors, June 2007 (NUREG G.1, G.2)
    - **English**
      http://agr.wa.gov/foodsecurity/attachments/radiologicalemergencybook.pdf
    - **Spanish**
      http://agr.wa.gov/FoodSecurity/Attachments/RadiologicalemergencybookSP.pdf
8. U. S. Department of Energy Tri-Fold, Emergency Preparedness for Nuclear Facilities in Washington State, December 2007(NUREG G.2)
   http://agr.wa.gov/FoodSecurity/Attachments/Trifold09.pdf
9. Communicating During and After a Nuclear Power Plant Incident, October 2011

ANNEX F - AGRICULTURE AND FOOD CONTROL MEASURES

I. RESPONSIBILITY

A. PRIMARY AGENCY

Washington State Department of Agriculture

B. SUPPORT AGENCIES

- Washington State Department of Fish and Wildlife
- Washington State Department of Health
- Washington State Military Department
- Washington State Patrol
- Washington State Department of Transportation
- Adams County
- Benton County
- Franklin County
- Grant County
- Kitsap County
- Kittitas County
- Klickitat County
- Snohomish County
- Walla Walla County
- Yakima County
- Naval Nuclear Propulsion Program Facilities
- AREVA NP, Inc.
- Adjacent States/Provinces

II. INTRODUCTION

A. PURPOSE

This Annex provides for the coordinated application of food control measures and other agricultural protective actions during the response to facility incidents or emergencies at Columbia Generating Station (CGS), United States Department of Energy Hanford Site, AREVA NP, Inc. and facilities associated with the Naval Nuclear Propulsion Program facilities with the potential to threaten the public health and safety of people in Washington State.

B. SCOPE

A. This Annex describes the general process involved in determining the extent and length of time needed for food control measures.

B. Food control measures may have to be set up to protect the public from consuming adulterated food and water in the event of an incident or emergency at a facility. Washington State, with the support of affected counties, will carry out the protective actions concerning food supplies, including livestock and the production of milk products. The counties are responsible for assessing the impacts of local area Protective Action Decisions (PADs) with the assistance of the local United States Department of Agriculture (USDA) agent.

C. Specific authorities and procedures for direct intervention in the production, marketing, or consumption of contaminated food products are addressed in Washington State Department of Health (Health) and Washington State Department of Agriculture (WSDA) statutes and procedures.

IV. SITUATIONS

A. EMERGENCY/DISASTER CONDITIONS AND HAZARDS

Conditions at a facility may deteriorate, or detonation of a Radiological Dispersion Device or an Improvised Explosive Device, causing the need for the application of food control measures within a designated area. Details of the methods of determining the affected area(s) are presented in agency operating procedures.

B. PLANNING ASSUMPTIONS

1. Facility incidents or emergencies requiring the application of food control measures will occur.
2. Personnel at the facilities and within the offsite emergency response organizations and other organizations that are familiar with food control measures.

V. Concept of Operations

A. GENERAL

1. The concern for food control and the deposition exposure pathway begins in the early phase of an incident. Meteorological data, facility data, and measurements taken by appropriately equipped field teams during and immediately after the release will help define the initial actions required when the release is terminated.

2. In the first hours after the release is terminated, field teams will continue to measure and sample material deposited on the ground to identify areas where

ingestion and control of food are of concern.

3. This initial area(s) is plotted on a map at the facility and sent to decision-makers from the affected county(ies) and state(s). Geopolitical boundaries describing the area(s) using easily recognizable features such as roads and rivers are proposed by the affected county(ies). This proposed boundary is forwarded to the Washington State Emergency Operations Center (SEOC) for coordination. The Executive Section of the SEOC evaluates the proposed boundary , drafts and forwards a Governor's Proclamation to the Governor's Office with a description of the boundaries of the food control areas(ANNEX F, APPENDIX 1).

4. DOH and WSDA will measure, sample, and analyze food for deposition. As this occurs, the boundary of the FCAs will be adjusted. It is anticipated that the area(s) will be reduced through this process.

5. Sources of licensed milk production, and food production and processing facilities within the ingestion exposure pathway are listed in the WSDA Radiological Emergency Procedures. Methods and procedures for carrying out protective actions are also described in the same document.

6. The sampling of crops, dairy products, and open water resources is conducted concurrently with the field measurements through a joint field team consisting of WSDA and DOH personnel. WSDA personnel are responsible for dairy milk sampling but may not be present on every DOH field team. Sample collection assistance is requested as needed from the local agricultural community, other states, USDOE-RL, other federal agencies, the nuclear facilities, or commercial firms under contract to conduct this function. The results of laboratory analysis of the samples are factored into the decisions regarding protective measures to be taken.

B. *NOTIFICATION*

The public is notified of food control measures through PIO notices and ESF 15.

1. WSDA will make available an agricultural protective action leaflet at Food Control Points (FCP).
2. WSDA or the local office of the Washington State University Cooperative Extension will provide information directly to food producers.
3. If established, the Joint Information Center (JIC) for the incident or emergency will be the primary point for release of general public information.
4. County emergency managers should be prepared to release information identifying the affected areas and provide the following.

    a. Agricultural protective action information at Emergency Worker

Assistance Centers (EWACs) and other locations for residents residing in the Plume and Ingestion pathway.

b. Specific information to home gardeners at EWACs and other locations for those residing in the Plume and Ingestion Pathway.

VI. RESPONSE ACTIONS

A. INITIAL ACTIONS

1. The affected counties issue agricultural advisories when a release is imminent or has begun. The advisories are initially based on projections describing the probable deposition path of the release. This is the first official indication more stringent food control measures may need to be carried out.
2. Health coordinates and directs monitoring resources to determine relocation and food control isopleths.
3. State and county planners develop recommended initial food control boundaries based upon the calculated dose line provided by the DOH from a Dose Assessment Center (DAC).
4. Based upon the counties' recommended geopolitical boundaries for FCAs, the SEOC will draft a Governor's Proclamation to formally establish the FCAs. The formal Governor's Proclamation will also stop food from being transported out of the FCA. This Proclamation is designed to protect the public from consuming adulterated food. (See example Annex F, Appendix 2)
5. Traffic Control Points (TCPs) will be needed on primary and secondary roads crossing the food control boundary. Food Control Points (FCPs) will be established where major commercial food transportation routes cross the food control boundary. These points serve to restrict transport of food from the FCA until food can be verified to be within accepted health standards by laboratory analysis. Law enforcement and representatives from WSDA, or other designated agencies will staff the FCPs. Commercial vehicles will be stopped to advise the vehicle operators of the Governor's Proclamation.

    a. Commercial food transporters will be directed to return their cargo to its point of origin within the FCA.

    b. People operating non-commercial vehicles may stop at a FCP on a voluntary basis. If the vehicle stops and is transporting food from the FCA, they will be asked to return the food to the point of origin or sign a statement voluntarily surrendering their food at the FCP.

    c. In those cases where the FCA is crossed by an interstate highway, or other limited access highways, TCPs should be established at each highway on-

ramp within the FCA.

6. Upon determination of the FCA, DOH in coordination with WSDA will establish a sampling plan to sample and monitor milk, pasture, and other agricultural crops to protect the health and safety of the population. Priorities of sampling are based on the risk to the most sensitive population (children) and crop harvest seasons. Laboratory analysis levels at which milk, water, and other food crops are embargoed are found in the Washington Department of Health Radiological Emergency Response Plan & Procedures, referenced in Annex G – Health and Medical.

7. Appropriate responses will consist of the identification and application of measures to protect various elements of the food chain from becoming adulterated. They also must address the proper disposal or diversion of food for which the contamination cannot be prevented or removed.

B. *Continuing Actions*

1. Support will be needed for Food Control Points (FCP) and TCP personnel.
2. The protective measures are modified and become increasingly more precise and location-specific as additional data is generated. Ingestion pathway protective measures are based on field data and lab analysis. Health certifies the food per laboratory analysis of samples. WSDA releases or embargoes the food, as appropriate.
3. Once all effects have been analyzed, final protective measures can be designated and implemented until full recovery and restoration activities are complete.

VII. Responsibilities

A. *Primary Agency: Washington State Department of Agriculture*

WSDA is responsible for preventing adulterated food from entering the food chain through oversight of commercial sales and movement of agricultural commodities. WSDA and DOH work in tandem to provide a comprehensive approach to the ingestion exposure pathway response. WSDA procedures detail how its responsibilities will be accomplished.

- Provide representatives to operate the FCPs at key transport intersections on the food control boundary with appropriate law enforcement.
- Target the specific crops and food products proven to be unacceptable for consumption, as the contamination profile is further defined through field samples and laboratory analysis.

- Identify and monitor the activities of licensed commercial dairies, farms, processing plants, and wholesale distributors, within the ingestion pathway Emergency Planning Zone (EPZ).
- Notify the agricultural community of the state's Protective Action Decisions (PADs).
- Assist DOH Office of Radiation Protection with obtaining samples for laboratory analysis, at licensed dairies, as requested.
- Coordinate with county agricultural agents who are charged with identifying family and hobby farms in the ingestion pathway to ensure appropriate protective actions are carried out.
- In conjunction with DOH, develop a prioritized sampling plan of the projected area(s) affected by a radiological release from a facility.
- Contribute to the identification of the geopolitical boundaries of the relocation area(s) and food control area(s), and the locations for the FCPs.
- Issue embargo orders as required, oversee testing of embargoed food, and monitor the proper disposition of adulterated food.

B. SUPPORT AGENCIES

1. Washington State Department of Fish and Wildlife

When Fish and Wildlife land holdings or facilities fall within the FCAs, Fish and Wildlife personnel will be assigned to work cooperatively with other state agencies to conduct sampling in these places, as well as control access into and out of these areas. Fish and Wildlife will work cooperatively with the SEOC Executive Section to ensure protective actions to control the harvest of fish, shellfish and game in FCAs are carried out.

2. Washington State Department of Health (DOH)

DOH will coordinate and direct all offsite monitoring to identify affected areas and verify non-affected areas; monitor and sample, and analyze air, milk, pasture, water, soil, and agricultural products as described in its Radiological Emergency Response Plan and Procedures. When the Federal Radiological Monitoring and Assessment Center (FRMAC) is activated at the state's request, DOH will continue to coordinate and direct all offsite monitoring operations in collaboration with the FRMAC staff.

- Analyze field data, perform dose assessment, and develop Protective Action Recommendations (PARs) that will effectively protect the health and safety of residents and the food supply.

- Provide health physics support and contamination control for WSDA Sanitarians when they collect milk samples from a radiologically affected area.
- If state and local capacity to deploy the required number of field teams is overwhelmed, prepare a request for federal assistance from the FRMAC.
- With WSDA, develop a prioritized sampling plan of the projected area(s) affected by a release from a facility.
- Provide technical assessment and analysis of field data to provide basis for county geopolitical boundary proposals for FCAs.
- Assign personnel to work cooperatively with WSDA personnel monitoring food at facilities within or near the FCAs, as appropriate.
- Consult with the facility and federal support teams, to identify additional laboratory resources qualified to conduct the required analysis of samples, if necessary. Identify needs for additional transportation capabilities to move samples to these laboratories, as required.
- Oversee the analysis of samples at all laboratories involved with the response.
- Provide continuing regular updates of dose assessment, analysis of field data, and new or refined Protective Action Recommendations (PARs) to the Executive Section of the SEOC.

3. Washington State Military Department

Emergency Management Division

- Support the Washington State Emergency Operations Center (SEOC) and assist local governments as necessary. Specific tasks in support of DOH and WSDA operations in the Food Control Areas (FCAs) may also be assigned.
- Coordinating Agency for ESF 9. Primary Agency for ESFs 5, 14 and 15.
- Establishes the state emergency management organization, to include staffing for normal activities and emergencies or disasters, and assists local jurisdictions in developing emergency management organizations.
- Establishes and maintains a 24-hour per day statewide warning capability and provides warning of impending emergencies or disasters to at risk political subdivisions.
- Maintains continuous preparedness and response capabilities through a 24-hour State Emergency Operations Officer (SEOO) system.
- Assures the continuity of resources (technical, administrative and material) to support 24-hour operations for a protracted period.

- Receives and processes requests from local jurisdictions for specific state and federal emergency and disaster related resources and services.
- Coordinates state resources to support local jurisdictions in need of supplemental emergency or disaster assistance.
- Identifies critical industry and infrastructures that may be impacted by disaster or required for emergency response efforts.
- Establishes and maintains an Emergency Public Information Program in accordance with ESF 15 - External Affairs at the direction of and in collaboration with the Governor's Communications Office. Coordinates with local jurisdictions, as appropriate. Disseminates information to the public and the news media regarding personal safety or survival, emergency and state response actions and the details of disaster assistance programs. After an emergency or major disaster declaration by the President, state public information programs will be coordinated with those of the federal government.
- Prepares state disaster proclamations and the Presidential Disaster Request for the Governor's signature.
- Provides overall administration and coordination for the processing of applications for federal disaster assistance authorized by Public Law 93-288 and/or other enabling legislation.
- Facilitate the development of the state's PADs and coordinate the carrying out of those decisions during the intermediate and late phases of the response.
- Facilitate the Governor's adoption of the geopolitical boundaries defining the FCAs. These boundaries are recommended by the affected counties and coordinated with the SEOC. FCPs and TCPs are established by law enforcement agencies. This decision-making process will include consultation with the state of Oregon, Office of Emergency Management, if necessary.
- In coordination with DOH, WSDA, WSP, the affected county(ies), and the state of Oregon, if required, facilitate the staffing and equipment requirements for carrying out traffic control measures, security measures, and food control measures.
- Conduct at regular intervals throughout the event, update briefings to the SEOC Executive Section on the latest sampling and monitoring data, recommendations from the MUDAC or UDAC, and other pertinent data. Based on these briefings, validate the boundaries of the FCAs or recommend refinements to these boundaries. Before altering the boundaries, solicit recommendations from the affected county(ies) and consult with the state of Oregon.

- Develop estimates of the probable duration and scope of the intermediate phase response, based on consultation with the facility and the Federal Emergency Management Agency (FEMA). Share these estimates with the affected jurisdictions so all state and local jurisdictions can identify the staffing patterns necessary to accomplish shift changes, and resource requests requiring action by the state or federal governments.
- Coordinate the dissemination of public information with the ingestion pathway county(ies) at regular intervals throughout the intermediate phase.
- Provide operational information to the counties.

National Guard

Support the Washington State Patrol (WSP) in traffic control, evacuation, mobile communications, and other areas. Assist local governments as necessary. Specific tasks in support of WSDA and DOH operations in the Food Control Areas (FCAs) also may be assigned.

4. Washington State Patrol

- Conduct traffic control.
- Assist local law enforcement efforts, and coordinate the transportation of samples.
- Provide supplemental enforcement services at the TCPs with available resources.
- Assist WSDA and DOH representatives at Food Control Points (FCPs).
- Coordinate the provision of additional state law enforcement resources to local law enforcement agencies, when requested. This includes the coordination of law enforcement resources with affected counties and the state of Oregon.

5. Washington State Department of Transportation (WSDOT)

- Coordinate transportation missions, when tasked, as prescribed by the Washington State Comprehensive Emergency Management Plan (CEMP). Washington State Department of Transportation Emergency Operating Procedures, established in WSDOT Disaster plan, is designed to carry out this function.
- Coordinate with WSP for traffic control resources and provide other transportation resources, as necessary. Ensure barricades, road signs, highway rerouting information and equipment necessary to redirect traffic from the FCAs is available The need for long-term rerouting of interstate

or intrastate traffic to avoid travel in or near specific areas will be addressed by WSDOT in consultation with WSP.

6. Adams, Benton, Franklin, Grant, Kitsap, Klickitat, Kittitas, Snohomish, Walla Walla, Yakima Counties

- Consult with the state regarding the development and implementation of PADs.
- Consult with the county extension agent to identify and locate milk producers, vegetable growers, fruit growers, and home gardeners not licensed by the state to carry out protective actions for this sector of the agricultural community. The county extension agent will assist the state in determining the impact on the food chain as well as implement the PADs for the state.
- Develop and submit recommendations to the state on the FCA boundaries and the locations for FCPs and TCPs.
- Identify and commit local law enforcement resources for FCPs. Request supplemental law enforcement support, when necessary.
- Coordinate the application of the PADs, requesting additional resources from the state, as needed.
- Implement ingestion PADs. PADs are the primarily responsibility of the affected county(ies). State resources may be made available to support such application, if requested. If state resources are fully committed, the state will request federal resources.

7. Adjacent States/Provinces

Washington State's emergency response to facility incidents includes coordinating PADs with the states and provinces adjacent to Washington State. Central to these relationships is the coordination between Washington and Oregon. Representatives from neighboring states may be present in the adjacent state's EOC to assist in the coordination of the decision-making process and the application of protective measures. Public information will be closely coordinated with Oregon State or other affected jurisdictions to ensure consistent messages are being delivered to the public.

VIII. REFERENCES

See Basic Plan, Authorities and References, of the Washington State Fixed Nuclear Facility Protection Plan.

ANNEX F, APPENDIX 1

GOVERNOR'S ORDER

Having been advised by competent authority of the deposition of radiological and/or chemical contaminants in portions of the area described by emergency

proclamation _____, to wit: the release of contaminants as a result of the accident at **(facility name)** has created conditions which threaten the health and safety of people in **(list county(ies))** and pursuant to the authority vested in me by Section 43.06.220, Revised Code of Washington, I hereby order the establishment of food control areas as described below to help preserve and maintain life, health, property, and the public peace. Law enforcement agencies are directed to stop all vehicles attempting to depart from the food control areas. Commercial food transporters will be directed to return any food produced or grown within the food control areas to its point of origin. Individuals transporting small amounts of food for personal consumption will be asked to return the food to its point of origin or to present it for collection at designated food access control points. Food grown, produced, or processed within the food control areas must be inspected and released for transport by the Washington State Departments of Agriculture or Health.

The boundaries of the food control areas are:

The Washington State Recovery Task Force (RTF) will reduce the boundaries of the food control area as the contamination profile allows.

_____ _____

Governor Date

THIS IS AN EXAMPLE

ANNEX F, APPENDIX 2

FOOD SURRENDER STATEMENT

AGRICULTURE EMBARGO AND HOLD ORDER

DEPARTMENT OF AGRICULTURE
MAILSTOP 42560
OLYMPIA, WASHINGTON 98504 - 2560
(360) 902-1800

DEPARTMENT OF HEALTH
MAILSTOP 47800
OLYMPIA, WASHINGTON 98504 - 7800
(360) 586-5864

Date:

Due to suspected adulteration by a radioactive or a chemical substance caused by an accidental release radioactivity or a toxic chemical, the following food items:

_____

_____

_____

_____

_____

shall not be sold, released, otherwise disposed of, or transported from the Food Control Area described below without written permission from the Departments of Agriculture/ Health, or by written court order:

Food Control Area Description: _____

_____

_____

_____

_____

The above-described food shall be stored as follows:

_____

_____

_____

_____

_____

It shall be unlawful to remove, alter, or destroy this Order or to remove the above described agriculture food product from the Food Control Area without written permission from the Departments of Agriculture/Health, or by written court order.

Agriculture Authority: _____ Phone: _____

Health Authority: _____ Phone: _____

By order of RCW 43.70.180 and RCW 69.04.110-120

Acknowledged by (driver, owner, operator): _____

THIS IS AN EXAMPLE

ANNEX G – HEALTH AND MEDICAL

I. INTRODUCTION

A. PURPOSE

This Annex establishes the basic means for health and medical support and assistance during a radiological incident originating from a fixed nuclear facility.

B. SCOPE

This Annex describes Washington state, county and facility responsibilities in support of radiological protection measures.

C. SITUATION OVERVIEW

A radiological release to the environment has occurred from the Columbia Generating Station nuclear power plant, DOE Hanford Site facility, AREVA NP, Naval Base Kitsap, or Naval Station Everett. State and county emergency response procedures will provide for radiological protective measures for those offsite areas directly threatened by the release. Facility plans and procedures provide protective measures for onsite personnel.

II. SITUATIONS AND ASSUMPTIONS

A. SITUATION

See the Basic Plan of the Washington State Fixed Nuclear Facility Protection Plan.

B. ASSUMPTIONS

1. An event has occurred in which there is a need or a belief that people have been placed in danger by a natural or technologically-caused emergency or disaster.

2. The event requires responding state and local agencies to provide medical and public health services to the public about the incident and actions people should take to save and protect lives, property, economy, and the environment. Responding agencies also would provide information to reduce public concerns about the incident and response activities.

III. CONCEPT OF OPERATIONS

A. The local organizations that are directly affected by the release will utilize existing resources to protect the safety and health of the public and emergency workers.

B. The State will assist local organizations, as requested, to fulfill any resource shortfalls and to request additional assistance from other states and the federal government, as needed.

IV. Organization and Assignment of Responsibilities

A. The local jurisdictions will contact the State using existing communications protocols and processes if a shortfall exists and assistance is needed.

B. The State will provide support and assistance using existing protocols located in the Basic Plan and as delineated in executed MOUs.

C. Department of Health and licensees will provide adequate methods, systems, and equipment necessary for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition (NUREG I).

V. Authorities and References

1. See the Basic Plan of the Washington State Fixed Nuclear Facility Protection Plan and Appendix 3 – MOUs
2. Mass Casualty Incident and Disaster Control Hospital Plan: Version - October 12, 2012 (Tri-Cities Area)
3. Washington Department of Health Radiological Emergency Response Plan & Procedures

ANNEX H - RESPONSE TO A FIXED NUCLEAR FACILITY RADIOLOGICAL EMERGENCY

I. INTRODUCTION

A. PURPOSE

The purpose of this Annex is to present the components of the radiological protection system.

B. SCOPE

This Annex describes Washington State, county, and facility responsibilities in support of radiological protection measures. These measures are to be taken to protect the health and safety of the workers at, and the general populace near, Energy Northwest-Columbia Generating Station, Naval Base Kitsap Naval Station Everett, and the United States Department of Energy, Hanford Site facilities on the Hanford Site.

C. *SITUATION*

An accidental release of radioactive material could pose a threat to the workers at, and a general populace near, Columbia Generating Station, Naval Base Kitsap, Naval Station Everett, and the Hanford Site. State and county emergency response procedures will provide for radiological protective measures for those offsite areas directly threatened by the release. Facility plans provide protective measures for onsite personnel.

D. *ASSUMPTIONS*

1. An accidental release of radioactive material from Columbia Generating Station, Naval Base Kitsap, Naval Station Everett, or the Hanford Site will occur.
2. The Columbia Generating Station, Hanford Site, Naval Base Kitsap, Naval Station Everett, state, and county emergency response procedures will provide for an effective and timely response to the emergency.
3. The state, Columbia Generating Station, Puget Sound Naval Shipyard, Submarine Group NINE in Bangor, and the Hanford Site will be required to provide assistance to the affected county(ies).
4. For Columbia Generating Station emergencies, the Energy Northwest Headquarters Building will serve as the Federal Response Center (FRC) or the Disaster Field Office (DFO), if needed.

5. The Lead Federal Agency (LFA) for an emergency at Columbia Generating Station is the Nuclear Regulatory Commission (NRC), which would locate at the Columbia Generating Station Emergency Operations Facility (EOF) along with representatives from the Federal Emergency Management Agency (FEMA), Washington State, and Benton and Franklin Counties.
6. The LFA for an emergency at DOE Hanford is the United States Department of Energy, which would locate at the Hanford Site Emergency Operations Center (EOC).
7. The potential locations for a Federal Radiological and Monitoring Assessment Center (FRMAC) operations in Franklin County is the Trade Recreational Agriculture Center (TRAC), located at 660 Burden Boulevard, Pasco WA and in Benton County, the Tri-Cities Coliseum, located at 7100-West Quinault Avenue (Building A), Kennewick, WA.
8. The LFA for an incident involving naval facilities or vessels is the Naval Nuclear Propulsion Program.
9. For Naval Nuclear Propulsion Program sites, the DOE will select a location for the FRMAC after consultation with the affected county's emergency management agency.

II. CONCEPT OF OPERATIONS

A. Emergency management organizations of the state and federal governments and the affected facility will respond to radiological emergencies affecting Washington State. Agencies of each county within the plume and ingestion exposure pathway Emergency Planning Zones (EPZs) (Areas of Planning Attention for Naval Nuclear Propulsion Program facilities) of a facility will respond to such incidents or emergencies according to the county emergency response procedures. If a county is unable to respond to a facility emergency, the state will act in the interest of public health and safety of the residents.

B. The state's initial response to a radiological emergency is to assist the affected county(ies) in carrying out the sheltering or evacuation of persons within 10 miles of the plant (0.5 miles for naval nuclear propulsion plants), if protective actions are warranted. During the intermediate phase, the state acts to minimize the public's exposure to radioactive material and to prevent the public's consumption of contaminated food and water. After the emergency, the state helps restore the community through reentry to the affected area(s), and recovery actions.

III. ORGANIZATION

A. Washington Department of Health leads the state's technical response to a fixed facility radiological emergency, including the storage, maintenance, testing, and use of radiological monitoring equipment (NUREG H.7).

B. The overall state response to the emergency is monitored and coordinated from the State EOC.

C. Each EPZ County will operate out of its own EOC.

D. A facility experiencing a radiological emergency is expected to play a key role in the emergency response. This response will include such things as operating out of its own emergency facility, providing dose assessment assistance and field teams, and generally assisting the state(s) and affected counties with response and recovery actions.

E. The affected facility, the LFA, and FEMA can expect to be asked to send representatives to the state EOC to assist in coordinating the response to the emergency. These representatives will have access to communications devices, computers, facsimile machines, and limited administrative support. The state EOC can accommodate two representatives from each of these agencies, if necessary. Federal agencies will be expected to provide for their own transportation support and lodging. Requests for local area support will be handled on a case-by-case basis.

IV. NOTIFICATION

A. A facility experiencing a radiological emergency is responsible for notifying the state(s) and plume county agencies of the occurrence.

B. Washington State Military Department, Emergency Management Division (EMD) is responsible for verifying notification messages (Appendix 4) then notifying other state agencies, the remaining ingestion county agencies, and ensuring that the state of Oregon has been notified.

C. Plume county emergency management agencies initiate emergency public notification actions--sirens and radio announcements--for transient and resident populations (not applicable for Naval Nuclear Propulsion Program facilities). The counties are responsible to take steps to ensure notification of special populations whose mobility is impaired, such as people in confinement, hospitals, and nursing homes.

V. RADIOLOGICAL EQUIPMENT

A. Washington State Department of Health and plume counties, where appropriate, provide for off-site radiological monitoring equipment in the vicinity of the nuclear facility. This includes the following items and activities explained in the Washington State Department of Health Radiological Response Plan and relevant county plans (NUREG H.7, H.10, H.11, H.12).

- Inventory of radiological monitoring equipment, by type and number, that is located or stored near the facility or that will be brought in by the responding organization
- Establishment of fixed radiological monitoring stations near the facility
- Provisions to inspect, inventory, and operationally check emergency equipment and instruments at least annually and after each use
- Calibration of equipment at supplier-recommended intervals
- Maintenance of a reserve of instruments/equipment sufficient to replace those that are removed for calibration or repair
- Identification of emergency kits by general category (e.g., protective equipment, communications equipment, radiological monitoring equipment, and emergency supplies)

B. Washington State Department of Health is responsible for assessing radiological data and establishes a central point for receipt of and analysis of all field monitoring data and coordination of sample media (NUREG H.12). The Washington State Department of Health Radiological Response Plan includes this information.

VI. RESPONSE ACTIONS

A. EARLY PHASE ACTIONS

1. Early phase actions (response) are taken before or during a release of radioactive material from a facility. Immediate emergency protective measures--sheltering and/or evacuation--may be necessary to prevent or minimize direct exposure or inhalation of radioactive material. During the early phase of the emergency response, the facility is responsible for making either automatic or other Protective Action Recommendations (PARs) to the affected counties and state(s). Plume exposure pathway Emergency Planning Zone (EPZ) counties are responsible for making and implementing Protective Action Decisions (PADs), such as sheltering or evacuation. Washington State provides support and professional health physics expertise to the counties.
2. Washington State Department of Health (Health) personnel will analyze the need for prompt PARs, identify the magnitude and location of a radiological plume in Washington State, project the dose to the public, prescribe use of Potassium Iodide (KI) for offsite emergency workers when needed, and compare these projections with the Protective Action Guides (PAGs) as described in its Radiological Emergency Plan and Procedures. KI is on the state pharmaceutical formulary and can be obtained over the counter by the public. Supplies of KI are maintained at the local level for emergency workers only and are replaced when expired; shelf life extensions may be requested from FEMA. The state and local health officers are authorized to prescribe the use of KI for emergency workers and communicate this decision through the EOCs in Benton and Franklin Counties (NUREG J.10.e). The Washington State Department of Health Radiological Emergency Plan and Procedures include the criteria and decision-making processes for recommending the use of KI and authorizing emergency workers to incur exposures in excess of the EPA General Public PAGs.

3. Upon notification of an **Alert** or more severe emergency classification, Health representatives, specifically trained in determining radiological doses and protective actions, will go to the appropriate facility's dose assessment center. Offsite dose assessments will be performed jointly by the facility and Health, utilizing information from the facility on plant status and field data. Plume counties and Health document the procedures for emergency worker dosimetry and maintenance of dose records (K.3.b).

4. Radiological monitoring teams from the affected facility will conduct initial radiological field monitoring. Health will also conduct offsite radiological monitoring. The Meteorological Unified Dose Assessment Center (MUDAC) is the central point of coordination and analysis of sample media.

B. INTERMEDIATE PHASE ACTIONS

1. The intermediate phase begins when the facility has been stabilized and no further release of radioactive material is anticipated. Intermediate phase responses focus on minimizing exposure to radioactive material deposited on the ground and preventing the consumption (ingestion) of contaminated food and water. During this phase, Washington State takes the lead in the consensus decision-making process, seeking expertise and participation from the affected counties.

2. The identification of relocation and Food Control Areas (FCAs) is initially based upon field team data, computer projections, and calculated dose lines. As the response to the event unfolds, these areas are further refined through extensive field team sampling and laboratory analysis.

3. The affected counties recommend geopolitical boundaries for relocation and food control around the areas identified by the dose assessment center.

    a. The relocation process is coordinated by the state and in consultation with the locals. The relocation area protective action recommendation is provided by the dose assessment center. The state, in consultation with the locals, determines the geopolitical boundaries of the relocation area. It also determines the actions necessary to carry-out a relocation area, resource needs, assigned tasks, and the implementation timeline. Benton and Franklin Counties are responsible for relocation and include details in their respective plans and procedures. The relocation area may be revised based upon changes in the radiological situation.

    b. Plume counties establish relocation centers in host areas and provide the means to register evacuees; radiologically monitor evacuees, their service animals, and their vehicles; decontamination; and contamination control measures (NUREG J.12).

    b. The details of the food control process are included in Annex F, Agriculture and Food Control Measures.

C. LATE PHASE ACTIONS

The late phase (recovery) includes the long-term emergency response activities necessary to restore the affected area to safe conditions. The state leads this decision process through the Recovery Task Force (RTF), which is described in the *Washington State Comprehensive Emergency Management Plan* (CEMP). The Department of Health is responsible for long-term dose assessment activities after an incident to periodically estimate the total population exposure, the details of which are in its Radiological Emergency Response Plans and Procedures (NUREG M.4).

D. HOSTILE ACTION-BASED INCIDENTS

Washington State Emergency Management Division (EMD) coordinates onsite response support from federal, state, and local response agencies as needed (NUREG C.6). Local jurisdictions maintain responsibility for the tactical coordination of in-bound response resources and evacuation efforts and radiological training requirements for personnel. Federal, state, and local response agencies are responsible for maintaining procedures for activating qualified alternate personnel.

Mutual aid agreements include Washington Intrastate Mutual Aid System (WAMAS) for local resources and Emergency Management Assistance Compact (EMAC) for state resources.

ANNEX I: TRAINING AND EXERCISES

I. PRIMARY AGENCY

- Washington State Military Department

II. SUPPORT AGENCIES

- Washington State Department of Agriculture
- Washington State Department of Health
- Washington State Patrol
- Washington State Department of Transportation
- Adams County
- Benton County
- Franklin County
- Grant County
- Kitsap County
- Kittitas County
- Klickitat County
- Snohomish County
- Walla Walla County
- Yakima County
- United States Department of Energy, Hanford Site
- Energy Northwest, Columbia Generating Station
- Federal Emergency Management Agency
- AREVA NP, Inc.
- Puget Sound Naval Shipyard and Intermediate Maintenance Facility
- Submarine Base Bangor
- Naval Station Everett

III. INTRODUCTION

A. PURPOSE

The purpose of this Annex is to describe the training and exercise activities supporting nuclear facilities, ships and submarines.

B. SCOPE

Pertinent state and county agencies will take part in emergency response training and exercise programs in support of this Plan.

III. POLICIES

Training activities supporting the Columbia Generating Station (CGS), United States Department of Energy- Hanford Site (DOE-RL) and US Naval Nuclear Propulsion Program (NNPP) installations are to be coordinated so as to consolidate similar training sessions into joint hazards training opportunities. Exercise activities in one program with the potential to satisfy exercise requirements in one of the other programs will be coordinated among the facilities, the state, and the Federal Emergency Management Agency (FEMA).

IV. SITUATION

See the Basic Plan of the Washington State Fixed Nuclear Facility Protection Plan.

V. CONCEPT OF OPERATIONS

A. GENERAL

Emergency response training and exercise programs are essential to ensure Washington State agencies and agencies of each affected county are able to implement and validate the Washington State Fixed Nuclear Facility Protection Plan.

B. EXERCISES

All exercises for CGS, DOE-RL, AREVA NP and NNPP are conducted in accordance with the Homeland Security Exercise and Evaluation Program (HSEEP). The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning.

In accordance with Homeland Security Presidential Directive 8 (HSPD-8) and the National Preparedness Goal, HSEEP uses a capabilities-based approach to individual exercises and exercise program management. Following the National Incident Management System (NIMS), HSEEP promulgates standardized policies and terminology usable by officials and emergency responders at all levels of government.

CGS also adheres to some additional guidance in the Radiological Emergency Preparedness (REP) Program Manual that is specific to the requirements of Radiological Emergency Program.

Exercises are conducted jointly between the CGS, DOE-RL, AREVA NP or NNPP, locals, the state, and FEMA to provide the opportunity to exercise critical decision making and coordination capabilities. This can be demonstrated in Operations Based Drills, Functional Exercises, or Full-Scale Exercises; or Discussion Based Tabletop Exercises. For the purpose of this plan Discussion Based Seminars and Workshops are

incorporated in the training section, but are still considered and exercised according to HSEEP.

Below are specific exercises that are required for the four programs CGS, DOE-RL, AREVA NP and NNPP. Each exercise includes the following (NUREG N.3).

- The basic objective and appropriate evaluation criteria
- The date(s), time period, place(s), and participating organizations
- Simulated events
- Time schedule of real and simulated initiating events
- Narrative summary describing the conduct of the exercise
- Description of the arrangements for and advance materials provided for official observers

Energy Northwest, Columbia Generating Station Exercises

Columbia Generating Station exercises will be conducted biennially in accordance with Nuclear Regulatory Commission (NRC) and the FEMA rules. All major elements of the plans and procedures will be tested at a minimum at the frequency specified by the REP Program Manual, Exhibit III-2 (NUREG N.1.b). The state plan will be tested using the evaluation areas listed in the REP Program Manual.

The exercises scenarios will be varied from exercise to exercise to allow all organizations having a role to demonstrate Columbia Generating Station preparedness. Exercises will be based on a radiological release that requires response by offsite response organizations and include all required scenario variations in accordance to the requirements in the RPM and the eight-year planning cycle. Official evaluators will observe, evaluate, and critique the exercises.

The facility operator, in cooperation with Washington Emergency Management Division (EMD), Washington State Department of Health (DOH), Washington State Department of Agriculture (WSDA), and appropriate county government, will prepare CGS exercise scenarios. Information about the scenario will not be released to participants before the exercise to ensure a realistic evaluation of emergency preparedness. The scenario will include specific objectives, dates, times, places, and participating organizations, schedules of real or simulated events, a narrative summary of events, and a timeline for integrating the activities of participating organizations.

Columbia Generating Station drills required by federal regulations include:

1. Communications Drills

a. Monthly communications tests (to include the aspect of understanding the content of messages) of telephone communications between the facility and each plume exposure Emergency Planning Zone (EPZ) county Emergency Operations Center (EOC).
b. Quarterly communications tests between federal response agencies and states within the ingestion pathway.
c. Annual communications tests by Health between the state field teams and the facility.
d. All communications drills include a message content check.

2. Medical Emergency Drills

a. Plume exposure Emergency Planning Zone (EPZ) counties will participate in biennial medical emergency drills involving a simulated contaminated individual that contain provisions for participation by local support services (i.e., ambulance and offsite medical treatment facilities). These exercises are coordinated such that a medical emergency drill occurs within the EPZ annually (N.2.c).
b. Medical emergency drills involving designated hospitals, county emergency services and state agencies, as appropriate, will be conducted biennially.

3. Radiological Monitoring Drills

Radiological monitoring drills will be conducted annually by Health.

4. Health Physics Drills

Health physics drills involving Health radiological monitoring teams will be conducted semi-annually to test response to an analysis of simulated elevated airborne and liquid samples and direct radiation measurements in the environment.

Other considerations for CGS exercises include the following.

- At least one exercise every eight-year exercise cycle must involve a Hostile Action Based (HAB) exercise.
- At least one exercise scenario every eight-year exercise cycle must involve an initial classification of or rapid escalation to a Site Area Emergency or General Emergency.
- At least one exercise every eight-year exercise cycle must include a scenario involving no radiological release or an unplanned minimal radiological release that requires the site to declare a Site Area Emergency, but does not require declaration of a General Emergency.
- At least one exercise every eight-year exercise cycle must involve an ingestion pathway exercises and involve state and other responding organizations (NUREG N.1.d).
- The number and type of personnel participating in ingestion aspects of an exercise will be sufficient for carrying out those ingestion measures required by the accident scenario.

- Observer and participant comments on areas needing improvement, including plan and procedural changes, are to be evaluated and responsibility assigned for implementing corrective actions. A management control process must be used to ensure corrective actions are implemented.

United States Department of Energy, Hanford Site Exercises

The DOE-RL site exercises have the following requirements.

1. The Hanford Site exercise is conducted annually. Materials will be provided to evaluators and controllers in advance of the exercise.
2. The state and each county within the plume exposure pathway EPZ must participate in the exercises.

AREVA NP

At least once every two years AREVA NP conducts an exercise that is evaluated by NRC.

Naval Nuclear Propulsion Program Exercises

Puget Sound Naval Shipyard and Intermediate Maintenance Facility shall conduct periodic exercises with State and County agencies. These exercises may be located at or near Naval Base Kitsap or Naval Station Everett.

Naval Nuclear Propulsion Program Drills (known as exercises at the Naval Nuclear Propulsion Program sites) conduct the following periodic drills.

1. *Communication Drills* Periodic communication test with WA EMD, Kitsap and Snohomish County EOCs.
2. *Protective Action Decision Making Drill* Tabletop Drill covering use of State and County notification form/event category determinations/protective action recommendations.

C. TRAINING

Emergency response training programs provide instruction for state, county, and municipal response personnel responsible for implementing this Plan and its implementing procedures. Initial and annual training is primarily accomplished through annual program refresher trainings/orientations and exercises. Specific technical training, such as field teams and dose assessors, is conducted in small groups by the lead agencies for that activity. Emergency response groups receiving training include, but are not limited to, the following.

1. Directors or coordinators of response agencies receive initial and annual training through orientations and drills on the overall program and the protective action decision-making process from their program staff.

2. Personnel responsible for accident assessment receive initial and annual training from the facility and/or The Washington State Department of Health (DOH) on the equipment and procedures necessary to accurately assess an accident.

3. Radiological/chemical hazardous materials monitoring teams and radiological analysis personnel receive initial and annual training from the facility and/or Health.

4. Law enforcement, security, and firefighting personnel receive annual training from the plume counties.

5. First aid and rescue personnel receive annual training from the plume counties and/or facilities.

6. Local support services personnel; including emergency services personnel receive annual training from the plume counties.

7. Medical support personnel receive annual training from the facility and plume counties.

8. Personnel who transmit emergency information and instructions receive annual training from the plume counties, Washington State Military Department, Emergency Management Division (EMD), and the facility.

9. Media personnel (radio, TV, and press) receive annual training by Energy Northwest (ENW) and EMD.

10. Personnel with emergency response responsibilities receive initial and annual training from their respective organizations. Additionally, all emergency workers may receive just-in-time training at the Benton County EOC or other location, as appropriate (NUREG O.1.3).

Available Training

- *Programmatic Courses*
    - REP Core Concepts Course (E/L339)
    - REP Program Plan Review Course (E/L340)
    - REP Exercise Evaluator Course (E/L304)
    - Instructor Methodology including EMI SME Course
- *Technical Courses*
    - Radiological Accident Assessment Concepts (RAAC) (E341)

  - Radiological Emergency Response Operations (RERO) (PER-904)
  - Advanced Radiological Incident Operations (ARIO) (PER-905)
  - Weapons of Mass Destruction (WMD) Radiological/Nuclear Awareness Course (AWR140)
- *Independent Study Courses*
  - Radiological Emergency Management (IS 3)
  - Introduction to REP Exercise Evaluation (IS 331)
  - Nuclear/Radiological Incident Annex (IS 836)
  - Radiological Emergency Response (IS 301)

VI. MODULAR EMERGENCY RADIOLOGICAL RESPONSE TRANSPORTATION TRAINING (IS 302) RESPONSIBILITIES

A. GENERAL

1. Support for training will be provided by EMD, Health, the facility, or the county emergency management agency. FEMA, Columbia Generating Station, Naval Nuclear Propulsion Program, and the DOE Hanford Site also provide training to state and county agencies with emergency response duties.

2. EMD, Health, the facilities, and the affected county(ies) within the plume and ingestion exposure pathway EPZs will coordinate and conduct exercises. Exercises will be developed by jointly setting objectives, creating scenarios with real and simulated events, developing participant lists, and producing evaluation materials. EMD, Health, and the affected county(ies) will ensure exercises are conducted, After Action Reports with an Improvement Plan (AAR/IP) of the exercises are produced, and evaluator and observer comments are addressed in a timely manner.

3. Management controls in each agency will be used to ensure corrective actions from the improvement plans are implemented following each exercise and will be maintained on a regular basis.

B. PRIMARY AGENCY: WASHINGTON STATE MILITARY DEPARTMENT, EMERGENCY MANAGEMENT DIVISION

1. Training activities supporting the fixed facilities are to be coordinated to maximize opportunities for joint training sessions or consecutive training sessions to minimize travel requirements for participants.

2. Training sessions are to be conducted as necessary to meet program requirements, generally initial and annual refresher training sessions (NUREG O.4).

3. In-house critiques will be conducted after each exercise and incorporate resulting appropriate changes into the next revision of this Plan. In the event significant planning issues are identified, an immediate change to this plan shall be issued. Routine editorial-type changes to the plan can be held for the next annual review.

4. Develop a summary of resolved corrective actions arising out of each exercise in conjunction with agencies participating in the exercise. Ensure appropriate corrective actions are taken to correct any noted problems.

5. Ensure appropriate staff and volunteers receive initial and recurring training.

6. Conduct periodic training sessions and exercises to validate the plan and procedures.

7. Maintain records of Columbia Generating Station related training provided, people attending, and corrective or remedial actions addressed by the training sessions to support the state's annual certification report.

C. *Support Agencies*

1. Washington State Department of Agriculture
   a) Ensure appropriate people receive initial and recurring training.
   b) Conduct periodic training sessions and exercises to validate the plan and procedures.
   c) Participate in training sessions to inform onsite and offsite responders of the requests for support that WSDA will be making.
   d) Participate in joint integrated exercises with facilities, counties, and other state agencies.

2. Washington State Department of Health
   a) Participate in joint integrated exercises with facilities, counties, and other state agencies.
   b) Work with the planning agency to develop and conduct tabletop exercises to validate plans and procedures.
   c) Conduct training exercises both internally and in conjunction with other radiological response agencies, to provide realistic, hands-on experience.
   d) Ensure responders have received initial and refresher training appropriate for their response positions.
   e) Coordinate training with EMD and facilities.
   f) Coordinate and provide radiological-specific training to all agencies requiring or requesting training, e.g., WSP, counties, firefighters, and ambulance/rescue, if appropriate.

3. Adams, Benton, Franklin, Grant, Kitsap, (Kittitas, Klickitat) Snohomish, Walla Walla, and Yakima Counties
    a) Ensure appropriate people receive initial and recurring training.
    b) Coordinate training requirements with EMD.
    c) Conduct periodic training sessions and exercises to validate the plan and procedures.
    d) Participate in joint integrated exercises with facilities, other counties, and state agencies.
    e) For Columbia Generating Station related training, maintain records of training presented, people attending, exam results, and corrective or remedial actions addressed by the training sessions to support the state's annual program certification report to FEMA.

4. Energy Northwest, Columbia Generating Station
    a) Support requests for assistance from state and county agencies.
    b) Provide critiques of observed exercises.
    c) Participate in joint integrated exercises with other facilities, counties, state, and federal agencies.

5. United States Department of Energy- Hanford Site
    a) Support requests for assistance from state and county agencies.
    b) Provide critiques of observed exercises.
    c) Participate in joint integrated exercises with other facilities, counties, state, and federal agencies.

6. AREVA NP, Inc.
    a) Support requests for assistance from state and county agencies.
    b) Provide critiques of observed exercises.
    c) Participate in joint integrated exercises with other facilities, counties, state, and federal agencies.

7. Federal Emergency Management Agency
    a) Support requests for assistance from state and county agencies.
    b) Provide critiques of observed exercises.
    c) Participate in joint integrated exercises with facilities, counties, state, and other federal agencies.

8. Naval Nuclear Propulsion Program
    a) Support requests for assistance from state and county agencies.

b) Participate in joint integrated exercises with facilities, counties, state, and other federal agencies.

VII. RESOURCE REQUIREMENTS

Resources required the support training and exercises will be identified by the agency providing the training or exercise in sufficient time to allow participants to be prepared.

VIII. REFERENCES

1. Basic Plan, Authorities, of the Integrated Fixed Nuclear Facility Plan.
2. Homeland Security Exercise and Evaluation Program (HSEEP) Volumes I-IV
3. Radiological Emergency Preparedness (REP) Program Manual, June 2013

APPENDIX 1 – ACRONYMS AND DEFINITIONS

I. ACRONYMS

AAG	Assistant Attorney General
AAR-IP	After Action Report-Improvement Plan
ACCESS	A Central Computerized Enforcement Service System
ACP	Access Control Point
AG	Attorney General
ALARA	As Low As Reasonably Achievable
AMS	Aerial Measuring System
ANI	American Nuclear Insurers
APA	Area of Planning Attention
APCO	Association of Public-Safety Communications Officials, International
ARC	American Red Cross
ARES	Amateur Radio Emergency Service
ARM	Aerial Radiological Monitor
AWC	Washington State Alert and Warning Center
CAP	Corrective Action Program
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosive
CDC	Centers for Disease Control and Prevention
CEDE	Committed Effective Dose Equivalent
CEMNET	Comprehensive Emergency Management Network
CEMP	Comprehensive Emergency Management Plan
CEO	Chief Elected Official / Chief Executive Officer
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CGS	Columbia Generating Station
CIKR	Critical Infrastructure Key Resources
COG	Continuity of Government
CPG	Comprehensive Planning Guide
CST	Civil Support Team
DAC	Dose Assessment Center (also see UDAC and MUDAC)
DFO	Disaster Field Office
DHHS	U.S. Department of Health and Human Services
DHS	U.S. Department of Homeland Security
DIL	Derived Intervention Level
DMORT	Disaster Mortuary Operational Response Team
DOD	U.S. Department of Defense
DOH	Washington State Department of Health
DOI	U.S. Department of Interior
DRD	Direct Reading Dosimeter
EAL	Emergency Action Level
EAS	Emergency Alert System
ECC	Emergency Control Center
ECC	Emergency Coordination Center
ECC	Emergency Communications Center
ECL	Emergency Classification Level
EFSEC	Energy Facility Site Evaluation Council

EEG	Exercise Evaluation Guide
EIS	Environmental Impact Statement
EMAC	Emergency Management Assistance Compact
EMC	Emergency Management Council
EMD	Emergency Management Division, Washington Military Department
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
EN	Energy Northwest
ENW	Energy Northwest
EOC	Emergency Operations Center
EOF	Emergency Operation Facility
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
EPHA	Emergency Preparedness Hazards Assessment
EPZ	Emergency Planning Zone
ERO	Emergency Response Organization
ESF	Emergency Support Function
EW	Emergency Worker
EW/AC	Emergency Worker / Assistance Center
F/ASC	Finance / Admin Section Chief, Incident Command System
FBI	Federal Bureau of Investigation
FCA	Food Control Area
FCB	Food Control Boundary
FCC	U.S. Federal Communications Commission
FCO	Federal Coordinating Officer
FCP	Food Control Point
FDA	U.S. Food and Drug Administration
FE	Functional Exercise
FEMA	Federal Emergency Management Agency
FIPS	Federal Information Processing Standard
FNF	Fixed Nuclear Facility
FRMAC	Federal Radiological Monitoring and Assessment Center
FRPCC	Federal Radiological Policy Coordinating Committee
FSE	Full-Scale Exercise
GE	General Emergency
GSA	U.S. General Services Administration
HAB	Hostile Action Based
HazMat	Hazardous Material (also HAZMAT)
HSEEP	Homeland Security Exercise and Evaluation Program
HSPD	Homeland Security Presidential Directive
HUD	U.S. Department of Housing and Urban Development
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IED	Improvised Explosive Devise
IMAAC	Interagency Modeling and Atmospheric Advisory Center
IMAT	Incident Management Assistance Team (replaces ERT)
IMT	Incident Management Team, Incident Command System
IND	Improvised Nuclear Device

JFO	Joint Field Office
JIC	Joint Information Center
JIS	Joint Information System
JOC	Joint Operations Center
KI	Potassium Iodide
LEPC	Local Emergency Planning Committee
LERN	Law Enforcement Radio Network
LETS	Law Enforcement Teletype System
LSC	Logistics Section Chief, Incident Command System
MAC	Multi-Agency Coordination
MACC	Multi-Agency Coordination Center
MACG	Multi-Agency Coordination Group
MEDNET	Medical Emergency Delivery Network
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
MUDAC	Meteorological Unified Dose Assessment Center (also see DAC, UDAC)
NARAC	National Atmospheric Release Advisory Center
NAWAS	National Warning System
NCP	National Contingency Plan
NCS	National Communication System
NDA	National Defense Area
NETC	National Emergency Training Center
NGO	Non-governmental Organization
NIMS	National Incident Management System
NNPP	Naval Nuclear Propulsion Program
NOAA	U.S. National Oceanic and Atmospheric Administration
NOUE	Notification of Unusual Event
NRC	U.S. Nuclear Regulatory Commission
NRF	National Response Framework
NUREG	U.S. Nuclear Regulatory Commission Regulation
NWS	National Weather Service, U.S. National Oceanic and Atmospheric Administration
ODOT	Oregon Department of Transportation
OEM	Oregon Emergency Management
ORO	Offsite Response Organization
ORP	Office of Radiation Protection, Washington State Department of Health
OSC	On-Scene Coordinator
OSC	Operations Section Chief
OSC	Operations Support Center
OSHA	Occupational Safety and Health Administration
PAD	Protective Action Decision
PAG	Protective Action Guide
PAO	Public Affairs Officer
PAR	Protective Action Recommendation
PIO	Public Information Officer
PNEMA	Pacific Northwest Emergency Management Arrangement
PPE	Personal Protective Equipment
PSAP	Public Safety Answering Point
PSC	Plans Section Chief, Incident Command System

PSNS&IMF	Puget Sound Naval Shipyard and Intermediate Maintenance Facility
PZ	Precautionary Zone, U.S. Naval Nuclear Propulsion Program
R	Roentgen
RAC	Regional Assistance Committee
RAD	Radiation Absorbed Dose
RACES	Radio Amateur Civil Emergency Services
RAP	Radiological Assistance Program
RCW	Revised Code of Washington
RDD	Radiological Dispersal Device
REM	Roentgen Equivalent in Man
REP	Radiological Emergency Preparedness
RERT	Radiological Emergency Response Team
RRCC	Regional Response Coordination Center
RRT	Regional Response Team
RRTF	Recovery and Restoration Task Force
SA	Salvation Army
SAE	Site Area Emergency
SARA	Superfund Amendments and Reauthorization Act includes Title III
SCBA	Self-contained Breathing Apparatus
SCO	State Coordinating Officer
SEOO	Washington State Emergency Operations Officer
SEOC	Washington State Emergency Operations Center
SERC	State Emergency Response Commission
SME	Subject Matter Expert
TCP	Traffic Control Point
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter
TTX	Table Top Exercise
UC	Unified Command
UDAC	Unified Dose Assessment Center (see also DAC and MUDAC)
UE	Unusual Event
USDA	U.S. Department of Agriculture
USDHS	U.S. Department of Homeland Security
USDOC	U.S. Department of Commerce
USDOD	U.S. Department of Defense
USDOE	U.S. Department of Energy
USDOE-RL	U.S. Department of Energy-Richland Operations
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USNORTHCOM	U.S. Northern Command
WAC	Washington Administrative Code
WADOE	Washington State Department of Ecology
WADOH	Washington State Department of Health
WAEMD	State of Washington Military Department, Emergency Management Division
WAMAC	Washington Mutual Aid Compact
WNG	Washington National Guard
WSDA	Washington State Department of Agriculture
WSDOH	Washington State Department of Health
WSDOT	Washington State Department of Transportation

WSEMD	Washington State Emergency Management Division
WSP	Washington State Patrol

II. DEFINITIONS

Term	Reference/Source	Definition
Absorbed dose	NUREG 0654, App B	When ionizing radiation passes through living tissue, some of its energy is imparted to the tissue, which absorbs it. The amount of ionizing radiation absorbed per unit mass of the irradiated tissue is called the absorbed dose. It is measured in rads and rems.
Access Control	NUREG 0654, App B	All activities accomplished for the purpose of controlling entry or reentry into an area that has either been evacuated or is under a sheltering protective action decision to minimize the radiation exposure of individuals because of radiological contamination. This function is needed to prevent the general public from entering restricted areas (sheltered and/or evacuated) and permitting only emergency workers with essential missions and limited members of the general public to enter.
Access Control Points (ACP)	Benton County Franklin County EMD	Road intersections or other logistically viable points on the boundaries of a restricted area which enable law enforcement and other emergency workers to maintain access control into the restricted area. May be manned or unmanned.
Accident Assessment	NUREG 0654, App B	The evaluation of the actual and potential consequences of a radiological incident.
Action Levels / Trigger	NUREG 0654, App B Franklin County	A designated value whereby an individual is directed to perform a specific action. Also, the threshold for contamination levels that trigger the need for decontamination established in the plans/procedures.
Activation	Benton County	The process by which a facility is brought up to emergency mode from a normal mode of operation. Activation is completed when the facility is ready to carry out full emergency operations.
Activation of Personnel	NUREG 0654, App B	The process by which emergency response personnel are notified of an incident and instructed to report for duty.

Term	Reference/Source	Definition
Activity	Health	The number nuclear disintegration's occurring in a radioactive material per unit of time. The standard measures of activity are the Curie or the Becquerel (SI).
Acute Health Effects	Health	(also called Nonstochastic, or deterministic effects) Radiation health effects which can be directly related to the absorbed dose. These effects occur at "high radiation" levels, and begin at a threshold level of radiation. Above the threshold, the severity of the effect is linearly related the dose. "Acute" refers to a dose received within one month or less.
Administration / Finance Section	NUREG 0654, App B	As applied to an exercise planning team organized according to Incident Command System principles, the team members providing grant management and administrative support throughout exercise development. This group is also responsible for the registration process and coordinates schedules for the exercise planning team, the exercise planning team leader, participating agencies, and the host community or communities.
Advisories	EMD	Precautionary advice which is easily implemented at a low cost. Advisories can be issued during the early or intermediate phases in a geopolitically bound area large enough to encompass the entire area where contamination is expected. For example, a typical advisory would be the recommendation to place livestock on covered water and stored feed until further notice.
Advisory	Health	The primary purpose of an advisory is to minimize human radiation dose. Advisories do not require lab results. They may be based on possible contamination and may be issued for broad geographic areas.
AEGL-1	EMD	The airborne concentration (expressed in parts per million (ppm) or milligram/meter cubed) of a substance above which)i.e. between AEGL-1 and AEGL-2) it is predicted that the general population, including susceptible

Term	Reference/Source	Definition
		individuals, could experience notable discomfort, irritation, or certain asymptomatic, non-sensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.
AEGL-2	EMD	The airborne concentration of a substance above which (i.e. between AEGL-2 and AEGL-3) it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects, or an impaired ability to escape.
AEGL-3	EMD	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individual, could experience life-threatening health effects or death.
Aerial Measuring System (AMS)	NUREG 0654, App B	A U.S. Department of Energy asset consisting of an integrated remote-sensing capability for rapidly determining radiological and ecological conditions of large areas of the environment. In conjunction with modern laboratory and assessment techniques, state-of-the-art airborne equipment is used for extremely low-level gamma radiation detection, high-altitude photography, airborne gas and particulate sampling, and multi-spectral photography and scanning.
Air Sampling	Health	The collection and analysis of samples of air to measure its radioactivity or to detect the presence of airborne radioactive substances, particulate matter, vapors, or chemical pollutants.
Airborne Radioactive Material	Health	Radioactive material dispersed in the air in the form of dust, fumes, mist, vapor, or gases.
Airborne Radioactivity	NUREG 0654, App B Health Benton County	Any radioactive material dispersed in the air in the form of dusts, fumes, mists, vapors, or gases.
ALARA	NUREG 0654, App B Health	Acronym for "As Low As Reasonably Achievable," a basic concept of radiation protection that specifies that radioactive discharges from nuclear plants and radiation exposure to personnel be kept as

Term	Reference/Source	Definition
		far below regulation limits as feasible.
Alert	NUREG 0654, App B	Licensee emergency classification level indicating that events are in process or have occurred that involve an actual or potential substantial degradation in the level of plant safety or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Releases are expected to be limited to small fractions of the Environmental Protection Agency protective action guide exposure levels.
Alerting of Personnel	EMD	The process of placing personnel on notice that a situation has developed that may require that they report for emergency duty.
Alerting the public	NUREG 0654, App B Benton County	Activating an attention-getting warning signal through such means as sirens, tone alert radios, route alerting, and speakers on cars, helicopters, and boats.
Alpha Particle	NUREG 0654, App B	A positively charged particle ejected spontaneously from the nuclei of some radioactive elements. It is identical to a helium nucleus that has a mass number of 4 and an electrostatic charge of plus 2. It has low penetrating power and short range. The most energetic alpha particle will generally fail to penetrate the skin. Alpha is hazardous when an alpha-emitting isotope is introduced into the body. Alpha particles are the least penetrating of the three common types of radiation (alpha, beta, and gamma) and can be stopped by a piece of paper (cannot penetrate skin).

Term	Reference/Source	Definition
Appeal	EMD	A request for reconsideration of the determination on any action related to Federal assistance under the Stafford Act and the Federal regulations implementing the Stafford Act.
Applicant	EMD	Individuals, families, States and local governments, or private nonprofit organizations who apply for assistance as a result of a declaration of a major disaster or emergency.
Applicants Agent	EMD	A person appointed and authorized by an eligible local government or private nonprofit corporation to represent that entity in the application and administration of Federal Public Assistance.
Area Command	NRF Health	An organization established to oversee the management of multiple incidents that are each being handled by a separate Incident Command System organization or to oversee the management of a very large or evolving incident or that has multiple incident management teams engaged. The Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multijurisdictional.
Area of Planning Attention	EMD NNPP	To assist State and local authorities in assessing the need for any preplanning in the vicinity of naval bases or shipyards where nuclear powered vessels are berthed, the Naval Nuclear Propulsion Program has designated Areas of Planning Attention. The areas of Planning Attention extend 0.5 mile around every location where nuclear powered vessels are normally berthed, (i.e., from the actual dock or pier where the ship is berthed - not from the shipyard or naval base property boundary). The 0.5-mile distance is based on detailed, conservative analysis of worst-case, but credible scenarios-the actual radius of

Term	Reference/Source	Definition
		impacted downwind area will most likely be smaller.
Area Requiring Corrective Action (ARCA)	NUREG 0654, App B	An observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety. Correction of ARCAs is verified before or during the next biennial exercise at that site.
Assessment Actions	EMD	Actions taken during or after an incident or emergency to obtain and process information in order to conduct an effective emergency response and plan for recovery.
Assistance Center(s)	Benton County	Facilities established to provide services to the evacuating public. These services include radiation monitoring and, if necessary, decontamination assistance, and registration.
Assistance Center(s)	EMD	Facilities located outside the plume exposure pathway emergency planning zone wherein evacuees can receive first aid and assistance in obtaining food and lodging. Limited housing of evacuees is provided at assistance centers or at separate lodging facilities. (See also, Emergency Worker/Assistance Centers.)
Atmospheric Stability (low level)	EMD	This is a relative classification of the mixing of the air near the surface. This mixing has been measured as a standard deviation of wind direction changes or, in a more direct way, as the difference in air temperature at two reference heights (temperature gradient between 2 and 4 meters). Low stability is associated with smaller downwind hazard distances.
Atmospheric Stability Categories	EMD	Note: Categories A, B, and C are most common during the day. Categories D, E, and F are most common during the night. Category G is at night but is very rare. Category A: Extremely Unstable - Weather conditions are very unpredictable. Wind speed average one meter/second but is "gusty." The temperature rapidly decreases with

Term	Reference/Source	Definition
		altitude. This condition is called "superadiabatic." It is common on a hot, sunny day. Due to these conditions, a contamination plume would "loop" and be unpredictable. Category B: Moderately Unstable - Weather conditions are still unpredictable, but less than "A." Wind speeds average two meters/second, and is not as "gusty." The temperature still decreases, but not as rapidly with altitude. "Looping" of a plume would still occur, but would not be as severe. This condition is common on a sunny, warm day. C. Category C: Slightly Unstable - Weather conditions are somewhat unpredictable. Wind speeds average five meters/second. A little gustiness may be expected. The temperature still decreases and looping of a contamination plume may occur, but progressively less pronounced than "A" or "B" categories. This is an average day, slightly cloudy. Category D: Neutral - Weather conditions are more predictable. Wind speeds average five meters/second, with no expected gustiness. The temperature still decreases with altitude, but the change is less pronounced. At this point, the condition name changes from "superadiabatic" to "adiabatic." A contamination plume is more predictable, with minor "looping." This condition is common on an overcast day or night (heavy overcast). Category E: Slightly Stable - Weather conditions turn more predictable than with "D." Wind speeds average three meters/second. The temperature does not change with altitude. This condition is called "isothermic." A contamination plume is easy to predict with this condition. "Coning" of the plume occurs.

Term	Reference/Source	Definition
		This condition generally occurs at night, and is considered an average night (partly cloudy). Category F: Moderately Stable - Weather conditions become very predictable. Wind speeds average two meters/second. This is an inversion. Temperatures increase with altitude (opposite of an "A" class). With this condition, little vertical dispersion occurs, i.e., it does not reach the ground rapidly Category G: Extremely Stable - This condition is very predictable, but rarely occurs. No wind blow, and the temperature increases rapidly with altitude. This condition may occur over a city, which acts even less pronounced than an "F" condition.
Background Radiation	NUREG 0654, App B	The level of naturally occurring radiation in the environment. Sources include air, water, soil, potassium-40 in the body and cosmic radiation from the sun. The usually quoted individual background radiation exposure in man's natural environment is an average of 125 millirem per year.
Beta Particle	NUREG 0654, App B	A charged particle emitted from a nucleus during radioactive decay, with a mass equal to 1/1827 that of a proton. A negatively a charged beta particle is identical to an electron. A positively charged beta particle is called a positron. Large amounts of beta radiation may cause skin burns, and beta emitters are harmful if they enter the body. Most beta particles can be stopped by aluminum foil.
Background Radiation	NUREG 0654, App B	The level of naturally occurring radiation in the environment. Sources include air, water, soil, potassium-40 in the body and cosmic radiation from the sun. The usually quoted individual background radiation exposure in man's natural environment is an average of 125 millirem per year.

Term	Reference/Source	Definition
Bioassay	Health	The collection and analysis of human hair, tissue, nasal smears, urine, or fecal samples to determine the amount of radioactive material that might have been ingested by the body.
Boiling Water Reactor (BWR)	EMD Agriculture Benton County Franklin County	A nuclear reactor in which water, used as both coolant and moderator, is allowed to boil in the core. The resulting steam is used to drive a turbine for generating electricity. Energy Northwest, Columbia Generating Station is a boiling water reactor.
Boiling Water Reactor (BWR)	NUREG 0654, App B	A nuclear reactor in which water, used both as coolant and moderator, is allowed to boil in the reactor vessel. The resulting steam is used directly to drive a turbine. Columbia Generating Station is a BWR.
Buffer Zone	Health	The area which falls between a measured or calculated isodose line and the surrounding geopolitical boundary that defines a relocation area or food control area.
Buffer Zone	NUREG 0654, App B Benton County	An area adjacent to a restricted zone, to which residents may return, but for which protective measures are recommended to minimize exposure to radiation.
Buffer Zone (Medical Facilities)	NUREG 0654, App BFranklin County	An area (within a hospital or other medical facility) adjacent to the radiological emergency area (restricted zone) for which protective measures are recommended to minimize both exposure to radiation and the spread of radiological contamination to radiologically clean areas of the facility.
Corrective Action Program	EMD	A CAP is an element of improvement planning through which corrective actions from the AAR/IP are prioritized, tracked, and analyzed continuously until they have been fully implemented and validated.
Calculated Dose Line	EMD	An isodose line that is generated using dose assessment techniques and calculations. This line is not measured in the field directly.
Calculated Dose Line	Walla Walla County	An isodose line of radiation levels below background, which is determined by

Term	Reference/Source	Definition
		using measured dose levels in a series of calculations to determine an isodose line for the desired radiation dose.
Chain-of-custody form	NUREG 0654, App B Benton County Franklin County	The documentation of the transfer of samples from one organization and individual to another with respect to the name of the organization and individual and dates of acceptance and / or transfer of samples.
Check Source	NUREG 0654, App B/ Benton County Franklin County	A radioisotope with a known, relatively fixed activity level used to determine the responsiveness of survey instruments.
Columbia Generating Station (CGS)	EMD Agriculture Franklin County	The nuclear power-generating facility operated by the Energy Northwest, on the Hanford site area. Formerly known as Washington Nuclear Plant -2 (WNP-2) and Washington Public Power Supply System (WPPSS)
Command Staff	NURE 0654, App B	As applied to an exercise planning team organized according to Incident Command System principles, the team members responsible for coordinating all exercise planning activities. Within this group is the exercise planning team leader, who assigns exercise activities and responsibilities, provides guidance, establishes timelines, and monitors the development process. The safety controller and the liaison coordinator report directly to the exercise planning team leader.
Commercial Nuclear Power Plant (NPP)	NURE 0654, App B	A facility licensed by the Nuclear Regulatory Commission to use a nuclear reactor to produce electricity for sale to the general public. While there are many types of nuclear facilities, FEMA's responsibility for offsite planning and preparedness and the guidance in the REP Program Manual are applicable only to commercial nuclear power plants.
Committed Dose	NURE 0654, App B	The dose that will be received over a period of 50 years from the ingestion or inhalation of a particular quantity of a radionuclide or a specific mix of radionuclides.
Committed Dose Equivalent (CDE)	NUREG 0654, App B	The dose equivalent to organs or tissues of reference that will be received from an intake of radioactive material by an

Term	Reference/Source	Definition
		individual during the 50-year period following ingestion.
Committed Effective Dose Equivalent (CEDE)	NUREG 0654, App B	1. The sum of the 50-year committed doses to individual organs from inhalation (or ingestion) of radionuclides, where the individual organ doses have been weighted so that the associated risk of fatal cancer can be added to the risk of fatal cancer from whole-body dose. 2. The radiation dose committed over a "lifetime" (50 years for adult, 70 years for infant) to a person via radiation of organs from inhalation or ingestion of radioactive material.
Comprehensive Emergency Management Plan (CEMP)	EMD	Framework for statewide migration, preparedness, response and recovery activities to facilitate interoperability between local, state, and federal governments.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	Agriculture	A law that deals with hazardous substance releases into the environment and the cleanup of hazardous waste sites.
Congregate Care (CC)	NUREG 0654, App B Benton County	The provision of temporary housing and basic necessities for evacuees.
Congregate Care Center (CCC)	NUREG 0654, App BBenton County EMD Agriculture	1. A facility for temporary housing, care, and feeding of evacuees. 2. A public or private facility that is predesignated and managed by the American Red Cross during an emergency, where evacuated or displaced persons are housed, and fed.
Contaminated	NUREG 0654, App B	The condition resulting from the adhesion of radioactive particulates to the surface of structures, areas, objects, or personnel.
Contaminated, Injured, or Exposed Individuals	NUREG 0654, App B Franklin County	Individuals who are: (1) contaminated with radioactive material that cannot be removed by the simple methods described in NUREG-0654/FEMAREP-1, Evaluation Criteria J.12 and K.5.b; or (2) contaminated and otherwise physically injured. Individuals exposed to high levels of radiation may be injured but not contaminated.

Term	Reference/Source	Definition
Contamination	NUREG 0654, App B	Refers to radioactive materials not in their intended containers. Whether the contamination is considered "fixed" or "loose" depends on the degree of effort required to unfix or remove the contamination from a surface.
Control Cell	EMD	Exercise personnel who facilitate interfaces with nonparticipating groups, such as ORO officials and persons with disabilities and access/functional needs.
Controlled Area	NUREG 0654, App B	A defined area in which the occupational exposure of personnel to radiation or radioactive material is under the supervision of an individual in charge of radiation protection.
Controller	NUREG 0654, App BFranklin County	The individual directing the flow of scenario events in order to ensure that an exercise is conducted in accordance with the agreed-upon exercise objectives and the extent of play.
Controller inject	NUREG 0654, App B Benton County	The introduction of events, data, and information into exercises to drive the demonstration of objectives.
Corrective Action	NUREG 0654, App B	Corrective actions are the concrete, actionable steps outlined in Improvement Plans that are intended to resolve preparedness gaps and shortcomings experienced in exercises or real-world events.
Corrective Actions	Health	Those emergency measures taken to lessen or terminate an emergency situation in order to prevent an uncontrolled release of radioactive material or to reduce the magnitude of a release (e.g., shutting down equipment, firefighting, repair, and damage control).
Counting	NUREG 0654, App B Franklin County	Using an instrument to detect individual particles or gamma rays which interact with the detector on the instrument. For example, ambient radiation can be counted, or, alternatively, the radiation emitted by specific samples can be counted in units of counts per minute (cpm) or counts per second (cps).
Crash Telephone System	Franklin County	A closed circuit phone system used in selected Emergency Operations Centers

Term	Reference/Source	Definition
		(EOC).
Curie	NUREG 0654, App B Health	The basic unit of measure for radiation activity. A Curie is equal to 37 billion disintegrations per second, which is also the rate of decay of 1 gram of Ra-226 (Radium). A Curie is also a quantity of any radionuclide that decays at a rate of 37 billion disintegrations per second. Several commonly used fractions of the curie include: millicurie: 1/1,000 of a curie, (one thousandth of a curie, abbreviated mCi) microcurie: 1/1,000,000 of a curie, (one millionth of a curie, abbreviated μCi) nanocurie: 1/1,000,000,000 of a curie, (one billionth of a curie, abbreviated nCi) picocurie: 1/1,000,000,000,000 of a curie (one trillionth of a curie, abbreviated pCi)
Damage Survey Report (DSR)	FEMA	A document (FEMA Form 90-91) prepared by a joint State-Federal inspection team which identifies the scope of eligible work and provides a cost estimate for the performance of the eligible work at a single project site. Costs for work not identified and described in an approved DSR may not be reimbursed by the Federal Government.
Decontamination	NUREG 0654, App B EMD CEMP	The process of making any person, object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing chemical or biological agents, or by removing radioactive material clinging to or around it.
Deficiency	NUREG 0654, App BBenton County	An observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant. Deficiencies must be corrected within 120 days of the

Term	Reference/Source	Definition
		exercise.
Delayed Health Effects (Stochastic)	Health	Radiation health effects that are based on the dose received AND the probability of those effect occurring at the given dose. Stochastic effects have no threshold and apply mainly to low levels of radiation. They can occur at any level of radiation as a function of probability.
Department of Health (DOH)	Benton County Franklin County	A Washington State agency created by statute to provide health and social services to the citizens of Washington. The DOH Office of Radiation Protection (ORP) is the lead Washington State emergency response agency in case of a nuclear facility emergency.
Derived Intervention Levels (DILs)	NUREG 0654, App B	Concentration derived from the intervention level of dose at which the Food and Drug Administration recommends consideration of protective measures. DILs correspond to the radiation concentration in food throughout the relevant time period that, in the absence of any intervention, could lead to an individual receiving a radiation dose equal to the protective action guide or in international terms the intervention levels of dose.
Direction and Control	NUREG 0654, App B Benton County	The management of emergency functions within a particular context (e.g., emergency operations center) through leadership and use of authority.
Disabled Individuals		Individuals, who are deaf, blind, non-ambulatory, or require support (e.g., crutches), frail, dependent upon life-support systems, or mentally or emotionally impaired.
Disaster	EMD CEMP	An event or set of circumstances which: (1) demands immediate action to preserve public health, protect life, protect public property, or to provide relief to any stricken community overtaken by such occurrences or (2) reaches such a dimension or degree of destructiveness as to warrant the Governor proclaiming a state of emergency pursuant to RCW 43.06.010.

Term	Reference/Source	Definition
Dose	Agriculture	A generic term denoting a quantity of energy absorbed from exposure to ionizing radiation. (The term when expressed in Roentgens relates to the amount of gamma or x-ray radiation required to produce a quantity of ionizations in a volume of air. Expressed in rads it relates to an amount of absorbed dose to any material. Expressed in rem it is a dose equivalent which relates absorbed dose to the biological effect in human tissue. Exposure to a rad of alpha will cause more damage to tissue than a rad of gamma radiation. Exposure to a rem of gamma will cause the same amount of damage to tissue.)
Dose	Health	A quantity of radiation received. The term is often used in the sense of the dose rate, expressed in [Roentgens/hour] (R/hr), which is a measure of "energy" that is being producing in air. This is different from the absorbed dose [Rads] that represents the energy absorbed from the radiation in material. Furthermore, the dose equivalent [rem], is a measure of the biological damage to living tissue from the radiation dose exposure.
Dose	NUREG 0654, App B	The quantity of energy absorbed from ionization per unit mass of tissue. The rad is the unit of absorbed dose.
Dose Assessment Center (DAC)	EMD Agriculture	An area within or near the facility which houses the personnel responsible for coordinating radiological monitoring teams, collecting radiological monitoring data, calculating dose projections, and recommending protective actions for the Emergency Planning Zones. At the Energy Northwest, Columbia Generating Station, this area is referred to as Meteorological Unified Dose Assessment Center (MUDAC). For Naval Nuclear Propulsion Program Installations, dose assessment will be conducted at the Emergency Control Center (ECC). Also see Meteorological Unified Dose Assessment Center (MUDAC) and Unfired Dose Assessment Center

Term	Reference/Source	Definition
		(UDAC)
Dose commitment	Agriculture Franklin County	The total dose equivalent which may be expected to accrue to an organ of interest, such as the thyroid, as a result of inhalation, ingestion, or immersion of a source of radiation during an event. The dose commitment includes the effect of retaining radioactive material in the body after the conclusion of the event.
Dose equivalent	Benton County	The product of the absorbed dose in rad, a quality factor related to the biological effectiveness of the radiation involved and any other modifying factors.
Dose Equivalent	Health	The amount of biological damage to human tissue caused by radiation. The absorbed radiation dose to human tissue times the quality factor. The units of the dose equivalent are the REM (R) or sievert (Sv).
Dose Equivalent	NUREG 0654, App B	1. A term used to express the amount of effective radiation when modifying factors have been considered. 2. The product of absorbed dose multiplied by a quality factor multiplied by a distribution factor. It is expressed numerically in rem. 3. The product of the absorbed dose in rad, a quality factor related to the biological effectiveness of the radiation involved and any other modifying factors.
Dose Equivalent	Franklin County	A radiation dose to the whole body or a single organ that has been adjusted to make it equivalent in risk of cancer to the amount dose from gamma radiation that would cause
Dose limits for emergency workers	NUREG 0654, App B Benton County	The allowable accumulated dose during the entire period of the emergency. Action to avoid exceeding the limit is taken based on actual measurements of integrated gamma exposure. In contrast, protective action guides are trigger / action levels of projected dose at which actions are taken to protect the public. These actions are taken prior to the dose being received.

Term	Reference/Source	Definition
Dose Rate	NUREG 0654, App BHealth	The radiation dose delivered per unit time. The dose rate may be expressed numerically in rads per second or rads per hour.
Dosimeter	NUREG 0654, App B	A portable device such as a thermoluminescent film badge or direct-reading ionization chamber used for measuring and registering the total accumulated exposure to ionizing radiation.
Dosimetry	Health	The theory and application of the principles and techniques involved in the measurement and recording of radiation doses. Its practical aspect is concerned with the use of various types of radiation instruments with which measurements are made.
Dosimetry	NUREG 0654, App B	The measurement of radiation doses. It applies to both the devices used (dosimeters) and to the techniques.
Drill	NUREG 0654, App B Benton County	1. An event involving organizational responses to a simulated accident to develop, test, and monitor specialized emergency skills that constitute one or more component of an emergency plan and procedure. 2. Drills only apply to facilities licensed by the NRC.
Early Phase	NUREG 0654, App B	(also referred to as Plume or Emergency Phase) The period at the beginning of a nuclear incident when immediate decisions for effective use of protective actions are required and must therefore usually be based primarily on the status of the nuclear power plant and the prognosis for worsening conditions. When available, predictions of radiological conditions in the environment based on the condition of the source or actual environmental measurements may also be used. Precautionary actions may precede protective actions based on the protective action guides. This phase lasts hours to several days and ends when the radioactive release ends.
Emergency	NUREG 0654, App B EMD CEMP	For the purposes of defining an emergency at a nuclear power plant, an

Term	Reference/Source	Definition
		unexpected event during the operation of a nuclear power plant that has a significant effect on the safety of the facility, personnel or the public. For the purposes of the State of Washington declaring an emergency, an event or set of circumstances which: (1) demands immediate action to preserve public health, protect life, protect public property, or to provide relief to any stricken community overtaken by such occurrences or (2) reaches such a dimension or degree of destructiveness as to warrant the Governor proclaiming a state of emergency pursuant to RCW 43.06.010.
Emergency Presidential Declaration	EMD CEMP	A formal declaration by the President a major disaster or emergency exists. The declaration is made upon the request for such a declaration by the Governor and with verification of the Federal Emergency Management Agency preliminary damage assessments.
Emergency Action Levels	Benton County	1. Predetermined conditions i.e. predetermined dose rates that are used to designate a particular class of emergency, i.e. Unusual Event, Alert, Site Area Emergency or General Emergency 2. Each class of emergency requires prescribed notification by the facility to state and county officials and may require subsequent activation of prescribed emergency operating centers. See Section 4.0 for definition of each class of emergency.
Emergency Action Levels (EAL's)	Franklin County	Predetermined conditions; predetermined dose rates, that are used to designate a particular emergency classification (Unusual Event, Alert, Site Area, or General Emergency).Each classification of emergency requires prescribed notification by the facility to the state and local officials and may require subsequent activation of designated EOC's.(See Appendix 7 for the definition of each Emergency Classification level.)

Term	Reference/Source	Definition
Emergency Action Levels (EALs)	EMD	Specific abnormal indications used by the nuclear power plant to designate the emergency classification and severity of the event. Such indications include power plant instrument indicators, specific levels or radioactive releases from the power plant, and radiological dose rates.
Emergency Alert System (EAS)	NUREG 0654, App B EMD CEMP	A system of radio and television stations responsible for providing official government instructions to the public (formerly the Emergency Broadcast System). EAS wasestablished to enable the dissemination of emergency information to the public via the Commercial Broadcast System by the President and federal, state and local jurisdiction authorities. Composed of amplitude modulation (AM), frequency modulation (FM), television broadcasters, and the cable industry.
Emergency Classification Level (ECL)	NUREG 0654, App B	Classifications used by the licensee to classify incidents. The four ECLs are Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency.
Emergency Control Center (ECC)	EMD NNPP	Where emergency directions and response are coordinated for the Naval Nuclear Propulsion Program.
Emergency information	NUREG 0654, App B Benton County	Material designed to improve public knowledge or understanding of an emergency.
Emergency Instructions	NUREG 0654, App B Franklin County	Information provided to the general public during an emergency pertaining to Protective Action Recommendations for actions such as evacuation and sheltering.
Emergency Management	EMD CEMP	The preparation for and the carrying out of all emergency functions, other than functions for which military forces are primarily responsible, to mitigate, prepare for, respond to and recover from emergencies and disasters, to aid victims suffering from injury or damage resulting from disasters caused by all hazards, whether natural or technological, and to provide support for search and rescue operations for persons and property in distress.

Term	Reference/Source	Definition
Emergency Management Division (EMD)	EMD	A subdivision of the Washington State Military Department designated to preserve health and safety of the state's citizens, economic prosperity, property, and environment.
Emergency Operations Center (EOC)	NUREG 0654, App B EMD	1. A facility that is the primary base of emergency operations for an offsite response organization in a radiological emergency. 2. The physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOCs may be organized by major functional disciplines (e.g., fire, law enforcement, and medical services), by jurisdiction (e.g., federal, state, regional, tribal, city, county), or some combination thereof.
Emergency Operations Facility (EOF)	NUREG 0654, App B Benton County Franklin County EMD	A facility that is the primary base of emergency operations for the Licensee in a radiological incident. An onsite operations facility provided by the NRC Licensee to facilitate the management of an overall emergency response. Utility and state officials and a very limited number of Federal personnel may be accommodated.
Emergency Phase	NUREG 0654, App B	see "early phase."
Emergency Planning Zone	Walla Walla County	1. Columbia Generating Station specific indications, conditions, or instructions readings, which are utilized to determine emergency classifications. 2. United States Department of Energy - Richland (DOE-RL) specific, predetermined, observable criteria used to detect, recognize and determine the classification of operational emergencies identified by the hazard assessment. Emergency Action Levels (EAL) are typically identified as either event-based

Term	Reference/Source	Definition
		or symptom-based.
Emergency Planning Zone (EPZ)	NUREG 0654, App B	A geographic area surrounding a commercial nuclear power plant for which emergency planning is needed to ensure that prompt and effective actions can be taken by offsite response organizations to protect the public health and safety in the event of a radiological accident. The plume pathway EPZ is approximately 10 miles in radius, while the ingestion pathway EPZ has a radius of approximately 50 miles.
Emergency Protective Actions	NUREG 0654, App B	Protective actions to isolate food to prevent its introduction into commerce and to determine whether condemnation or other disposition is appropriate.
Emergency Support Function (ESF)	EMD	The functional approach that groups the types of assistance a state and/or local jurisdiction is most likely to need, (e.g. mass care, health and medical services) as well as the kind of federal operations support necessary to sustain state response actions (e.g., transportation, communications). ESFs are expected to support one another in carrying out their respective missions.
Emergency Work	Benton County Franklin County	That work which must be done immediately to save lives and to protect improved property and public health and safety, or to avert or lessen the threat of a major disaster.
Emergency Worker(s)	NUREG 0654, App B Health Benton County Franklin County Agriculture	1. Individual who has an essential mission to protect the health and safety of the public who could be exposed to ionizing radiation from the plume or from its deposition. Some examples of emergency workers are: radiation monitoring personnel, traffic control personnel, fire and rescue personnel, including ambulance crews; medical facilities personnel, emergency operations center personnel, personnel carrying out route alerting procedures; and essential services or utility personnel; and evacuation vehicle (e.g., bus, van, etc.) drivers. Note that evacuation vehicle drivers who will be transporting

Term	Reference/Source	Definition
		individuals or groups out of the emergency planning zone and who are not expected to return to the emergency planning zone are not considered "Emergency Workers." 2. Any person, including, but not limited to, an architect registered under chapter 18.08 RCW or a professional engineer registered under Chapter 18.43 RCW, who is registered with a local emergency management organization or the department holds an identification card issued by the local emergency management director or the department for the purpose of engaging in authorized emergency management activities or is an employee of the state of Washington or any political subdivision thereof who is called upon to perform emergency management activities.
Emergency Worker Center	EMD	A facility where emergency workers will assemble for assignments, equipment, and necessary training. The facility is also equipped to monitor and decontaminate personnel as required. (See EWAC.)
Emergency Worker/Assistance Center (EWAC)	Benton County	A location providing services for both emergency workers and the public. See definitions for emergency worker center, assistance center and shelter.
Energy Northwest (ENW)	Benton County Franklin County Agriculture	A public corporation operating the only commercial nuclear power plant in the State of Washington. The facility, Columbia Generating Station, is located on land leased from the United States Department of Energy, Hanford Site. Formerly known as Washington Nuclear Plant -2 (WNP-2), the Washington Public Power Supply System (WPPSS), or the Supply System.
Essential Emergency Functions	REP Program Manual, June 2013	Communications, direction and control of operations, alert and notification of the public, accident assessment, information for the public and media, radiological monitoring, protective response, and medical and public health support are essential emergency functions.

Term	Reference/Source	Definition
Essential Facilities	EMD	All facilities that would lose investments, such as animals or facilities that would cause an emergency if people were restricted from working there. Examples Hanford Nuclear plants, dairies, fish hatchery and utility companies.
Evacuation (Citizen Evacuation)	NUREG 0654, App B	A population protection strategy involving orderly movement of people away from an actual or potential hazard, and providing reception centers for those without their own resources for temporary relocation.
Evacuation Time Estimate (ETE)	NUREG 0654, App B	An estimate, contained in emergency plans / procedures, of the time that would be required to evacuate general persons and persons with access / functional needs within the plume pathway emergency planning zone under emergency conditions.
Exception Area	NUREG 0654, App B	An area located approximately 5 to 10 miles from a nuclear power plant and specifically designated in an offsite response organization's plans / procedures for which FEMA has granted an exception to the requirement for the capability to complete alert and notification of the public within 15 minutes. Most exception areas are recreation areas or similar low-population within the emergency planning zone. Offsite response organizations must have the capability to complete alert and notification of the public in approved exception areas within 45 minutes.
Exclusion Area (Fixed Nuclear Facility)	NUREG 0654, App BAgriculture EMD	The area surrounding a nuclear reactor in which the facility operator has the authority to determine all activities, including exclusion or removal of personnel and property from the area. A specific area off-limits (expressed in miles) from a nuclear power plant. Naval Nuclear Propulsion Program facilities a combination of the outer base boundary and the Controlled Industrial Area (CIA) form the Exclusion Area.

Term	Reference/Source	Definition
Exercise	NUREG 0654, App B Franklin County	The purpose of an exercise is to test the integrated capabilities of involved organizations to implement emergency functions set forth in offsite response organization radiological emergency plans and procedures.
Exercise Evaluation Guide	EMD HSEEP	EEGs are HSEEP documents that support the exercise evaluation process by providing evaluators with consistent standards for observation, analysis, and AAR/IP development. Each EEG is linked to a target capability and provides standard activities, performance measures, and tasks to be evaluated based on the exercise objectives.
Exercise Issue	REP Program Manual, June 2013	A problem in organizational exercise performance that is linked with specific NUREG-0654/FEMA-REP-1 Planning Standards and applicable Evaluation Criteria. There are two categories of exercise issues: Deficiencies and Areas Requiring Corrective Action.
Expedient Sheltering	EMD	Taking refuge in existing structures that are modified at the time of an accident to reduce infiltration by using common resources and materials, such as plastic bags, tape, and wet towels.
Exposure	NUREG 0654, App B	The absorption of radiation or ingestion of a radionuclide. The exposure at a REP Program Manual, Page B-12 given point is a measurement of radiation in relation to its ability to produce ionization. The unit of measurement of the exposure is the roentgen. A measure of radiation dose received by a person, usually broken down and used to refer to whole-body exposure
Exposure Rate	NUREG 0654, App B Benton County Franklin County	The amount of gamma radiation that an individual would receive in one hour as measured in air (typically expressed in units of milli-R per hour or R per hour).
Facility	NUREG 0654, App B	Any building, center, room(s), or mobile unit(s) designed and equipped to support emergency operations.
Federal Coordinating Officer (FCO)	NUREG 0654, App B	The Federal official appointed by the President upon declaration of a major disaster or emergency under Public Law

Term	Reference/Source	Definition
		93-288 to coordinate the overall Federal response.
Federal Emergency Management Agency (FEMA)	NUREG 0654, App B	The agency responsible for establishing Federal policies for and coordinating all civil defense and civil emergency planning, management, mitigation, and assistance functions of executive agencies. FEMA assists state, local, and tribal agencies in their emergency planning. Its primary role is one of coordinating Federal, state, local, tribal, and volunteer response actions.
Federal or Other Support Organizations	NUREG 0654, App B Franklin County	Federal agencies such as FEMA, the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission, or any other governmental, quasi-governmental, or private organization (American Red Cross, Civil Air Patrol, Radio Amateur Civil Emergency Services, cooperating state compact radiological monitoring or sampling personnel, and national or university laboratories) that may provide assistance during radiological emergencies.
Federal Radiological Monitoring and Assessment Center (FRMAC)	NUREG 0654, App B	A center usually located at an airport near the scene of a radiological emergency from which the Department of Energy Offsite Technical Director conducts the National Response Framework response. This center need not be located near the onsite or Federal-state operations centers as long as its operations can be coordinated with them.
Federal Radiological Monitoring and Assessment Plan (FRMAP)	NUREG 0654, App B	A former plan to provide coordinated radiological monitoring and assessment assistance to the offsite response organizations in response to radiological REP Program Manual Page B-13 emergencies. The Federal Radiological Emergency Response Plan superseded the FRMAP in 1996. The Federal Radiological Emergency Response Plan has been superseded by the National Response Framework.
FEMA-State Agreement	FEMA	This is the agreement executed by the Governor on behalf of the State and the Regional Director or his/her designee on behalf of the Federal Government, setting

Term	Reference/Source	Definition
		out the understandings, commitments and conditions for assistance under which FEMA disaster assistance shall be provided. It imposes binding obligations on FEMA, States, their local governments, and private nonprofit organizations within the States in the form of conditions for assistance which are legally enforceable.
Field Team Coordinator	NUREG 0654, App B Benton County	The individual who manages the functions of field teams and coordinates data with the dose assessment group located in emergency operation centers and facilities.
Field Team Coordinator	REP Program Manual, June 2013	The individual who manages the functions of field teams and coordinates data with the dose assessment group located in emergency operation centers and facilities.
Final Safety Analysis Report (FSAR)	Health	An extensive document produced by a nuclear facility operator which includes design, environmental, emergency and safety information about the facility.
First Federal Official (FFO)	FEMA	The first federal representative of a participating agency of the National Response Team arriving at the incident scene. The FFO coordinates activations under the National Contingency Plan.
Fixed (reproducible) geometry	REP Program Manual, June 2013	A method of measuring levels of radioactivity in samples by using a standard size or volume of samples held at a fixed distance from the measuring instrument.
Fixed contamination	REP Program Manual, June 2013	Contamination that remains after loose contamination has been removed by decontamination.
Fixed Nuclear Facility (FNF)	NUREG 0654, App B Agriculture	1. A stationary nuclear installation that stores, uses, or produces radioactive materials in its normal operations. Fixed nuclear facilities include commercial nuclear power plants and other fixed facilities. 2. In Washington it also includes facilities under the Naval Nuclear Propulsion Program.

Term	Reference/Source	Definition
Food Access Control Point (FACP)	EMD	An access control point established along the food control boundary to ensure maintenance of food control measures. FACP is synonymous with Food Control Point.
Food Control Area (FCA)	Health	A geographical area in which food control measures may be implemented. Measures are enacted due to potential or actual contamination of food products above the Washington State intervention levels. The Food Control Area includes the relocation area. Food Control Area = Food Control Isopleth + buffer
Food control Boundary (FCB)	Franklin County Agriculture	A geopolitical designation which defines and surrounds the food control area, where food control measures may be implemented. (Synonymous with Food Control Area Boundary).
Food Control Isopleth	Health	The calculated and / or projected isopleth used to determine the Food Control Area.
Food Control Measures	Health Benton County EMD	Protective Actions established to limit the exposure of the public to adulterated food. Measures may include delaying or restricting harvest and / or transport, instituting an embargo, or processing contaminated foods.
Food Control Point (FCP)	Walla Walla County Franklin County Agriculture Health	A control point established along the Food Control Boundary to ensure that food control measures are maintained. A food control point controls agricultural food products that have been potentially exposed to radiation from being taken out of the area or into the area. Synonymous with Food Access Control Point.
Fuel Fabrication Plant	Health	A plant that produces uranium oxide fuel elements for use in nuclear power reactors.
Full participation Exercise	NUREG 0654, App B 44 CFR 350.2(j)	Per 44 CFR 350.2(j), a joint exercise in which: (1) state, local, and tribal organizations, licensee emergency personnel, and other resources are engaged in sufficient numbers to verify the capability to respond to the actions required by the accident / incident scenario; (2) the integrated capability to

Term	Reference/Source	Definition
		adequately assess and respond to an accident at a commercial nuclear power plant is tested; and (3) the implementation of the observable portions of state, local, and tribal plans / procedures is tested.
Full-Scale Exercise (FSE)	NUREG 0654, App B	An exercise that engages all ORO entities in real-time hands-on response activities including all of those specified in the Demonstration Criteria extent-of-play sections. A site's qualifying exercise is full-scale, as well as at least one exercise in every 8-year cycle.
Functional Exercise (FE)	NUREG 0654, App B	An exercise that sufficiently engages organizations to test their abilities to respond to the scenario, but participation is less than full-scale. Most REP biennial joint exercises are functional exercises because they simulate some response capabilities or demonstrate them out of sequence from the scenario, and the exercise may not require participation of all offsite entities that would respond in a real radiological emergency.
Gamma Radiation	EMD	High-energy electromagnetic radiation emitted by nuclei during nuclear reactions or radioactive decay. These rays have high energy and a short wave length. Shielding against gamma radiation requires thick layers of dense materials, such as lead. Gamma rays or radiation are potentially lethal to humans, depending of the intensity of the flux.
Geiger-Mueller detector	NUREG 0654, App B Benton County Franklin County	A type of radiation detector that can be used to measure the gamma, or beta plus gamma radiation depending on whether the detector is covered by a beta shield. (CD V-700 and Ludlum Model 12 detectors are of this type.)
General Emergency (GE)	NUREG 0654, App B EMD	Licensee emergency classification level indicating that events are in process or have occurred that involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can reasonably be expected to exceed

Term	Reference/Source	Definition
		Environmental Protection Agency protective action guide exposure levels offsite for more than the immediate site area.
Geopolitical Boundary	EMD	A continuous line on a map which may utilize geographic (rivers, roads, and railroad tracks) or political (county/state border) designations. The food control and relocation boundaries are geopolitical boundaries.
Governors Authorized Representative (GAR)	CPG-101	An individual empowered by a Governor to: (1) execute all necessary documents for disaster assistance on behalf of the state, including certification of applications for public assistance; (2) represent the Governor of the impacted state in the Unified Coordination Group, when required; (3) coordinate and supervise the state disaster assistance program to include serving as its grant administrator; and (4) identify, in coordination with the State Coordinating Officer, the state's critical information needs for incorporation into a list of Essential Elements of Information.
Grant	EMD	An award of financial assistance. The grant award shall be based on the total eligible Federal share of all approved projects.
Grantee	EMD	The government to which a grant is awarded which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the award document.
Half-life	NUREG 0654, App B	The time required for the activity of a given radioactive substance to decrease to half of its initial value due to radioactive decay. The half-life is a characteristic property of each radioactive species and is independent of its amount or condition. The effective half-life of a given isotope on the body is the time in which the quantity in the body will decrease to half as a result of both radioactive decay and biological elimination. Half-lives vary from millionths of a second to billions of years.

Term	Reference/Source	Definition
Hazard Mitigation	EMD	Any cost effective measure which will reduce or eliminate the long-term risk to human life and property from a disaster event.
Hazard Mitigation Grant Program	EMD	The program authorized by section 404 of the Stafford Act, which may provide funding for certain mitigation measures identifies through the evaluation of hazards required by section 409 of the Stafford Act.
Hazard Mitigation Plan	EMD	The plan resulting from a systematic evaluation of the nature and extent of vulnerability to the effect of natural hazards present in society and includes the actions needed to minimize future vulnerability to hazards.
Hazard Mitigation Plan Update	EMD	An update to the existing Hazard Mitigation Plan, which may be accomplished by updating the status of mitigation actions within the existing plan, or by expanding the existing plan to address additional hazards or mitigation issues.
Hazard Mitigation Survey Team	EMD	The FEMA/State/Local survey team that is activated following disasters to identify immediate mitigation opportunities and issues to be addressed in the required hazard mitigation plan.
Hazardous Materials	EMD	Refers generally to hazardous substance, petroleum, natural gas, synthetic gas, acutely toxic chemicals, radiological, and other toxic chemicals.
Health Physics Technician	NUREG 0654, App B Franklin County /	An individual trained in radiation protection.
High exposure rate	NUREG 0654, App B Benton County	An exposure rate greater than 2.5 milliroentgens per hour.
High Levels of Radiation Exposure	NUREG 0654, App B Franklin County	Doses of 100 rem or greater.
Homeland Security Exercise Evaluation Program (HSEEP)	NUREG 0654, App B	A capabilities and performance-based exercise program that provides standardized policy, doctrine, and terminology for the design, development, conduct, and evaluation of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs.

Term	Reference/Source	Definition
Host / Support Jurisdiction	NUREG 0654, App B	A geographical area that is at least 5 miles, and preferably 10 miles, beyond the boundaries of the 10-mile plume pathway emergency planning zone (i.e., 15-20 miles from the commercial nuclear power plant) where functions such as congregate care, radiological monitoring, decontamination, and registration are conducted.
Host Area / Support Jurisdiction	NUREG 0654, App B	A geographical area that is at least 5 miles, and preferably 10 miles, beyond the boundaries of the 10-mile plume pathway emergency planning zone (i.e., 15-20 miles from the commercial nuclear power plant) where functions such as congregate care, radiological monitoring, decontamination, and registration are conducted.
Host Regional Office	NUREG 0654, App B Franklin County	FEMA Regional Office that has program jurisdiction for a site because of the location of a commercial nuclear power plant within its regional borders.
Implementing Procedure	NUREG 0654, App B	Instructions used by personnel that provide a detailed description, including checklists, of the operations that are to be conducted by either a specific group of individuals or a designated position. Implementing procedures are also referred to as standard operating guidelines.
Inadequate	NUREG 0654, App B	As used in reviews of radiological emergency response plans / procedures, inadequate means the plan / procedure contents do not meet the intent of a particular NUREG-0654 / FEMA-REP-1 Planning Standard and / or Evaluation Criterion.
Incident	NUREG 0654, App B	An occurrence, natural or man-made, that requires a response to protect life or property. Incidents can include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wild land and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other

Term	Reference/Source	Definition
		occurrences requiring an emergency response.
Incident Command System (ICS)	EMD CEMP	All-hazards, on-scene functional management system that establishes common standards in organization, terminology, and procedures. ICS provides a means (unified command) for the establishment of a common set of incident objectives and strategies during multi-agency / multi-jurisdiction operations while maintaining individual agency / jurisdiction authority, responsibility and accountability. ICS is a component of the National Interagency Incident Management Systems (NIMS).
Incident period	FEMA	The time interval during which the disaster-causing incident occurs. No Federal assistance under the Stafford Act shall be approved unless the damage or hardship to be alleviated resulted from the disaster-causing incident which took place or was in anticipation of that incident. The incident period will be established by FEMA in the FEMA-State Agreement and published in the Federal Register.
Ingestion Exposure Pathway Emergency Planning Zone (EPZ)	NUREG 0654, App B	A geographic area, approximately 50 miles in radius surrounding a commercial nuclear power plant, in which it has been estimated that the health and safety of the general public could be adversely affected through the ingestion of water or food which has been contaminated through exposure to radiation primarily from the deposition of radioisotopes after a radiological accident. The duration of such exposures could range in length from hours to months.
Ingestion Pathway Exercise	NUREG 0654, App B	An exercise involving ingestion exposure pathway protective action decision-making and implementation. A state fully participates in the ingestion pathway portion of exercises at least once every 8 years. In states with more than one site, the state rotates this participation from site to site.

Term	Reference/Source	Definition
Ingestion Phase	NUREG 0654, App B	See Intermediate Phase
In-Place Sheltering	EMD	primarily from the deposition of radioisotopes
Institutionalized individuals	NUREG 0654, App B Franklin County	Individuals who reside in institutions, such as nursing homes or correctional facilities, who may need to depend on others for assistance with protective actions. Institutionalized individuals may or may not have disabilities and access/functional needs.
Intermediate Phase	NUREG 0654, App B	The period beginning after the utility has verified that the release has been terminated. Reliable environmental measurements are available for use as a basis for decisions on additional protective actions. It extends until these additional protective actions are terminated. This phase may overlap the late phase and may last from weeks to many months. The intermediate phase encompasses REP post plume activities associated with both ingestion and relocation.
Ionizing Radiation	NUREG 0654, App B Agriculture Health	Any radiation that displaces electrons from atoms or molecules, thereby producing icons. Alpha, beta and gamma radiation are examples. Ionizing radiation may damage skin and tissue.
Isodose line	Agriculture	A geographic designation which defines locations where the radiation doses (or dose rates) are constant. There are typically many isodose lines on a map when characterizing radioactive contamination. This is similar in form to a topographic map designation, which shows increments of elevation.
Isotope	NUREG 0654, App B	Nuclides having the same number of protons in their nuclei and the same atomic number, but differing in the number of neutrons and atomic mass number. Some isotopes of a particular element may be radioactive while the others are not.
Joint Field Office (JFO)	CPG 101	The primary Federal incident management field structure. The Joint Field Office is a temporary Federal

Term	Reference/Source	Definition
		facility that provides a central location for the coordination of Federal, state, territorial, tribal, and local governments and private sector and nongovernmental organizations with primary responsibility for response and recovery. The Joint Field Office structure is organized, staffed, and managed in a manner consistent with National Incident Management System principles and is led by the Unified Coordination Group. Although the Joint Field Office uses an Incident Command System structure, the Joint Field Office does not manage on-scene operations. Instead, the Joint Field Office focuses on providing support to on-scene efforts and conducting broader support operations that may extend beyond the incident site.
Joint Information Center (JIC)	NUREG 0654, App B	A central point of contact for all news media at the scene of the incident. News media representatives are kept informed of activities and events via public information officials from all participating Federal, state, and local agencies, which, ideally, are co-located at the JIC.
Joint Information System (JIS)	NUREG 0654, App B	a structure that integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, accurate, accessible, timely, and complete information during a crisis or incident operations. The mission of the joint information system is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans/procedures and strategies on behalf of the Incident Commander; advising the incident command concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Term	Reference/Source	Definition
Key Staff	NUREG 0654, App B Franklin County	Those emergency personnel, sufficient in numbers and functions, necessary to carry out emergency operations as required by scenario events and as set forth in the plans / procedures.
KI (Potassium Iodide)	NUREG 0654, App B Benton County	See Potassium Iodine.
Late Phase	NUREG 0654, App B	The period beginning when recovery action designed to reduce radiation levels in the environment to acceptable levels for unrestricted use are commenced, and ending when all recovery actions have been completed. This period may extend from months to years. REP post-plume activities associated with return and recovery occur during the late phase.
Licensee Offsite Response Organization (Licensee ORO)	REP Course Manual Benton County Franklin County	The Licensee's offsite emergency response organization comprised of Licensee, State and Local government, volunteer and other support personnel required to implement the Licensees ORO plan. Such an organizational entity is typically employed for situations where State and Local governments do NOT participate in the Radiological Emergency Preparedness Planning program.
Local Emergency Planning Committee (LEPC)	EMD CEMP	The planning body designated by the Superfund Amendments and Reauthorization Act, Title III legislation as the planning body for preparing local hazardous materials plans.
Local Hazard Mitigation Officer	EMD	The representative of local government who serves on the Hazard Mitigation Survey Team or Interagency Hazard Mitigation Team and who is the primary point of contact with FEMA, other Federal agencies, and the State in the planning and implementation of post-disaster hazard mitigation activities.
Logistics Section	NUREG 0654, App B	As applied to an exercise planning team organized according to Incident Command System principles, the team members providing the supplies, materials, facilities, and services that enable the exercise to function smoothly without outside interference or

Term	Reference/Source	Definition
		disruption. This group consists of two subsections: service and support. The service section provides transportation, barricading, signage, food and drinks, real-life medical capability, and exercise-site perimeter security. The support section provides communications, purchasing, general supplies, very important personnel (VIP) / observer processing, and recruitment / management of actors.
Low exposure rate	Health	Exposure rates less than 100 milliroentgens per hour.
Major Disaster	NUREG 0654, App B	As defined in 44 Code of Federal Regulations, Section 206.2(17), is any natural catastrophe (including hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm or drought) or, regardless of cause, and fire, flood or explosion in any part of the United States which, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act to supplement the efforts and available resources of states, local governments and disaster relief organizations in alleviating the damage, loss, hardship or suffering caused thereby.
Marine Safety Zone (MSZ)	EMD CSEPP	That stretch of the Columbia River from Juniper Canyon (River Mile 305) on the east, down river to the west end of Crow Butte State Park (River Mile 262).
Material Safety Data Sheet (MSDS)	EMD	Compilation of information on a specific chemical compound including chemical name, manufacturer, physical data, and health hazard.
Maximally Exposed Individual	NUREG 0654, App B Franklin County	A hypothetical individual who receives the greatest possible projected dose in the area of highest radiation levels over a specified period of time.
Measured Dose Line	Health	An isodose rate line which is compiled by field results and indicate a dose rate, which is readily measured. An example

Term	Reference/Source	Definition
		of a measured dose line is the 500mr/hr line, which is used to define the restricted area within the relocation boundary.
Measuring	NUREG 0654, App B Benton County	Refers to counting to detect radiation levels or determining other parameters, such as the energy of radiation or physical characteristics of samples, such as the volume of an air sample.
Media Center	NUREG 0654, App B Franklin County	A facility staffed by public information officers from multiple emergency response organizations for the purpose of providing a single designated point of contact with the news media and to facilitate exchange and coordination of information among public information officers from different organizations. This type of facility is also referred to as a Public Information Center, a Joint Information Center, a Public Affairs Center, or an Emergency News Center.
Meteorological Unified Dose Assessment Center (MUDAC)	NUREG 0654, App B EMD Benton County Agriculture	An area within or near the facility which houses the personnel responsible for the coordination of radiological monitoring teams, collection of radiological monitoring data, calculation of dose projections and the recommendation of protective actions for the emergency planning zones. The MUDAC for Energy Northwest is located at the EOF. Also see dose assessment center (DAC) and Unified Dose Assessment Center (UDAC).
Microcurie	NUREG 0654, App B Franklin County	One millionth of a Curie (Ci).
Mitigating Actions	EMD	Those emergency measures taken to lessen or terminate an emergency situation in order to prevent an uncontrolled release of radioactive material or to reduce the magnitude of a release (e.g., shutting down equipment, fire fighting, repair, and damage control).
Mitigation Measure	EMD	Any project or action proposed to reduce risk of future damage, hardship, loss or suffering from disasters.
Mobilized Organization	NUREG 0654, App B Franklin County	An organization that has completed the activation process and is able to carry out

Term	Reference/Source	Definition
		the essential emergency functions, as required by scenario events and as set forth in emergency response plans / procedures.
Monitoring	NUREG 0654, App B Franklin County	The act of detecting the presence of radiation and the measurement of radiation levels, usually with a portable survey instrument.
Monitoring and decontamination facility	NUREG 0654, App B Benton County	A temporary facility established outside the plume emergency planning zone for the purpose of monitoring and decontaminating emergency workers and their vehicles and equipment used in the plume and / or areas contaminated by the plume.
National Atmospheric Release Advisory Center (NARAC)	NUREG 0654, App B	A Department of Energy asset capable of providing a computer-generated model of the most probable path of the radioactive contamination released at a radiological accident site.
National Contingency Plan (NCP)	FEMA	"The National Oil and Hazardous Substances Pollution Contingency Plan" (40 CFR Part 300) prepared by the Environmental Protection Agency to put into effect the response powers and responsibilities created by the Comprehensive Environmental Response, Compensation and Liability Act, and the authorities established by Section 311 of the Clean Water Act.
National Defense Area (NDA)	NNPP	An area established on non-federal lands located within the United States, its possessions, or territories for the purpose of safeguarding classified defense information or protecting Department of Defense equipment and/or material. A national defense area may be established around the site of an accident involving military weapons or equipment by the Department of Defense to protect national security.
National Incident Management System (NIMS)	NUREG 0654, App B	A set of principles that provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and

Term	Reference/Source	Definition
		mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment. *Mandated by HSPD-5*
National Response Framework (NRF)	EMD	The plan, which establishes the basis for the provision of federal assistance to a state and the local jurisdiction, impacted by a catastrophic or significant emergency or disaster which results in a requirement for federal response assistance.
National Response Team	Agriculture	The group consisting of representatives of 14 government agencies. The National Response Team agencies include the Department of Defense, Department of Interior, Department of Transportation/Research and Special Programs Administration, Department of Transportation/U.S. Coast Guard, Environmental Protection Agency, Department of Commerce, Federal Emergency Management Agency, Department of State, Department of Agriculture, Department of Justice, Department of Health and Human Services, Department of Labor, Nuclear Regulatory Commission, and Department of Energy.
Naval Base Kitsap-Bangor	EMD NNPP	A 7450-Acre nuclear Submarine Base on the eastside of Hood Canal near Bangor, Washington. Trident submarines and one fast attack submarine are home ported at Naval Base Kitsap Bangor. Emergency preparedness and response for all nuclear submarines at Bangor are the responsibility of the Submarine Group Nine.
Naval Nuclear Propulsion Program (NNPP)	EMD NNPP	A joint program of the US Department of Energy / National Nuclear Security Administration and US Navy. All naval nuclear propulsion work and operations at nuclear capable public and private shipyards, naval nuclear ships / tenders, submarine bases and nuclear homeport naval stations are under the radiological regulatory authority of the Naval Nuclear Propulsion Program.

Term	Reference/Source	Definition
Naval Station Everett	EMD NNPP	A 120-acre naval station in Everett, Washington on Port Gardner Harbor. One nuclear vessel, an aircraft carrier, is homeport at Naval Station Everett. PSNS is responsible for emergency preparedness and response.
Noble Gases	NUREG 0654, App B Franklin County	The chemically inert radioactive gasses that are released during an accident at a nuclear power plant.
Non-Participating Organizations	NUREG 0654, App B	Offsite response organizations that are not participating in emergency planning and preparedness for incidents at a commercial nuclear power plant.
Notice of Interest (NOI)	FEMA	A document (FEMA Form 90-49) which must be completed by each entity seeking Federal Public Assistance and submitted to the FEMA Regional Director through the State within 30 Days of the Presidential designation of an emergency or disaster area in order to request or receive Federal assistance.
Notification and Mobilization of Personnel	NUREG 0654, App B	The transmission of messages to emergency personnel informing them of an incident and directing them to report for emergency duty at their assigned duty stations.
Notifying the Public	NUREG 0654, App B Franklin County	Distributing an instructional message to the public, either through the Emergency Alert System (EAS) or some other system.
Nuclear Regulatory Commission (NRC)	FEMA	The federal agency that regulates and licenses commercial nuclear facilities.
Nuclear/Radiological Incident Annex	FEMA	The plan which describes the Federal response to the radiological and onsite technical aspects of an emergency in the United States and identifies the lead federal agency for an event. The events include one involving the Nuclear Regulatory Commission or state licensee, the Department of Energy or Department of Defense property, a space launch, occurrence outside the United States, but not affecting the United States, and one involving radium or accelerated-produced material. Transportation events are included in those involving the Nuclear Regulatory Commission, state licensee,

Term	Reference/Source	Definition
		Department of Energy, or Department of Defense.
NUREG 0654 / FEMA-REP-1	EMD	Criteria for preparation and evaluation of radiological emergency response plans and preparedness in support of nuclear power plants.
Off-hours	Benton County Franklin County REP course manual	The hours between 6:00 p.m. and 4:00 a.m. or any weekend hours.
Offsite response organization (ORO)	NUREG 0654, App B Benton County	Any state, local, and tribal government; supporting private industry and voluntary organizations; and Licensee offsite response organizations (that are formed when state, local, and tribal governments fail to participate in the REP Program) that are responsible for carrying out emergency functions during a radiological emergency.
On-Scene Coordinator (OSC)	EMD Agriculture	The federal official predesignated by the Environmental Protection Agency or the Coast Guard to coordinate and direct federal responses and removals under the National Contingency Plan, or the Department of Defense official designated to coordinate and direct the removal actions from releases of hazardous substances, pollutants or contaminants from the Department of Defense vessels and facilities. For Department of the Army facilities, the Initial Response Force and the Service Response Force Commander is the On-Scene Coordinator.
Onsite Personnel	NUREG 0654, App B Franklin County	Licensee or contract personnel working at commercial nuclear power plants.
Operationally mobilized organization	NUREG 0654, App B	An organization that has completed the activation process required by events and their emergency response plans / procedures. Operational mobilization is achieved when all key personnel are at their duty stations.
Operations Section	NUREG 0654, App B	As applied to an exercise planning team organized according to Incident Command System principles, the team member providing most of the technical or functional expertise for the participating entities. This group

Term	Reference/Source	Definition
		develops scenarios, selects evaluation tools, and has personnel with the expertise necessary to serve as evaluators.
PAG ratio	Agriculture	The ratio of the measured sample isotopic concentration to the corresponding derived intervention level. A PAG value of 1.0 or greater indicates that protective actions should be taken to prevent or reduce radiation exposure to the public.
Partial participation exercise	NUREG 0654, App B 44 CFR 350.2(k)	As set forth in 44 CFR 350.2(k), the engagement of state, local, and tribal personnel in an exercise sufficient to adequately test direction and control functions for protective action decision-making related to the emergency action levels and communication capabilities among affected offsite response organizations and the licensee.
Permanent work	EMD	Restorative work that must be performed through repairs or replacement, to restore an eligible facility on the basis of its pre-disaster design and current applicable standards.
Personnel Monitoring	Health	The determination of the degree of radioactive contamination on individuals using survey meters, or the determination of radiation dosage received by means of dosimetry devices.
Persons with disabilities and access/functional needs	NUREG 0654, App B	Individual(s) within a community that may have additional needs before, during, and after an incident in one or more of the following functional areas: maintaining independence, communication, transportation, supervision, and medical care. Individual(s) in need of additional response assistance may include those who have disabilities (sensory, motor skills, mental / emotional); who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited or no English-speaking proficiency; or who are transportation disadvantaged.
Phase	EMD	A time frame reference for an RDD incident. There are three phases over the course of an accident; early, intermediate, and late. See Early Phase, Intermediate Phase, Late Phase.

Term	Reference/Source	Definition
Plan	EMD	An organizations documented concept of operations and implementing procedures for managing its internal response and coordinating its external response with other organizations to radiological emergencies.
Plan Issue	NUREG 0654, App B	Issue: an identified inadequacy in the organization's emergency plan / procedures, rather than in the organization's performance. Plan Issues are required to be corrected through the revision of the appropriate plans / procedures during the next annual plan review and update, submitted for FEMA review, and reported in the state's Annual Letter of Certification.
Planning Area	NUREG 0654, App B	A pre-designated geographic subdivision of the plume exposure pathway EPZ. In some plans / procedures, it may be referred to as an Emergency Response Planning Area or an equivalent term.
Planning Section	NUREG 0654, App B	As applied to an exercise planning team organized according to Incident Command System principles, the team members responsible for compiling and developing all exercise documentation. To accomplish this effectively, the Planning Section also collects and reviews policies, plans, and procedures that will be validated during the exercise. During the exercise, the Planning Section may be responsible for developing simulated actions by agencies not participating in the exercise and setting up a Simulation Cell for exercises that necessitate one (such as Functional Exercises).
Plume	NUREG 0654, App B	Generally a gaseous atmospheric release from a nuclear power plant, in an accident or emergency, which may contain radioactive noble gases and volatile solids. While emergency plans / procedures must recognize the very low probability that particulates could be released in a serious accident, primary emphasis is given to the development of protective actions against the release of noble gases and volatiles such as

Term	Reference/Source	Definition
		radioiodines. This cloud is not visible to the eye, but can be measured, or "seen" with radiation measurement equipment.
Plume Dose Projections	NUREG 0654, App B Franklin County	Estimates of dosage to the public from exposure to the plume, over a period of time, in the absence of any protective actions.
Plume Exposure Pathway	NUREG 0654, App B	Pathway: (1) For planning purposes, the area within approximately a 10-mile radius of a commercial nuclear power plant site. (2) A term describing the means by which whole body radiation exposures occur as a result of immersion in a plume release. The area in which plume exposures are likely is described in NUREG-0396 as an area extending out approximately 10 miles from the reactor site and keyhole oriented downwind. In the plume emergency planning zone, actions may be required to protect the public from the effects of whole-body external exposure to gamma radiation from the plume and from deposited materials and inhalation exposure from the passing radioactive plume's released materials. The duration of exposure in this mode could range from hours to days in the case of particulate deposition.
Plume Exposure Pathway Planning Zone	NUREG 0654, App B	A geographic area approximately 10 miles in radius surrounding a commercial nuclear power plant within which the health and safety of the general public could be adversely affected by direct whole body external exposure to gamma radiation from deposited materials as well as inhalation exposure from the passing radioactive plume during a radiological accident. The duration of such exposures could range in length from hours to days.
Plume Phase	NUREG 0654, App B	See Early Phase
Portal monitor	NUREG 0654, App B	A radiation monitor consisting of several radiation detectors arranged in a fixed position within a frame that forms a passageway for individuals being

Term	Reference/Source	Definition
		monitored.
Potassium Iodide (KI)	NUREG 0654, App B EMD	A prophylactic compound commonly referred to as a radioprotective drug containing a stable (i.e., non-radioactive) form of iodide that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.
Potential Dose	NUREG 0654, App B Franklin County	The radiation dose that could result from a particular set of plant conditions, not based on estimated or measured releases or environmental levels.
Precautionary Protective Actions	NUREG 0654, App B	Any preventive or emergency protective actions implemented without the verification of radionuclide measurements by field monitoring or laboratory analysis.
Pre-Disaster Design	EMD	The size or capacity of a facility as originally designed and constructed or subsequently modified by changes to the original design. It does not mean the capacity at which the facility was being used at the time the major disaster occurred if different from the most recent designed capacity.
Pre-Operational Exercise	NUREG 0654, App B Benton County Franklin County	An exercise conducted prior to the issuance of a full-power license to a commercial nuclear power plant licensed by the Nuclear Regulatory Commission (NRC).
Pressurized Water Reactor (PWR)	NUREG 0654, App B	A power reactor in which heat is transferred from the core to the heat exchanger by water kept under high pressure. The primary system is pressurized to allow the water to reach high temperatures without boiling. Steam is generated in a secondary circuit.
Preventive Protective Actions	NUREG 0654, App B Benton County Franklin County	Protective actions to prevent or reduce contamination of milk, food, and drinking water such as covering water sources and providing dairy cows with stored feed. Preventive protective actions also include washing, brushing, scrubbing, or peeling fruits and vegetables to remove surface contamination.

Term	Reference/Source	Definition
Principal Federal Officer (PFO)	NUREG 0654, App B	Pursuant to the Homeland Security Act of 2002 and HSPD-5, the Secretary of Homeland Security is the principal Federal official for all domestic incidents requiring multiagency Federal response. The Secretary may elect to designate a single individual to serve as his or her primary representative to ensure consistency of Federal support as well as the overall effectiveness of the Federal incident management. When appointed, such an individual serves in the field as the Principal Federal Official for the incident.
Principal responder	NUREG 0654 1.A.1	Principal responders have lead roles in emergency planning, preparedness, and response, such as emergency management, fire/HAZMAT, law enforcement, and nuclear facilities. Also referred to as principal off-site response organization (ORO).
Private nonprofit organization	EMD	Any non-governmental agency or entity that currently has (1) An effective ruling letter from the US Internal Revenue Service granting tax exemption under section 501(c), (d), or (e) of the Internal Revenue Code of 1954; or (2) Satisfactory evidence from the State that the organization or entity is a nonprofit one organized or doing business under State law.
Project	FEMA	All work performed at a single site whether or not described on a single Damage Survey Report.
Project Approval	FEMA	The process by which the FEMA Regional Director signs an approval of work and costs on a Damage Survey Report or group of Damage Survey Reports. Such an approval is also an obligation of funds to the grantee.
Projected dose	NUREG 0654, App B Benton County	The estimated or calculated amount of radiation dose to an individual from exposure to the plume and / or deposited materials, over a period of time, in the absence of protective action.
Projected dose / equivalent	Agriculture EMD Health	An estimate of the radiation dose equivalent which affected population groups could potentially receive if

Term	Reference/Source	Definition
		protective actions are not taken.
Protective Action	EMD Agriculture Health	An action or policy that is designed to protect human health and safety. Protective actions are often described based on a certain Protective Action Guide and circumstances.
Protective Action Decision (PAD)	NUREG 0654, App B Agriculture	Measures taken in anticipation of, or in response to, a release of radioactive material to the environment. The purpose of PADs is to provide dose savings by avoiding or minimizing the radiation exposure received by individuals, thereby minimizing the health risks resulting from radiation exposure. Sheltering and evacuation are the two PADs relied upon for limiting the direct exposure of the general public within the plume exposure emergency planning zone. Preventive and emergency PADs are two categories of PADs relied upon for limiting exposure from contaminated food and water in the ingestion exposure emergency planning zone.
Protective Action Guide (PAG)	NUREG 0654, App B Benton County	Projected dose to an individual in the general population that warrants the implementation of protective action. The Food and Drug Administration and Environmental Protection Agency have recommended specific protective action guides in terms of the level of projected dose that warrants the implementation of evacuation and sheltering, relocation, and limiting the use of contaminated food, water, or animal feed.
Protective Action Guide Ratio	Health	The ratio of the measured sample isotopic concentration to the corresponding derived intervention level. A PAG value of 1.0 or
Protective Action Recommendations (PAR)	NUREG 0654, App B	Advice to the state/locals on emergency measures it should consider in determining action for the public to take to avoid or reduce their exposure to radiation.
Public Alert and Notification System	EMD	The system for obtaining the attention of the public and providing appropriate emergency information. Sirens are the

Term	Reference/Source	Definition
		most commonly used outdoor public alert devices but frequently are supplemented by tone alert radios, visual warning devices for the hearing impaired, and telephone based warning systems.
Public Assistance	EMD	Supplementary Federal assistance provided under the Stafford Act to State and local governments or certain private, nonprofit organizations other than assistance for the direct benefit of individuals and families.
Public Facility	EMD	Any of the following types of facilities owned by a State or local government any flood control, navigation, irrigation, reclamation, public power, sewage treatment and collection, water supply and distribution, watershed development, or airport facility; any non-Federal aid street, road, or highway; and any other public building, structure, or system, including those used for educational, recreational, or cultural purposes; or any park.
Public Information Officer	EMD	Public Information Officers are the communications coordinators or spokespersons of certain governmental organizations (i.e. city, county, school district, state government and police / fire departments). The primary responsibility of a PIO is to provide information to the media and public as required by law and according to the standards of their profession
Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS&IMF) Naval Base Bremerton	EMD NNPP	A 353-acre shipyard performing repair, overhaul, testing and decommissioning of nuclear vessels in Sinclair Inlet adjacent to Bremerton, Washington. A nuclear aircraft carrier is home ported at Naval Base Kitsap-Bremerton that is collocated with the shipyard. Emergency preparedness and response of all nuclear ships at the shipyard and Naval Base Kitsap-Bremerton are the responsibility of the Shipyard Commander.
Radiation Absorbed Dose (RAD)	Health REP Program Manual	Acronym for radiation absorbed dose. This is the basic scientific unit of absorbed dose of radiation. A dose of 1 rad means the absorption of 100 ergs (a

Term	Reference/Source	Definition
		small amount of energy) per gram of absorbing material.
Radiation Safety Officer (RSO)	NUREG 0654, App B Franklin County	A Health Physicist or other individual experienced in radiation protection who advises medical facility staff regarding the hazards associated with high levels of radiation.
Radiological Assistance Program (RAP)	NUREG 0654, App B	A team dispatched to the site of a radiological incident by the Department of Energy Regional Office responding to the incident.
Radiological Dispersal Device (RDD)	EMD	Any device that causes the purposeful dissemination of radioactive material, across an area with the intent to cause harm, without a nuclear detonation occurring.
Radiological Emergency Preparedness Program (REP)	NUREG 0654, App B	The FEMA program that administers emergency preparedness for all commercial nuclear sites.
Radionuclide	NUREG 0654, App B Franklin County	A radioactive isotope of a particular element.
Radiological Emergency Area	NUREG 0654, App B	An area established either on an ad hoc basis or pre-identified in a medical facility for monitoring, decontamination, and treatment of contaminated injured individuals, and for contamination control.
Reasonable Assurance	NUREG 0654, App B	A determination that state, local, tribal, and utility offsite plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial nuclear power plants.
Reception / Relocation Center	NUREG 0654, App B	A pre-designated facility located outside the plume exposure pathway emergency planning zone (at a minimum 15 miles from the nuclear power plant) at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A

Term	Reference/Source	Definition
		reception / relocation center is also referred to as a registration center or public registration and decontamination center.
Recovery	NUREG 0654, App B Franklin County	The process of reducing radiation exposure rates and concentrations of radioactive material in the environment to acceptable levels for return by the general public for unconditional occupancy or use after the emergency phase of a radiological emergency.
Recovery and Restoration	EMD Health	The late phase protective activities taken to address the long-term concerns in the affected area(s) and among its residents. These concerns include economic, social, psychological, physiological, and environmental impacts, as well as control of contaminated food, and a continuing public information effort.
Recovery Worker	NUREG 0654, App B Franklin County	An individual who is permitted to enter the restricted zone under controlled conditions to perform work or to retrieve valuable property.
Reentry	NUREG 0654, App B	The provisions for the return of the public after evacuation, when the radiation risk has been reduced to acceptable levels.
Re-entry	Health	Temporary movement into a restricted or relocation area under controlled conditions.
Regional Director (RD)	FEMA	A Director of a regional office of FEMA, or his/her designated representative. As used in these regulations, Regional Director also means Disaster Recovery Manager who has been appointed to exercise the authority of the Regional Director for a particular emergency or major disaster.
Regional Response Force (RRF)	NUREG 0654, App B	A force identified in the Nuclear Accident Response Capabilities Listing (at the Joint Nuclear Accident Coordinating Center) belonging to Department of Defense or Department of Energy installations, facilities, or activities within the US and its territories. The Regional Response Force may be tasked with taking emergency response actions necessary to maintain command and control onsite pending arrival of the

Term	Reference/Source	Definition
		Service or Agency Response Force. Functions with which the Regional Response Force may be tasked, within its capabilities, are: (1) rescue operations; (2) accident site security; (3) firefighting; (4) initial weapon emergency staffing; (5) radiation monitoring; (6) establishing command, control and communications; and (7) public affairs activities.
Regional Response Force (RRF)	REP Program Manual, June 2013	Force identified in the Nuclear Accident Response Capabilities Listing (at the Joint Nuclear Accident Coordinating Center) belonging to Department of Defense or Department of Energy installations, facilities, or activities within the US and its territories. The Regional Response Force may be tasked with taking emergency response actions necessary to maintain command and control onsite pending arrival of the Service or Agency Response Force. Functions with which the Regional Response Force may be tasked, within its capabilities, are: (1) rescue operations; (2) accident site security; (3) firefighting; (4) initial weapon emergency safing; (5) radiation monitoring; (6) establishing command, control and communications; and (7) public affairs activities.
Regional Response Team (RRT)	Agriculture	The representatives of federal agencies and a representative from each state in the federal region. During a response to a major hazardous materials incident involving transportation or a fixed facility, the on-scene coordinator may request that the RRT be convened to provide advice or recommendations on specific issues requiring resolution.
Relocation	NUREG 0654, App B Health	The removal or continued exclusion of people (households) from contaminated areas to avoid chronic radiation exposure.
Relocation area	Agriculture	The geographic area in which relocation has been determined to be necessary. This area is defined by geopolitical designations that surround an area of

Term	Reference/Source	Definition
		potential exposure with long-term health and safety impacts to the general public.
Relocation Area	Benton County	The geographic area described by geopolitical boundary designations in which relocation has been determined to be necessary.
Relocation Area	Health	A geographical area where ground deposition levels would expose populations greater than 2 rem TEDE during the first year following the accident or greater than 0.5 rem TEDE during the second year. Access to the Relocation Area is controlled. Residents or employees not previously evacuated from these areas are relocated if their calculated dose will exceed these guidelines. • Relocation Area = Relocation Isopleth + buffer
Relocation Boundary	Walla Walla County	The border of the Relocation Area, which is defined by geopolitical designations that surround an area of potential exposure to the public.
Relocation Control Points	Health	Road intersections or other logistically viable points on the Relocation Boundary which enable law enforcement and other emergency workers to maintain access control of the Relocation Area.
Relocation Isopleth	Health	The isodose line used to determine the relocation area.
Roentgen Equivalent in Man (REM)	Agriculture	The unit of exposure expressed as dose equivalent. (The dose in rem is equal to the absorbed dose times a quality factor. The quality factor takes into consideration the linear energy transfer of each type of radiation due to it's size, charge, spin, influence, and so forth.)
Roentgen Equivalent in Man (REM)	Health Benton County	Acronym of Roentgen Equivalent in Man. The unit for dose equivalent of ionizing radiation that equates the biological damage to human tissue (biological effect) caused by any type of ionizing radiation (i.e., alpha, beta, gamma, etc.) A rem of alpha radiation is equal to a rem of gamma or beta radiation. (A rem = a rad x a quality factor).

Term	Reference/Source	Definition
Rem (also see roentgen equivalent in man/mammal	NUREG 0654, App B	The unit of dose of any ionizing radiation that produces the same biological effect as a unit of absorbed dose of ordinary x-rays. A unit of dose for measuring the amount of ionizing radiation energy absorbed in biological tissue.
Responsible offsite response organization (responsible ORO)	NUREG 0654, App B Benton County	An organization designated in emergency response plans / procedures as that organization's responsible for a specific emergency function.
Responsible school official	NUREG 0654, App B Benton County	The school official participating in an exercise or drill, who is responsible for implementing school emergency procedures according to the plan.
Restricted Area or Zone	Walla Walla County Health	Any area to which access is controlled for the protection of individuals from exposures to radiation and hazardous materials. The state of Washington recommends protection actions (i.e. relocation) in areas where members of the public could receive two REM over the first year by residing in the area. In contrast, state WAC 246-221-010 sets the occupational workers exposure limits in restricted areas at 5 REM/year, or 1.25 REM per calendar year.
Restricted zone	NUREG 0654, App B Benton County	An area of controlled access from which the population has been evacuated, relocated or sheltered-in-place.
Return	EMD	The intermediate phase action to allow evacuees to return to their homes as quickly as possible in areas that were clearly not affected. Several return protective action decisions may be made, and are described as Initial Return, Second Return, and others.
Return	NUREG 0654, App B Health Benton County	Reoccupation of areas cleared for unrestricted residence or use by previously evacuated or relocated populations.
Revised Code of Washington (RCW)	RCW	The Revised Code of Washington (RCW) is the compilation of all permanent laws now in force. It is a collection of Session Laws (enacted by the Legislature, and signed by the Governor, or enacted via the initiative process), arranged by topic, with amendments added and repealed laws removed. It does not include

Term	Reference/Source	Definition
		temporary laws such as appropriations acts.
Roentgen (R)	Health Benton County	A unit of exposure to ionizing radiation. It is that amount of gamma- or x-rays required to produce ions carrying 1 electrostatic unit of electrical charge in 1 cubic centimeter of dry air under standard conditions.
Roentgen (r)	NUREG 0654, App B	A unit of exposure of gamma (or X-ray) radiation in field dosimetry. One roentgen is essentially equal to one rad (see "rad"). A unit for measuring the amount of radiation energy imparted to a volume of air. The roentgen can be used only to measure X-rays or gamma rays.
roentgen equivalent in man/mammal (rem)	NUREG 0654, App B	One rem is the quantity of ionizing radiation of any type which, when absorbed by man or other mammals, produces a physiological effect equivalent to that produced by the absorption of 1 roentgen of X-ray or gamma radiation.
Rumors	NUREG 0654, App B Benton	Information circulated by individuals and organizations during an emergency that may or may not be true. (Usually, rumors originate and are spread on an ad hoc, not official basis.)
Sampling	NUREG 0654, App B Franklin County	Collecting specimens of materials (e.g., particles or radioiodine in the air, animal feed, vegetation, water, soil, or milk) at field locations.
Schools	NUREG 0654, App B Benton County	In the context of the REP Program, the term "schools" refers to public and private schools, and licensed or government supported pre-schools and daycare centers. Primarily intended to refer to public schools. However, because of the interest of private schools, kindergartens, and day care centers in participating in Radiological Emergency Preparedness exercises, this term may be expanded to include these groups
Section 409 Hazard Mitigation Plan	EMD	The hazard mitigation plan required under section 409 of the Stafford Act as a condition of receiving Federal Disaster

Term	Reference/Source	Definition
		Assistance. This plan is the basis for the identification of measures to be funded under the Hazard Mitigation grant Program.
Senior Federal Official (SFO)	Agriculture	An individual representing a Federal department or agency with primary statutory authority responsibility for incident management.
Senior FEMA Official (SFO)	NUREG 0654, App B	Official appointed by the director of FEMA, or his representative, to direct the FEMA response at the scene of a radiological emergency.
Service Animal	NUREG 0654, App B	Any guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability including, but not limited to, guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items.
Shall	NUREG 0654, App B	Language in the REP Program Manual quoted directly from regulatory material uses both shall and should to denote requirements. The remaining text in the REP Program Manual uses the terms shall, must, and require to denote mandatory items originating in regulatory material including NUREG-0654 / FEMA-REP-1 and the Code of Federal Regulations. The terms should, suggest and recommend denote guidance outlining a Federally-approved means of meeting the intent of the REP regulations. If an offsite response organization wishes to employ an alternative approach or method for meeting the intent of the regulations, they may do so according to the information in Part I.D.3 of the REP Program Manual. The term may denotes an option, neither requirement nor recommendation.
Shelter	Benton County Franklin County	Staffed by the American Red Cross (ARC). Established to provide evacuees with food, lodging, first aid and other services. Can be co-located with an EWAC. Evacuees must stop at the Assistance Center to be referred to a

Term	Reference/Source	Definition
		shelter.
Sheltering	Agriculture	A protective action that involves taking cover in a building that can be made relatively airtight. Generally, any building suitable for winter habitation will provide some protection when the windows and doors are closed and the heating, ventilation, and air conditioning systems are turned off. Effectiveness can be increased by methods such as using an interior room or basement, taping doors and windows, and employing other systems to limit natural ventilation.
Sheltering	Health	The use of a structure for radiation protection from an airborne plume and/or deposited radioactive material.
Shelter-In-Place	NUREG 0654, App B	A protective action that includes going indoors, listening to an Emergency Alert System radio or television station, closing all windows and doors, closing exterior vents, and turning off heating and air conditioning equipment using outside air.
Should	NUREG 0654, App B	Language in the REP Program Manual quoted directly from regulatory material uses both shall and should to denote requirements. The remaining text in the REP Program Manual uses the terms shall, must, and require to denote mandatory items originating in regulatory material including NUREG-0654 / FEMA-REP-1 and the Code of Federal Regulations. The terms should, suggest and recommend denote guidance outlining a Federally-approved means of meeting the intent of the REP regulations. If an offsite response organization wishes to employ an alternative approach or method for meeting the intent of the regulations, they may do so according to the information in Part I.D.3 of the REP Program Manual. The term may denotes an option, neither requirement nor recommendation.

Term	Reference/Source	Definition
Sievert	Health	The metric unit of dose equivalent (biological effect) of radiation to humans. 1 Sievert = 100 rem.
Simulation Cell (SimCell)	NUREG 0654, App B Benton County	Exercise personnel who simulate interfaces with any nonparticipating groups and who deliver exercise injects to participants.
Site Area Emergency (SAE)	NUREG 0654, App B	Licensee emergency classification level indicating that events are in process or have occurred that involve actual or likely major failures in the plant functions needed for protecting the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Releases are not expected to exceed Environmental Protection Agency protective action guide exposure levels beyond the site boundary.
Site Specific Procedures	EMD	The procedures used by an organization or individual to respond to a specific occurrence.
Special Population	EMD Benton County Franklin County	In the event of public evacuation, certain groups within the plume exposure pathway emergency planning zone may require special transportation or protective provisions due to special needs or sensitive industrial operations. Examples of such groups are the staff and inhabitants of: Schools and day care centers Nursing homes Hospitals Retirement centers Public utilities Large dairies Correctional institutions Facilities for developmentally disabled Impaired mobility, sight, or hearing Special industrial plants

Term	Reference/Source	Definition
Stafford Act	Benton County	The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.
State Administrative Plan	EMD	A state level plan for implementing the Federal Public Assistance Program that is to be updated and submitted to the Regional Director for approval on an annual basis, or 1. A state level plan for implementing the Federal Hazard Mitigation Grant Program. 2. For a detailed listing of the required elements of these plans see 44 CFR 206.207(b) and 44 CFR 206.433(d).
State Coordinating Officer (SCO)	NUREG 0654, App B	An official designated by the governor of an affected state to work with the Cognizant Federal Agency Official and Senior FEMA Official in coordinating the response efforts of Federal, state, local, tribal, volunteer, and private agencies.
State Coordinating Officer(SCO)	Benton County	The person appointed by the Governor to act in cooperation with the Federal Coordinating Officer to administer disaster recovery efforts. This person shall coordinate State and local disaster assistance efforts with those of the Federal Government.
State Emergency Response Commission (SERC)	EMD Agriculture	The state planning group designated by the Superfund Amendments and Reauthorization Act of 1986, Title III statutes as the state coordinating body for hazardous materials activities.
State Hazard Mitigation Officer	EMD	The representative of State government who is the primary point of contact with FEMA, other Federal agencies, and local units of government in the planning and implementation of post-disaster hazard mitigation programs and activities under the Stafford Act.
Subgrant	EMD	An award of financial assistance under a grant by a grantee to an eligible subgrantee.
Subgrantee	EMD	The government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. This will generally be a local government or non-profit

Term	Reference/Source	Definition
		corporation.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	EMD	Title III of SARA includes detailed provisions for community emergency planning for fixed chemical facilities.
Table Top Exercise	NUREG 0654, App B	A discussion-based exercise that may test single or multiple scenarios and outcomes. OROs may use tabletop exercises to assess key elements in decision-making and implementation.
Target Capabilities List (TCL)	NUREG 0654, App B	A list of capabilities that provides guidance on the specific capabilities that Federal, state, local, and tribal entities are expected to develop and maintain to prevent, protect against, respond to, and recover from incidents of national significance, including terrorism or natural disasters, in order to maintain the level of preparedness set forth in the National Preparedness Goal.
Technical Specifications	Benton County Agriculture	The limits, operating conditions, and other requirements imposed by the NRC on the operation of commercial facilities and DOE on the operation of its reactor facilities.
Technical Support Center	Benton County	An onsite facility located near the control room, occupied during an Alert or higher classification of emergency, which provides management and technical support to plant operations personnel.
Thermoluminescent Dosimeter (TLD)	Benton County	A type of dosimetry badge used to measure an individual's level of exposure to ionizing radiation. It is characteristic of thermoluminescent material that radiation produces internal changes that cause the material, when subsequently heated, to give off a measurable amount of light directly proportional to the radiation dose. This type of dosimeter cannot be read directly by the wearer; it must be read by a laboratory.
Thermoluminescent Dosimeter (TLD)	EMD	A device for measuring radiation exposure similar to a film badge or a pocket dosimeter.
Thermoluminescent Dosimeter (TLD)	Health	A personal radiation measuring device that uses crystal substances (e.g., lithium

Term	Reference/Source	Definition
		fluoride, calcium fluoride) which absorb radiation and develop an electrical potential proportional to the radiation exposure. TLDs are used in a manner similar to a film badge or a pocket dosimeter. TLDs are considered accurate enough to constitute a legal record of dose.
Thermoluminescent Dosimeter (TLD)	NUREG 0654, App B	A type of dosimetry badge used to measure an individual's level of exposure to ionizing radiation. It is characteristic of thermoluminescent material that radiation produces internal changes that cause the material, when subsequently heated, to give off a measurable amount of light directly proportional to the radiation dose. This type of dosimeter cannot be read directly by the wearer; it must be read by a laboratory.
Thermo-luminescent Dosimeter (TLD)	Franklin County	A non-self-reading device for measuring radiation exposure which is a more accurate than a direct reading dosimeter and constitutes a legal record of an Emergency Worker's actual radiation exposure received during the duration of an accident.
Thyroid blocking agent	NUREG 0654, App B	A prophylactic compound such as Potassium Iodide (KI) used to block the intake of radioactive iodine by the thyroid in a human being.
Total Effective Dose Equivalent (TEDE)	Health	The sum of the internal and external radiation doses received from a given exposure to radiation and intake of radioactive material.
Total Effective Dose Equivalent (TEDE)	NUREG 0654, App B	The sum of the deep dose equivalent (for external exposures) and for committed effective dose equivalent (for internal exposures).
Total Effective Dose Equivalent (TEDE)	Franklin County	• The sum of the deep dose equivalent from external gamma radiation and the Committed • Effective Dose Equivalent (CEDE) from internal exposures.
Traffic Control	NUREG 0654, App B Franklin County	All activities accomplished for the purpose of facilitating the evacuation of the general public in vehicles along specific routes.

Term	Reference/Source	Definition
Traffic Control Point (TCP)	Health	Location on primary or secondary road where it crosses the Food Control Area boundary.
Transient Persons	NUREG 0654, App B	Non-residents - Persons who do not permanently reside in the plume exposure pathway emergency planning zone, but may be present during an emergency.
Transportation Dependent Individuals	Benton County Franklin County	Those individuals who do not have their own transportation and must depend on other individuals, taxis, or public transportation.
Turn - Back Values	Benton County Franklin County	Total accumulated external limits or exposure rates, established by the Offsite health authority, at which the Emergency Worker should leave the area without further consultation or direction.
Unannounced exercise (or drill)	EMD	An exercise (or drill) for which knowledge of the exact date and time is restricted to those individuals with a need to know.
Unified Dose Assessment Center (UDAC)	EMD	An area within the Hanford Site EOC which houses the personnel responsible for the coordination of radiological monitoring teams, collection of radiological monitoring data, calculation of dose projections, and the recommendation of protective actions for the Emergency Planning Zones. Also see Dose Assessment Center (DAC) and Meteorological Unified Dose Assessment Center (MUDAC).
United States Department of Energy (DOE)	Benton County Franklin County EMD	The United States Department of Energy is the Federal agency responsible for a broad array of energy research, development, and materials production activities. The U.S. Department of Energy is responsible for management of the Hanford Site located in Benton, Franklin and Grant Counties, Washington through its Richland Operations Office (RL) and provides resources support in the event of a fixed nuclear facility incident.
Unrestricted Area	Health	The area where radiation dose rates are less than twice background.
Unusual Event (UE) Classification	EMD	The least serious emergency. It means there is a minor problem at the facility

Term	Reference/Source	Definition
		being handled by facility workers.
Urgent medical condition	EMD	Medical problems for which a delay in treatment may cause extended recovery time, reduced level of recovery, or death.
Walk-through		A type of evaluation in which evaluators inspect the physical layout of a facility or area including equipment, attendant resources, and procedures to determine conformity with specific ORO plans.
Warning		A notification to the public in advance of anticipated emergency.
Washington Administrative Code (WAC)	Legislature	Washington Administrative Code — Regulations of executive branch agencies are issued by authority of statutes. Like legislation and the Constitution, regulations are a source of primary law in Washington State. The WAC codifies the regulations and arranges them by subject or agency. The online version of the WAC is updated twice a month.
Washington Nuclear Project (WNP)	EMD	A term used to designate facilities of Energy Northwest facilities on the Hanford site. Now known as the Columbia Generating Station.
Washington Public Power Supply System (Supply System)	EMD	A public corporation operating the only commercial nuclear power plant in the State of Washington. Now doing business as Energy Northwest.
Wedge	EMD	An angle centered about the downwind bearing. Used to indicate a larger area of concern for emergency planning than that provided by the output of a dispersion model. For example, the D2PC dispersion model assumes that the area surrounding the release is flat and open, and that there will be no changes in the wind direction after the release. For this reason, a wedge is often used to account for model limitations

APPENDIX 2 – MAPS

I. Columbia Generating Station, Energy Northwest

II. DOE Hanford

III. U.S. Navy

IV. AREVA NP, Inc.

Figure 1-1 - CGS 10-Mile EPZ

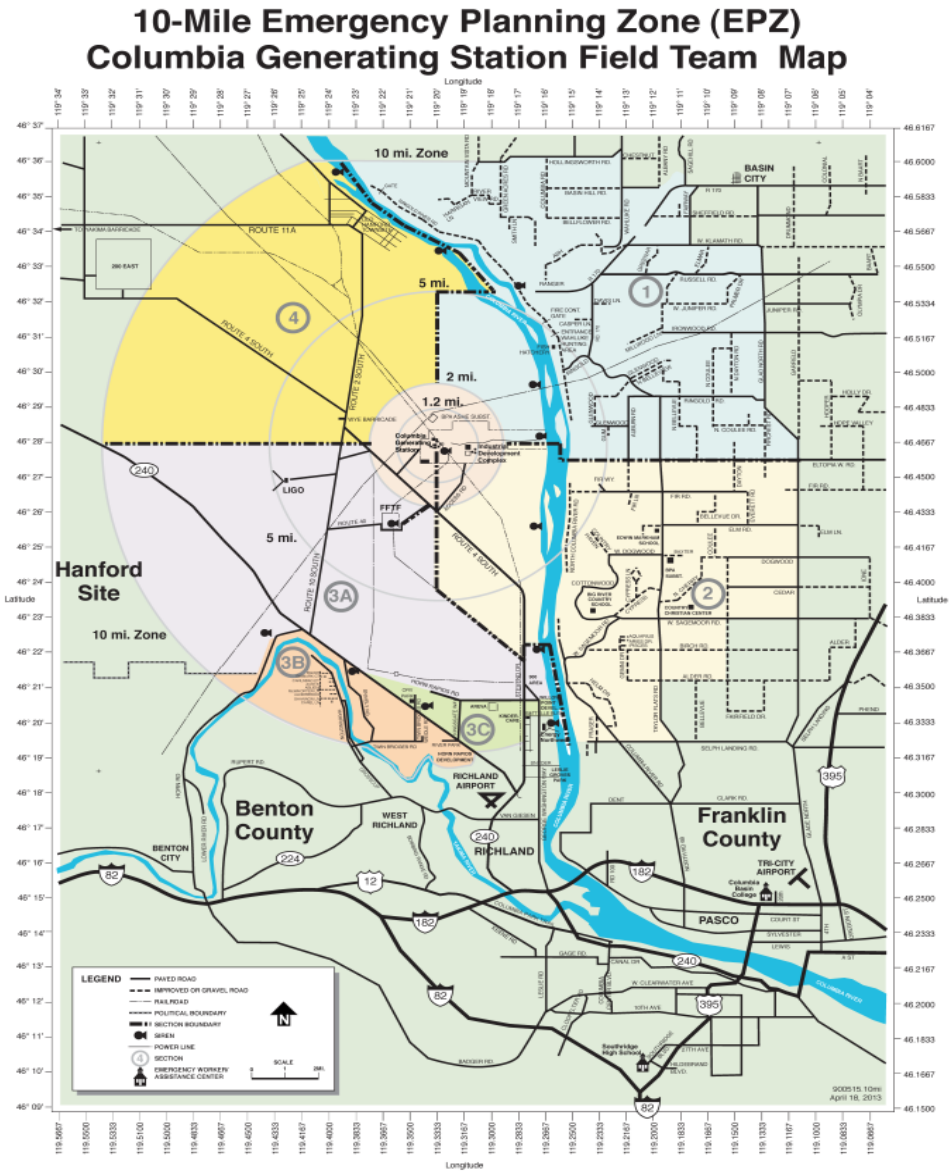


Figure 1-2 - CGS 50-Mile EPZ

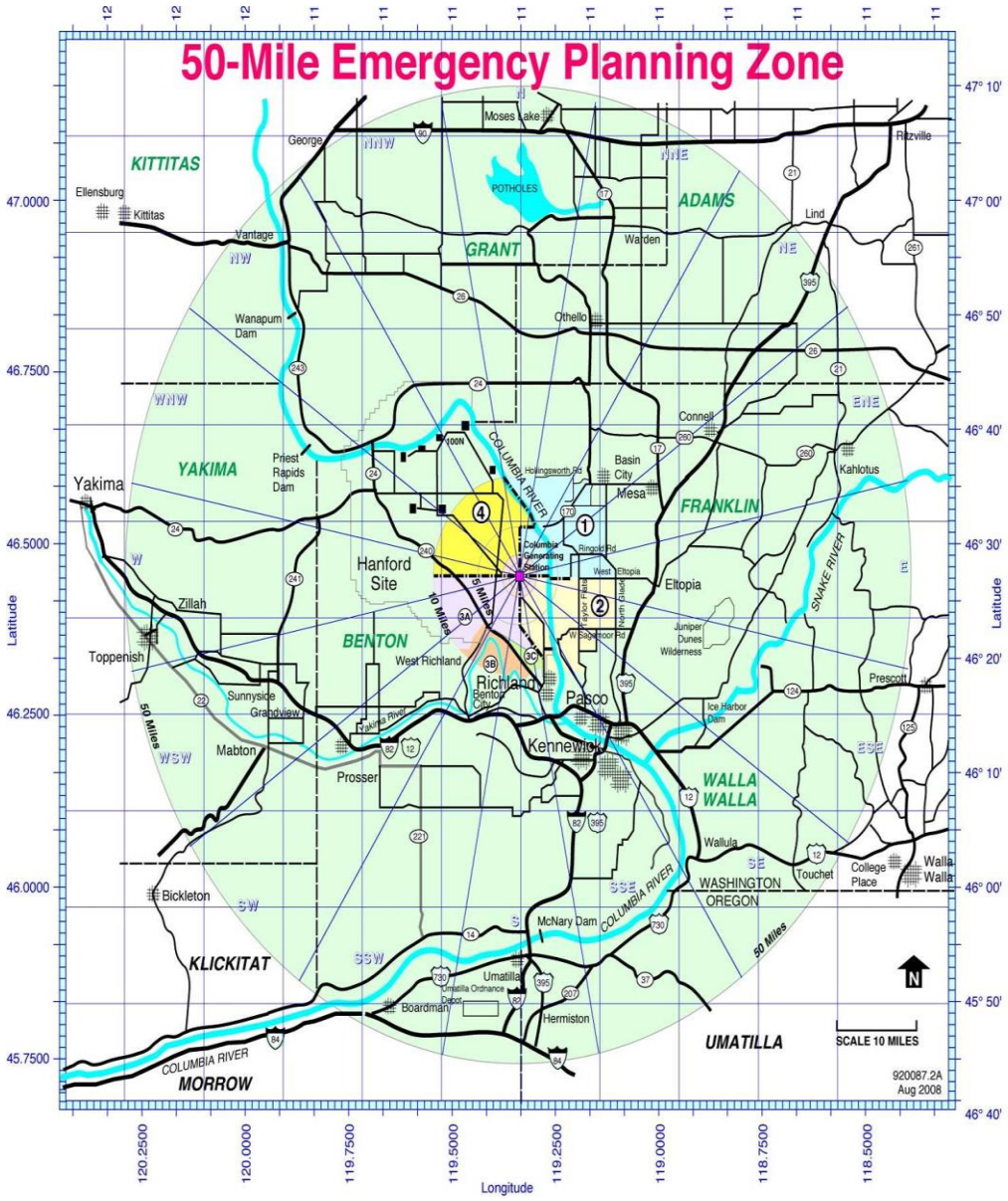


Figure 1-3 – DOE Hanford Site Evacuation Routes and Assistance Centers

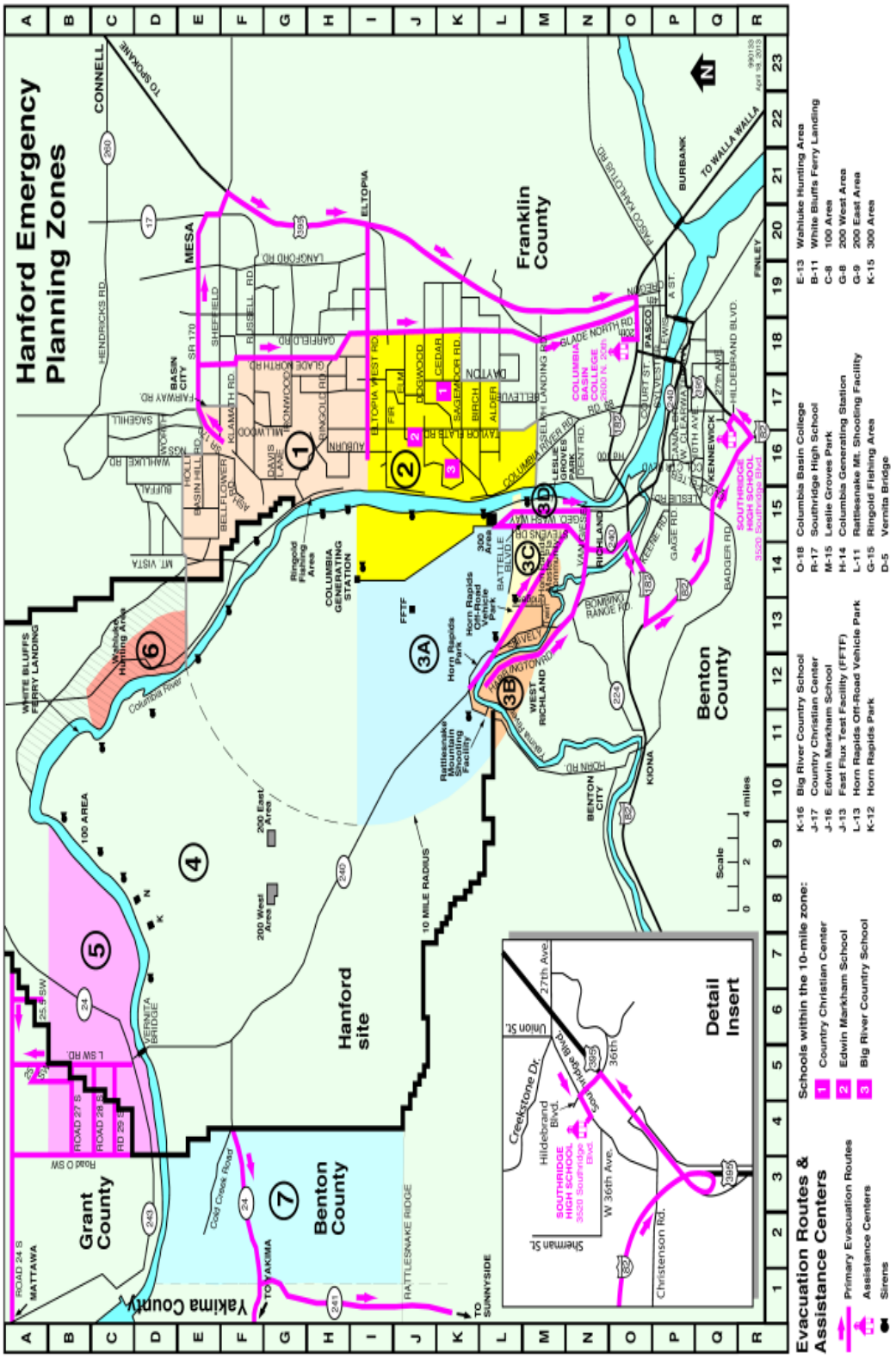


Figure 1-4 – DOE Hanford Site EPZs

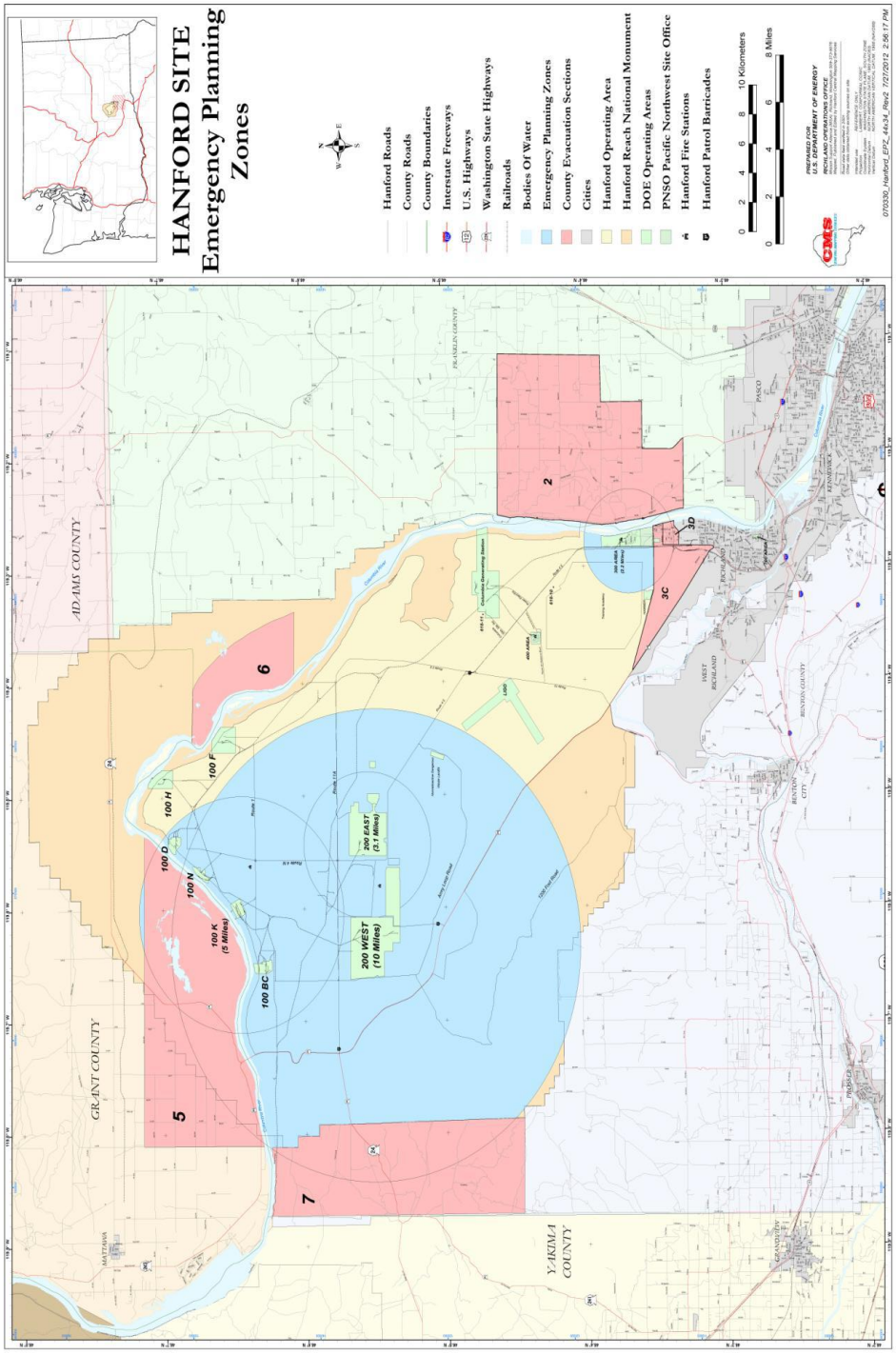


Figure 1-5 - DOE Hanford Site 100K Emergency Planning Zone

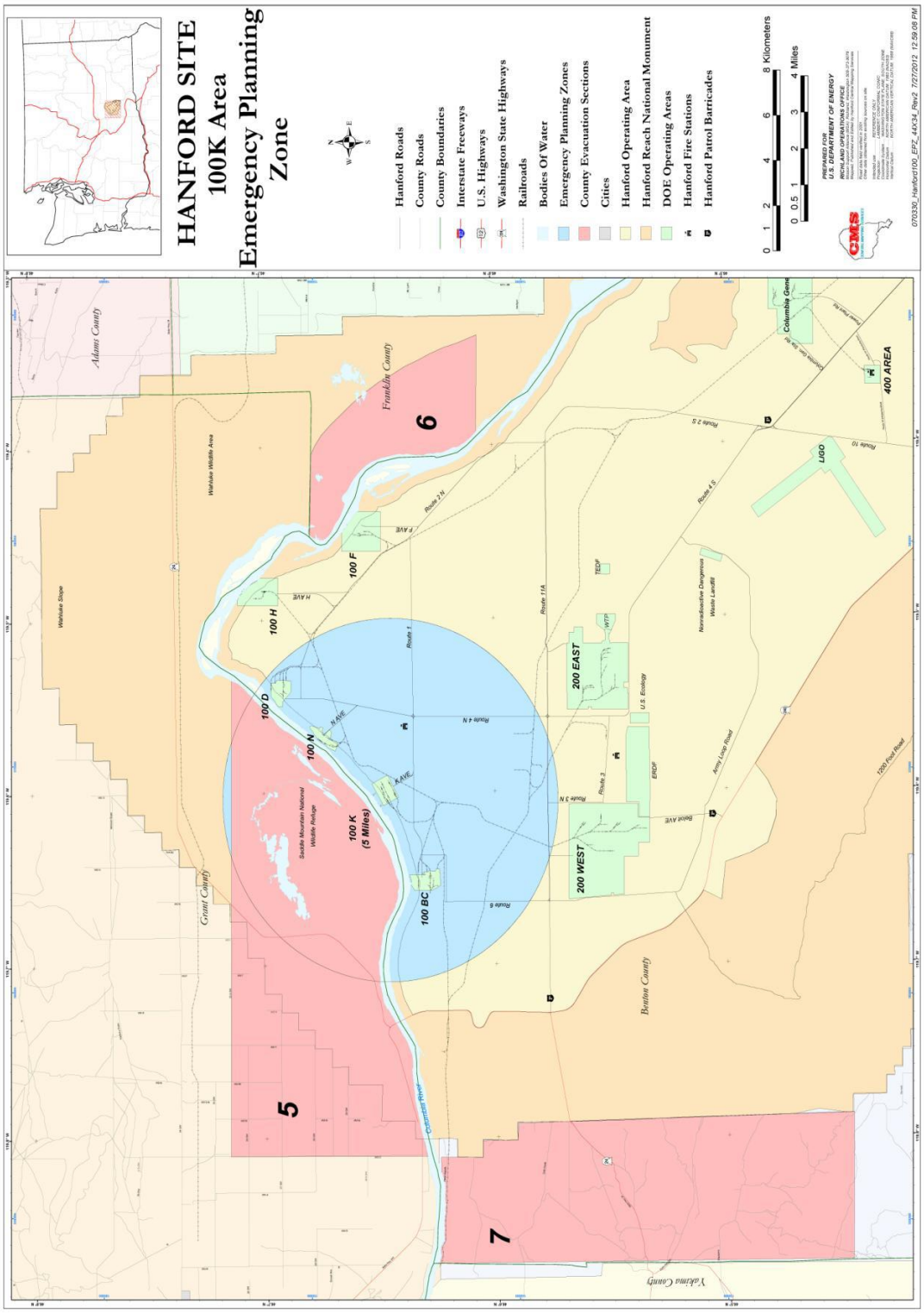


Figure 1-6 - DOE Hanford Site 200 Areas Emergency Planning Zones

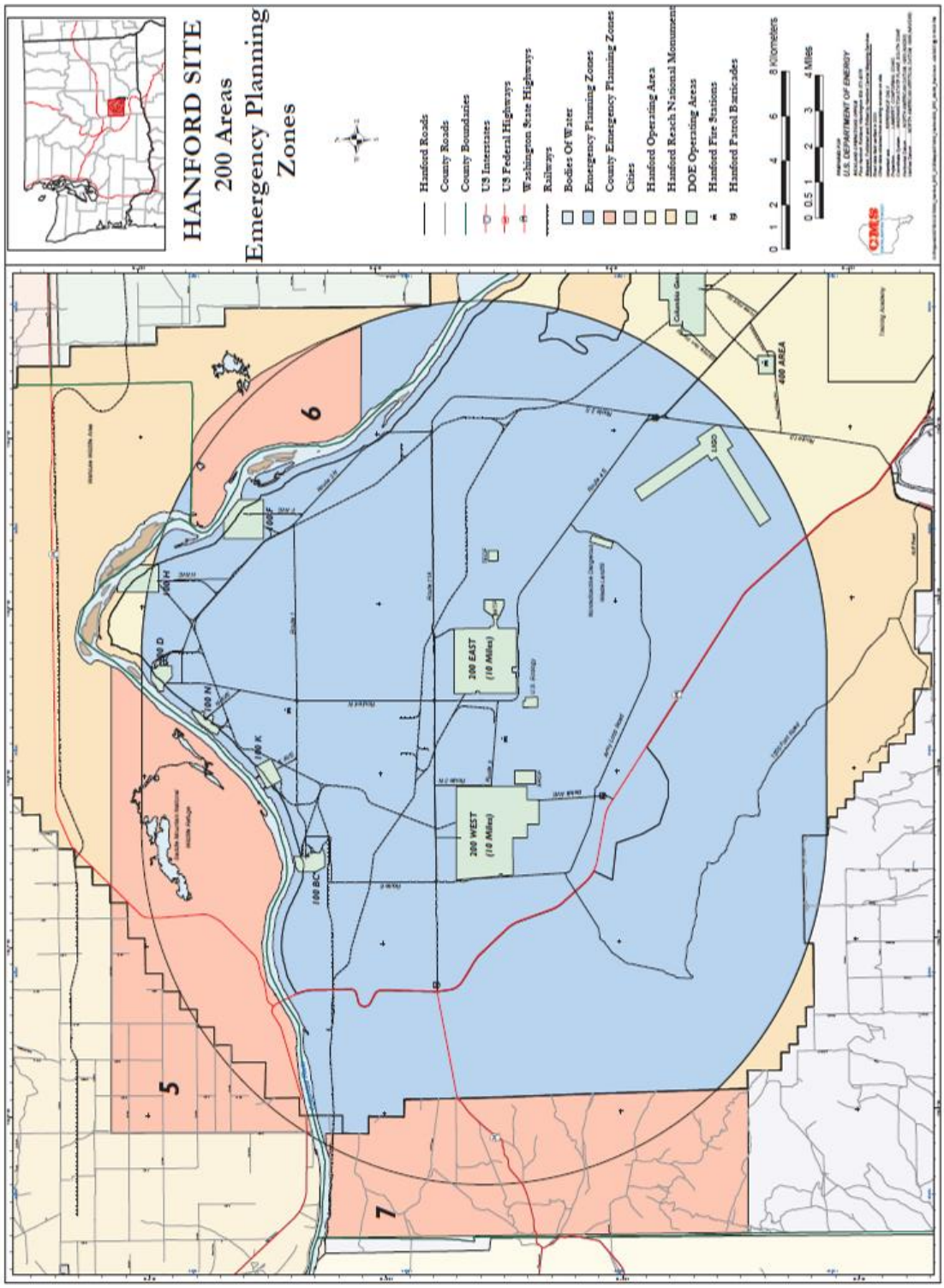


Figure 1-7 - DOE Hanford Site 300 Area Emergency Planning Zone

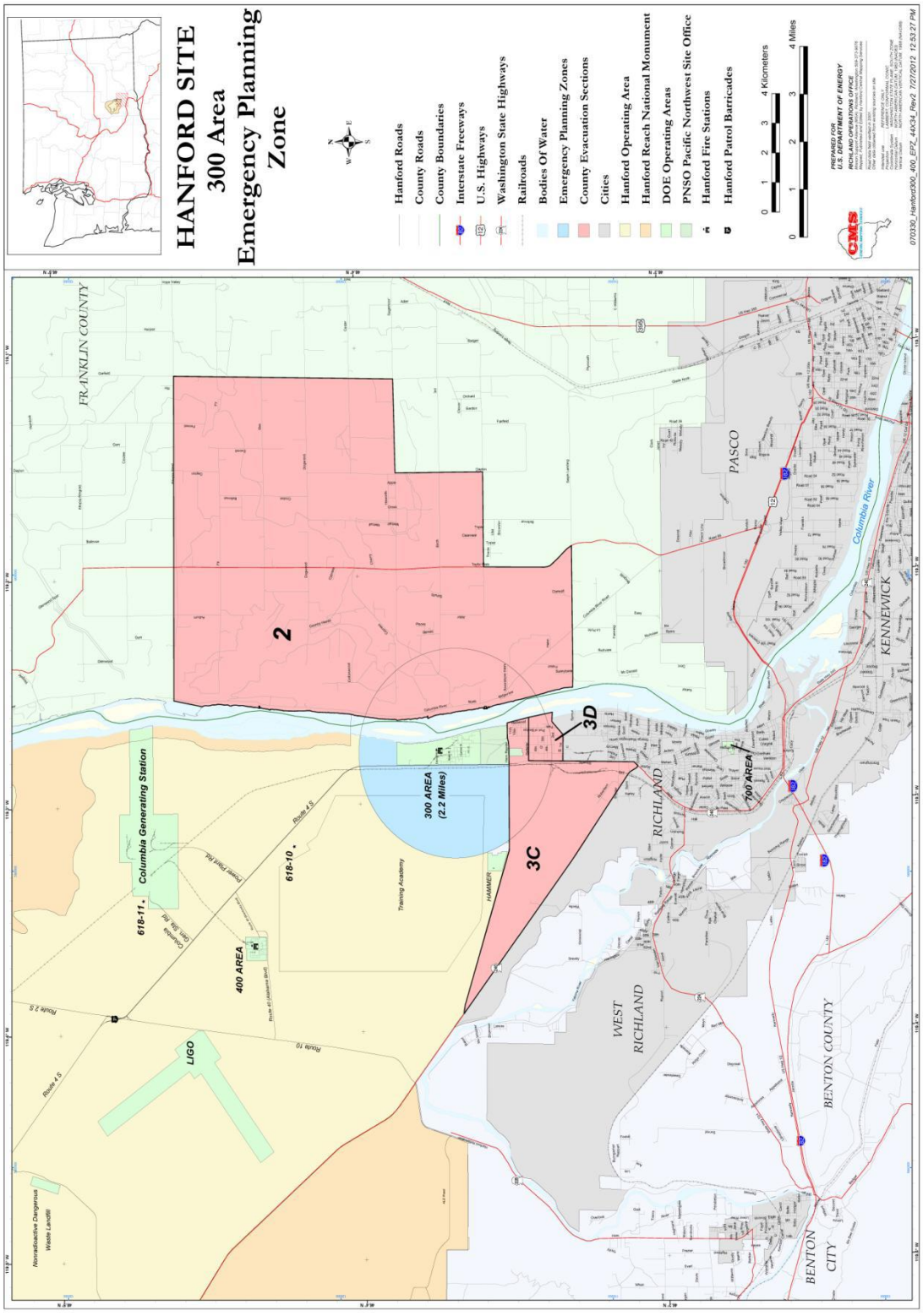


Figure 1-8 - DOE Hanford Site 50 Mile Emergency Planning Zone

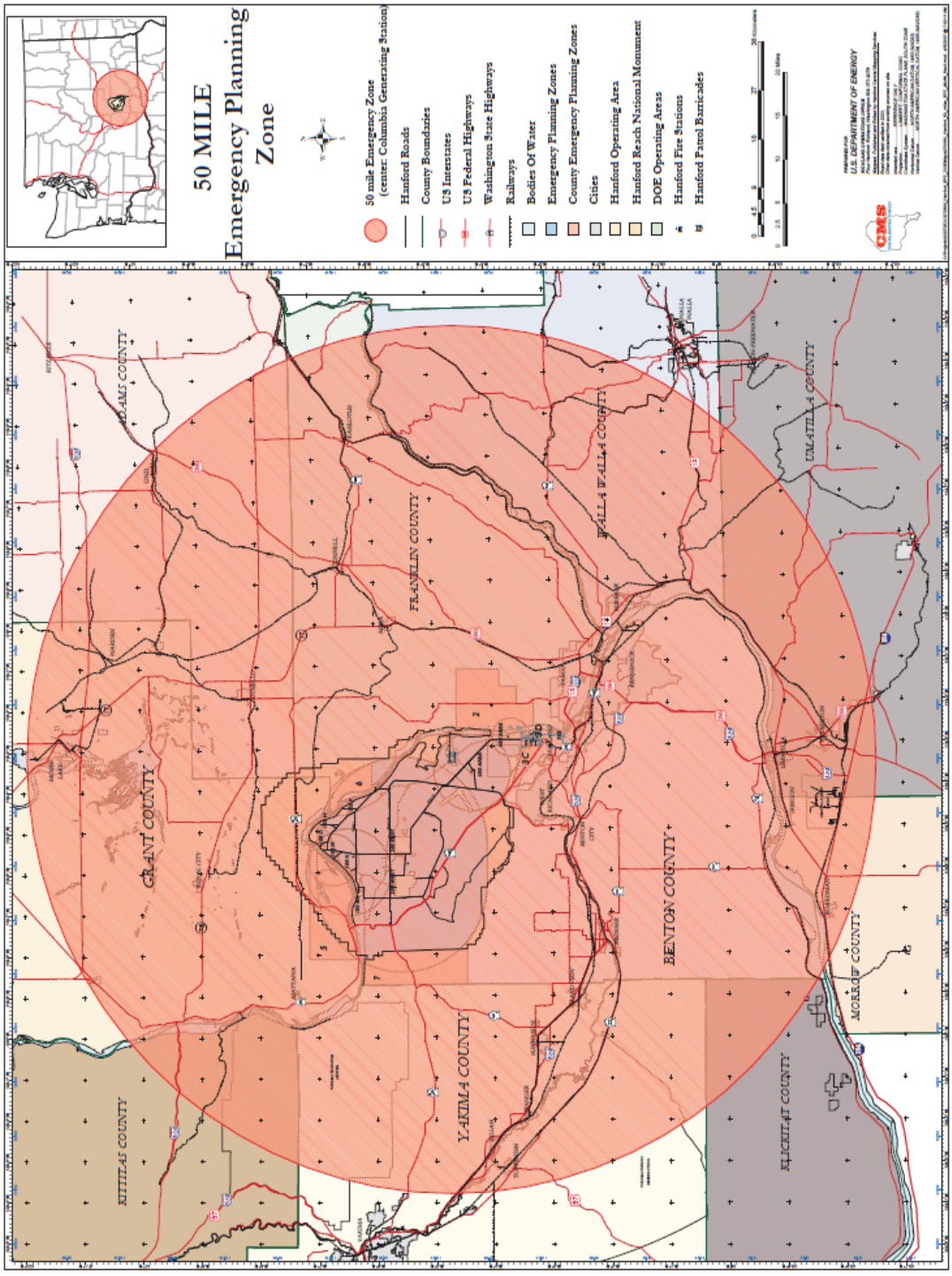


Figure 1-9 - Naval Submarine Base Bangor Area of Planning Attention

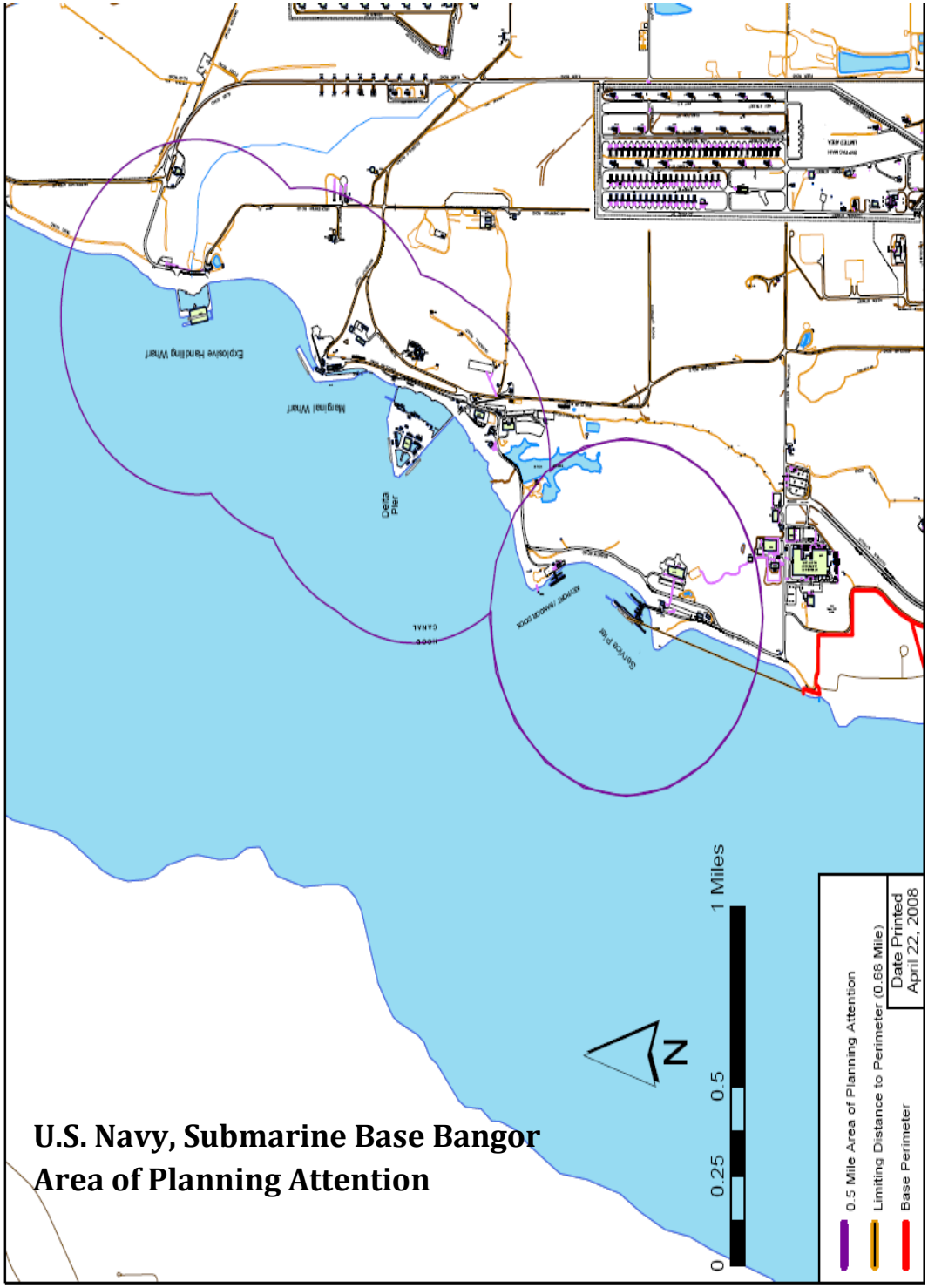


Figure 1-10 - Naval Station Everett Area of Planning Attention

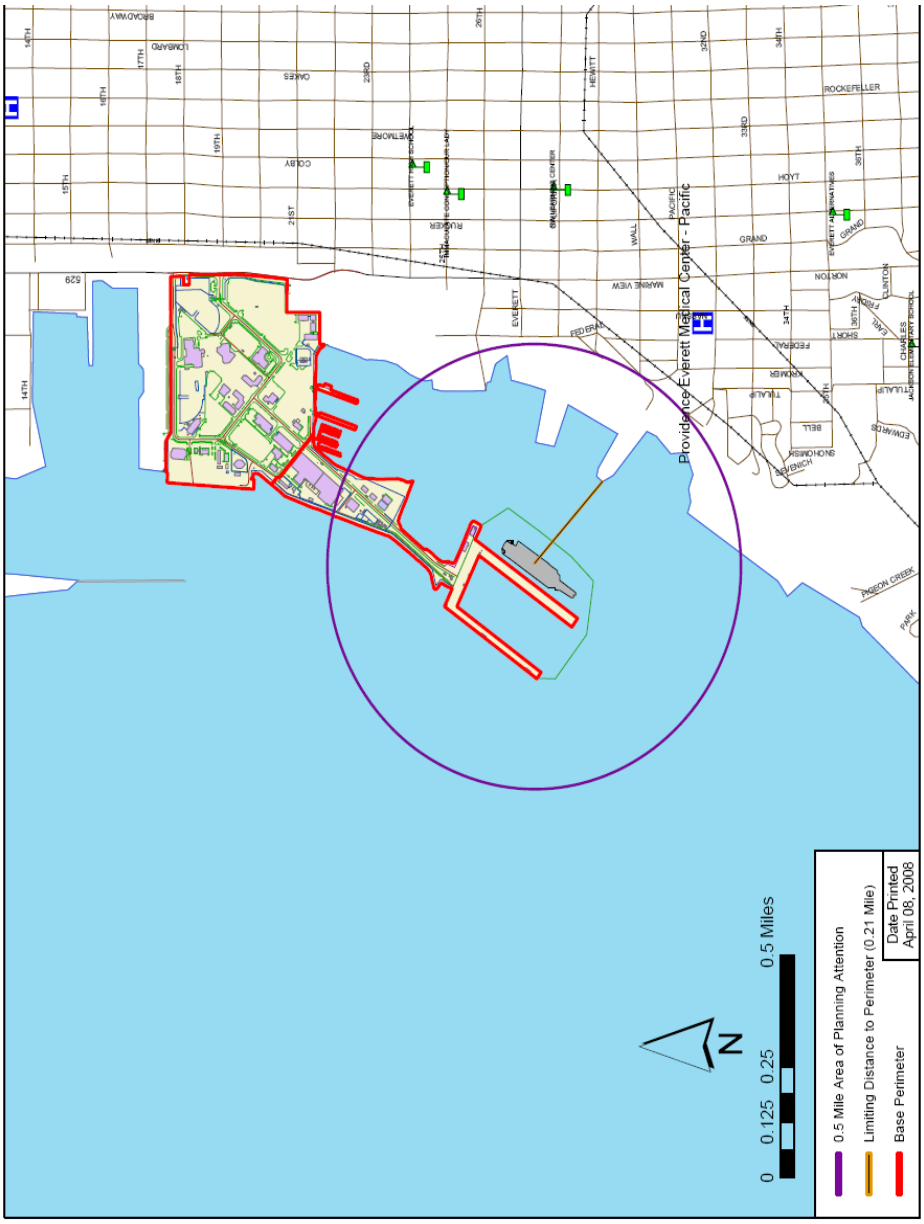


Figure 1-11 - Naval Base Kitsap Area of Planning Attention

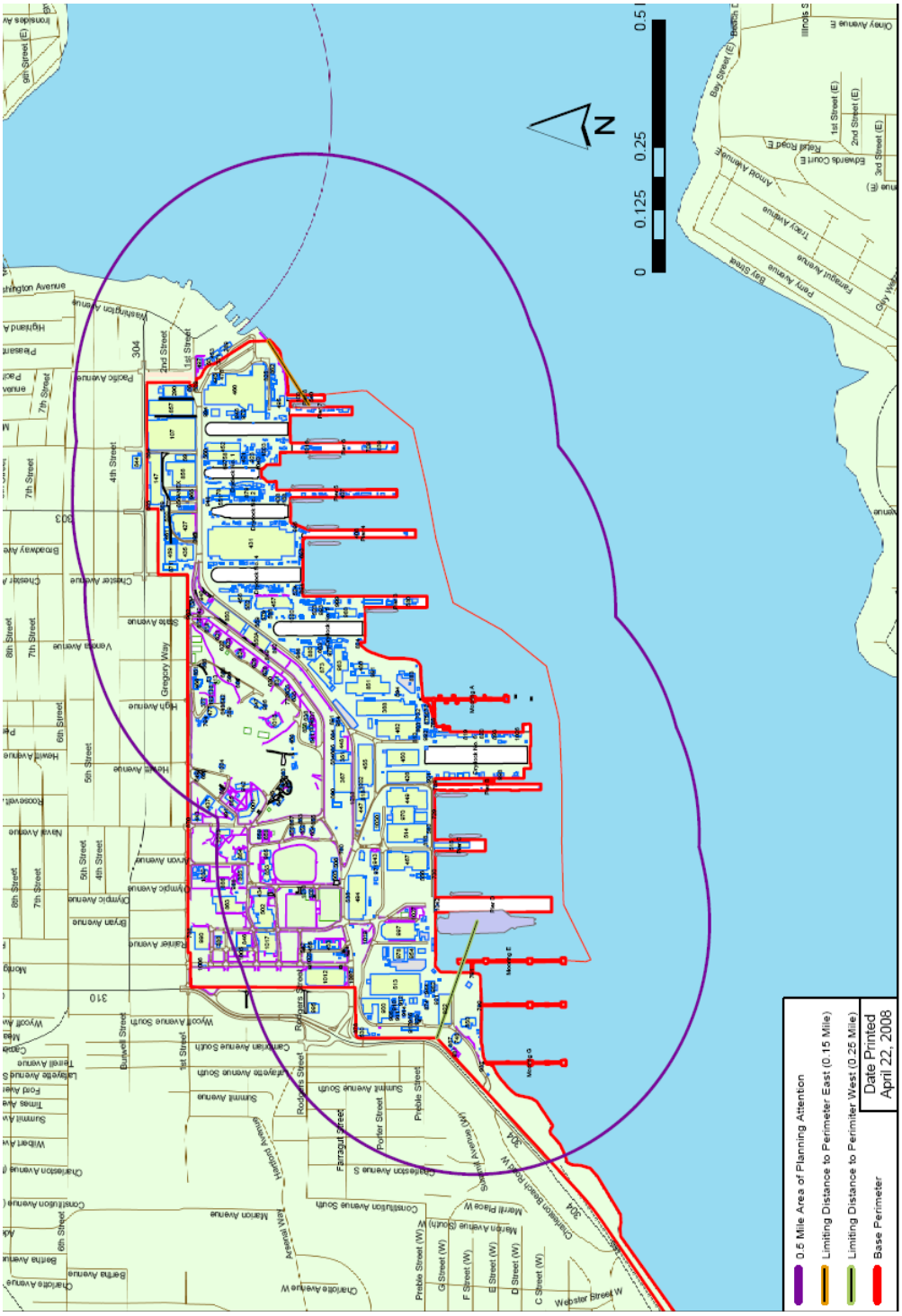


Figure 1-12 - Naval Base Kitsap Off-site Population in Area of Planning

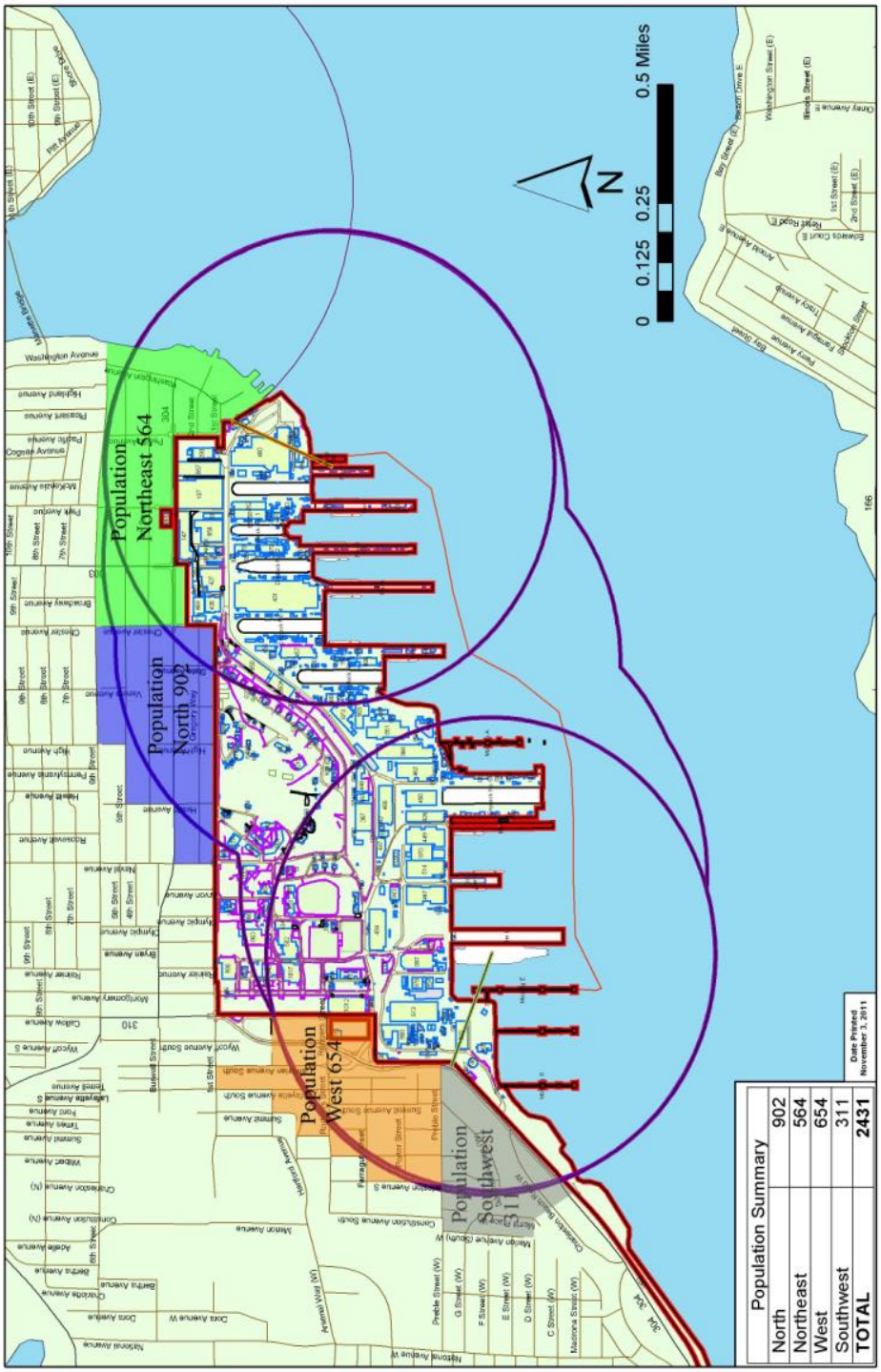


Figure 1-13 - AREVA NP, Inc., Emergency Planning Zone Sections

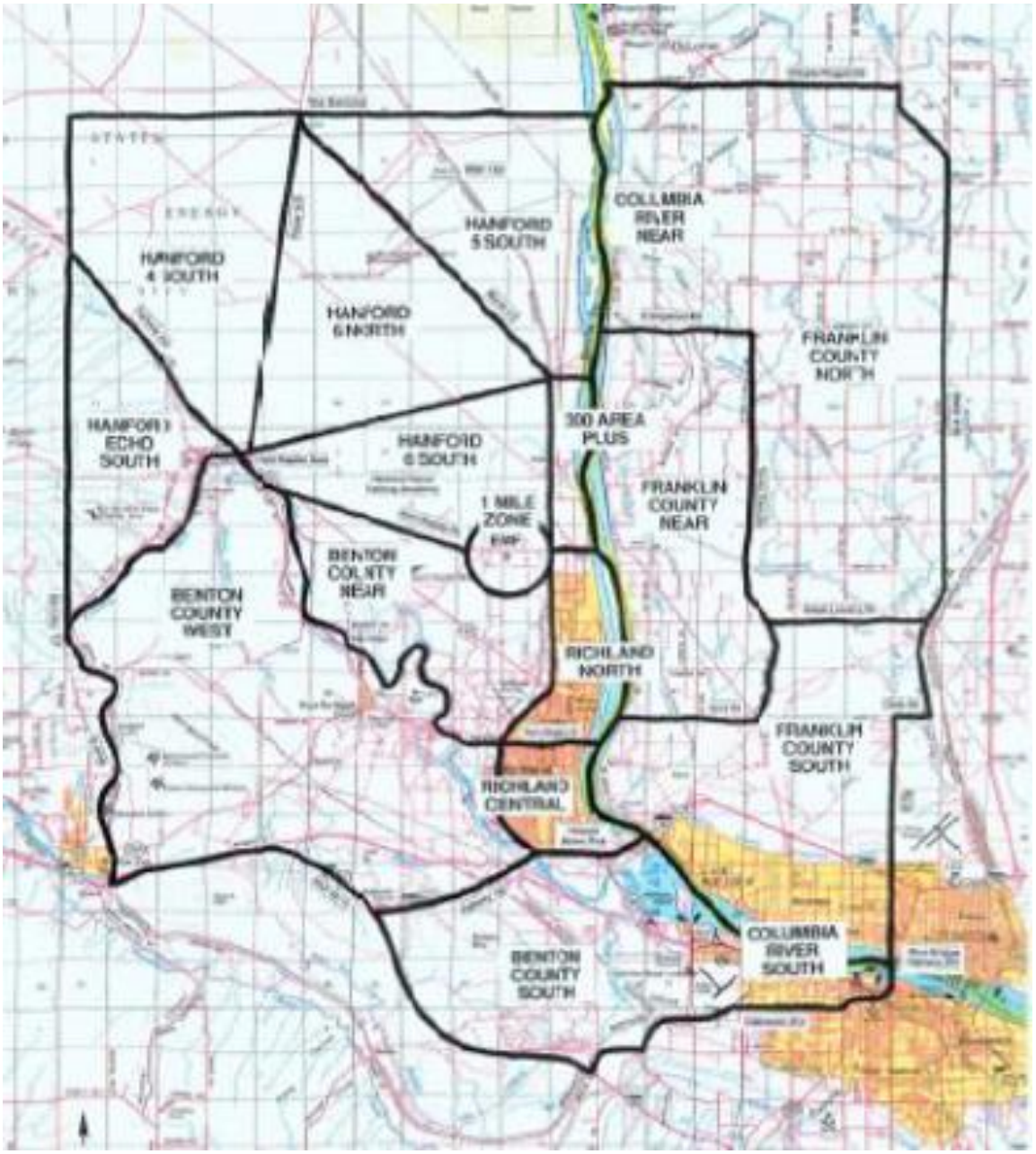
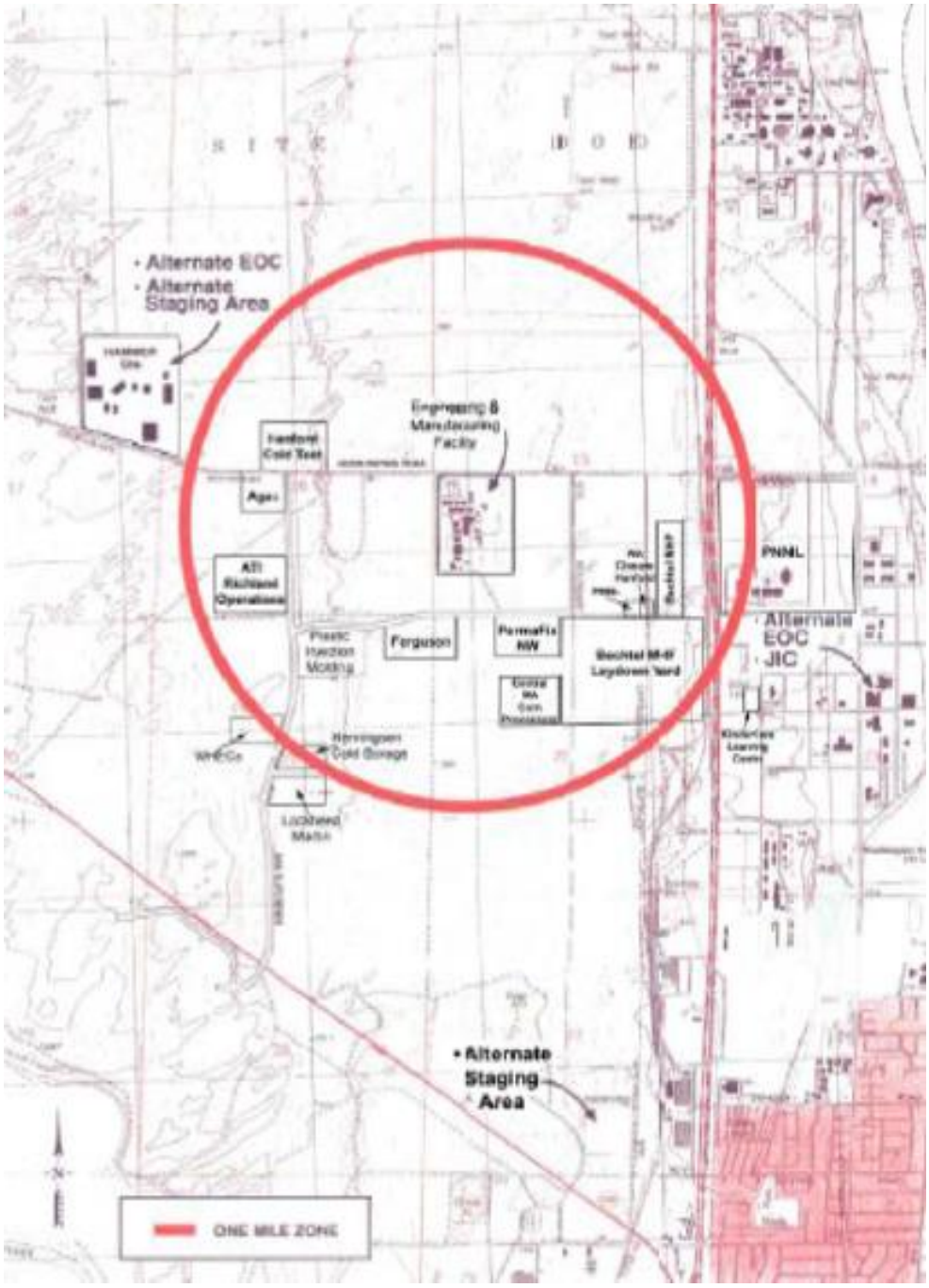


Figure 1-4 - AREVA NP, Inc., Land Use within One Mile



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APPENDIX 3 – MEMORANDA OF UNDERSTANDING (MOU)

I. GOVERNMENTAL AGENCY MEMORANDA OF UNDERSTANDING AND LETTERS OF AGREEMENT

There are no known limitations on the authority of Letter of Agreement (LOA) signatures that are relevant to State, local, or tribal statues and not policy. Limitations will be included in relevant LOAs as applicable (NUREG A.2.b).

The following MOU include details on what services will be provided and how the agreements will be activated.

- Energy Northwest, Columbia Generating Station and Washington State for Emergency Preparedness with Concurrence from Washington State Departments of Agriculture and Health (U12-004) provides for information, technical data, and radiological monitoring.
- State of Washington and the State of Oregon State for Radiological Emergency Response at the Columbia Generating Station and the US Department of Energy's Richland Operations Office Hanford Site (U14-001) provides for information, liaisons, and expertise.
- U.S. Department of Energy, Richland Operations Office and Washington State for Emergency Preparedness (U12-004) provides for information, technical data, and radiological monitoring.

II. WASHINGTON STATE HOSPITAL MEMORANDA OF UNDERSTANDING

The following MOU include details on what services will be provided and how the agreements will be activated. Individual hospital and medical center plans detail additional information.

Figure 3-1 - Capacity and Capability of State Hospitals

Hospital	Location	Type	Outpatient Capacity/Day		Beds	Special Capabilities
			Non-Contaminated	Contaminated		
Harborview Medical Center (U13-002)	Seattle	Public	220	100/hour	413	Level I Trauma Center
Kadlee Regional Medical Center (U13-009)	Richland	Public	Variable	Variable	270	Level III Trauma Center
Kennewick General Hospital (U13-003)	Kennewick	Public	200	200	14 ER 111 total	Level III Trauma Center

Hospital	Location	Type	Outpatient Capacity/Day		Beds	Special Capabilities
Lourdes Medical Center (U13-008)	Pasco	Public	73	10	25 (Critical Access Hospital – licensed for 100)	Level IV Trauma Center
Madigan Army Medical Center (U13-004)	Tacoma	Military	2,000	60/hour	249	Level II Trauma Center
Prosser Memorial Hospital (U13-013)	Prosser	Public	80	80	20	Level IV Trauma Center
Providence Sacred Heart Medical Center (U13-010)	Spokane	Public	260	50	628	Level II Trauma Center
Providence Saint Mary Medical Center (U13-015)	Walla Walla	Public	Variable	Variable	141	Level III Trauma Center
Swedish Medical Center / Cherry Hill (U13-006)	Seattle	Public	100	50	385	Level II Trauma Center; immediate access to Level I
Swedish Medical Center / First Hill (U13-005)	Seattle	Public	150	75	697	Level II Trauma Center; immediate access to Level I
Yakima HMA Inc., dba Yakima Region Medical and Heart Center (U13-007)	Yakima	Public	Variable	Variable	214	Level III Trauma Center

Note: Appropriate EMD staff and signatories annually review and update MOUs as required. EMD's SharePoint site catalogs MOUs electronically (under Contracts); the Washington Military Department contracts office maintains originals in hard copy.

APPENDIX 4 – FACILITY NOTIFICATION FORMS

Note: Notification Forms are current as of date of publication of this document. Plan holders are responsible for maintaining current notification forms.

Figure 4-1 - Columbia Generating Station Classification Notification Form, Page 1 of 2

1 **Type of Event:**
a. ☐ Emergency
b. ☐ Drill

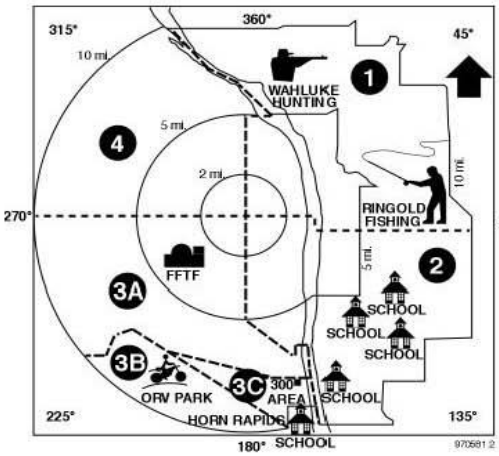
COLUMBIA GENERATING STATION
CLASSIFICATION NOTIFICATION FORM (CNF)

2 **No:** ____

3 **Notification Provided By:** **Phone:**
(Emergency Director)
Name (Print): (509)

4 Classification/Status	Date:	Time:
a. ☐ Initial Classification		
b. ☐ Reclassification		
c. ☐ Termination		
d. ☐ PAR Changes/Additions		
e. ☐ Information		

Section Map



5 a. ☐ **UNUSUAL EVENT**
No Offsite Protective Actions Recommended

b. ☐ **ALERT**
No Offsite Protective Actions Recommended

c. ☐ **SITE AREA EMERGENCY**
Automatic Protective Action Recommendation
EVACUATE:
- Columbia River
- Ringold Fishing Area
- Wahluke Hunting Area
- Schools in EPZ
- Horn Rapids Recreation Area/ORV Park

d. ☐ **GENERAL EMERGENCY**
Automatic Protective Action Recommendation
EVACUATE:
- Columbia River
- Ringold Fishing Area
- Wahluke Hunting Area
- Schools in EPZ
- Horn Rapids Recreation Area/ORV Park

6a ***Additional Protective Action Recommendations***
Minimum PAR at General Emergency is; Evacuate All sections 0-2 Miles; Evacuate 2 - 10 miles in downwind section; and shelter 2 - 10 miles in remaining sections.

7 **Meteorological Data:**
Wind Speed: _____ mph from _____ degrees
Precipitation: ☐ Yes ☐ No
Stability Classification _____

0-2 miles	2-10 miles			
All Sections	Section 1	Section 2	Section 3	Section 4
☐ No Action ☐ Shelter ☐ Evacuate	☐ No Action ☐ Shelter ☐ Evacuate	☐ No Action ☐ Shelter ☐ Evacuate	☐ No Action ☐ Shelter ☐ Evacuate	☐ No Action ☐ Shelter ☐ Evacuate

8 ☐ No Release Block 9,10,11 N/A ☐ Release

Basis for PARs: ☐ None ☐ Radiological ☐ Plant

9 **Type of release:**
☐ Airborne
☐ Water
☐ N/A

10 **Estimated Start of Release:**
Date/Time: _____
Release Terminated:
Date/Time: _____

Additional Information and / or
Specific Protective Action Recommendations

11 **State Criteria met for administering KI...**(Information only)
☐ No
☐ Yes ☐ 250 mrem/hr thyroid
☐ 1.4 x 10^{-7} µci/cc I-131
☐ Unfiltered or unmonitored release from a nuclear power plant

6b **Security Event:** ☐ Yes ☐ No
Responding personnel are to report to:
☐ On-Site EOF
☐ Alternate EOF, Energy Northwest Office Complex, 3000 George Washington Way

12 **EAL #** _____ **Description of Incident:** _____

13 **Prognosis of Situation:** a. ☐ Unknown b. ☐ Stable c. ☐ Escalating d. ☐ Improving

14 **Emergency Director Approval Signature:**

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Figure 4-2 - Columbia Generating Station Classification Notification Form, Page 2 of 2

Completion of Classification Notification Form (CNF)

Completing the form

Block 1. Type of event. For actual emergencies, the block "Emergency" should be checked. During drills or exercises, the block "Drill" should be checked.

Block 2. Classification Form Number. This is a sequential number indicating the order of offsite notifications. The first CNF is #1 followed by #2, etc.

Block 3. Notification provided by. This is the name of the Emergency Director providing the information on the Crash call. Phone number is the number at which the notifier can be contacted.

Block 4. Classification/Statues a-e.

Item a. or b.: The time listed is the time at which the ED declares the emergency classification or upgrade. This time starts the 15-minute notification requirement.

Item c.: A CNF and Crash must be initiated at the termination of a drill or actual event.

Item d. If additional PARs are required after the CNF for the GE has been transmitted, complete this block. The need for additional PARs requires notifications be completed within 15 minutes of the time in the block.

Item e. Periodic information updates such as release information, KI, prognosis, and changes in Met conditions should be provided at least once an hour.

Block 5. Check block for appropriate emergency classification. At General Emergency, ensure applicable PAR information is included.

Block 6a. PAR information should be checked for applicable sections and communicated during the Crash call for the GE. As necessary, information or specific PARs can be added.

Block 6b. Identify whether the event is security based (Auto Dialer Scenario 191) and reporting location for EOF personnel.

Block 7. Enter Meteorological data. Following a release, if Met data changes, ensure additional PARs are considered and provide offsite notification. To convert Delta T to stability class, refer to PPM 13.8.1.

Block 8. Enter release information. Provide CNF and Crash notifications to offsite agencies as soon as release criteria has been met.

Block 9. If there is a release, mark it as airborne or water.

Block 10. If there is a release, enter the start time. Enter stop time following release termination.

Block 11. The block with information on the State's criteria for KI is an information notification not a PAR.

Block 12. Enter the EAL number. Provide a short description of the event. Do not use jargon and avoid acronyms.

Block 13. Enter Prognosis of Situation. This is a judgment call primarily relating to the condition of the reactor.

Block 14. Signature block. Ensure the ED has signed the form prior to transmittal to the offsite agencies.

Additional information to consider when completing the CNF

- CNF must be filled out in entirely prior to transmittal to offsite agencies. Transmittal of the CNF should occur prior to initiation of each Crash call. The requirement to complete 15-minute notifications to the offsite agencies should not be delayed if the time needed to complete the form would impact the notification requirement. In cases where the Crash is initiated prior to transmittal, the form should be filled out and transmitted as soon as possible.
- When the Control Room is providing emergency classifications, they will ensure the SCC has received the CNF at which time the SCC will follow up with the offsite agencies to ensure they have received the information. If the SCC is not available, the Control Room Notifier must provide the information block by block to the offsite agencies.
- If the CNF information is being communicated from the EOF or TSC, all information on the form must be verbally communicated. When communicating the CNF information, it must be communicated block by block for each of the blocks.
- If an error on the CNF is recognized during the Crash call, the correction should be noted on the CNF, initialed, and communicated during the Crash call.
- If an error is recognized in block 4, 5, 6, 7, 8, 9, 10 or 11 after the Crash has concluded, a new corrected CNF with the next sequential number should be completed, transmitted, and followed up with a Crash call.

Page 2

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Figure 4-3 - U. S. Department of Energy Hanford Emergency Notification Form

RL-F-5540.1
(REV 4)
(09/12)

U.S. DEPARTMENT OF ENERGY
HANFORD EMERGENCY NOTIFICATION FORM

No. _____

1 NOTIFICATION PROVIDED BY: Name: _____ Phone: (509) _____

2 AREA AND FACILITY: _____ 3 TYPE EVENT: a. ☐ Emergency b. ☐ Exercise/Drill

4 CLASSIFICATION/STATUS: a. ☐ Initial Classification b. ☐ Reclassification c. ☐ Correction
d. ☐ PAR Change/Addition e. ☐ Information f. ☐ Termination

5 EMERGENCY CLASSIFICATION LEVEL AND OFFSITE PROTECTIVE ACTION RECOMMENDATIONS:

AREA	a. ☐ ALERT	b. ☐ SITE AREA EMERGENCY	c. ☐ GENERAL EMERGENCY
☐ 100K	None	Evacuate Columbia River from Vernita Bridge to White Bluffs Ferry Landing.	• Evacuate Columbia River from Vernita Bridge to White Bluffs Ferry Landing. • Evacuate Section 5, east of Hwy. 24.
☐ 200E	None	None	• Evacuate Columbia River from Vernita Bridge to Leslie Groves Park. • Evacuate Sections 5, 6, and 7.
☐ 200W[1]	None	None	None
☐ 200W[2]	None	Evacuate Columbia River from Vernita Bridge to White Bluffs Ferry Landing.	• Evacuate Columbia River from Vernita Bridge to White Bluffs Ferry Landing. • Evacuate Sections 5 and 7.
☐ 300	None	Evacuate Columbia River from White Bluffs Ferry Landing to Leslie Groves Park.	• Evacuate Columbia River from White Bluffs Ferry Landing to Leslie Groves Park. • Evacuate 2.2 mile radius.
☐ Other	None	None	Evacuate Columbia River from Vernita Bridge to Leslie Groves Park.

[1]For emergencies at U Plant, REDOX, 222-S, 224-T, 283W, or 200W Tank Farms.
[2]For emergencies at PFP, LLBG, CWC, T Plant, or WRAP.

6 TYPE OF INCIDENT:

a. Security Incident Yes ☐ No ☐

EAL No.: DOE-0223, RLEP 1.0, Appendix 1-_____ Table _____

Description of Incident: _____

7 RELEASE TO THE OUTSIDE ENVIRONMENT INFORMATION:

a. ☐ No Release (No indicators)
b. ☐ Unknown (Indicators of possible release, but not confirmed)
c. ☐ Confirmed Release (Visible or instrument indication of hazardous release)
- Estimated Start Time of Release: _____
☐ Airborne ☐ Spill ☐ to Columbia River
d. ☐ Release Terminated - Time: _____

8 METEOROLOGICAL DATA:

Wind Speed _____ mph
Wind Direction: from _____
Precipitation: ☐ Yes ☐ No
Stability Class:
A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

9 PROGNOSIS OF SITUATION: a. ☐ Unknown b. ☐ Stable c. ☐ Escalating d. ☐ Improving

10 ADDITIONAL OFFSITE PROTECTIVE ACTION RECOMMENDATIONS:

_____

APPROVED: _____ DATE: _____ TIME: _____

Figure 4-4 - AREVA NP, Inc., Incident Notification Form, Page 1 of 2

AREVA

INCIDENT NOTIFICATION FORM

AREVA NP INC. INCIDENT NOTIFICATION FORM, Number: _____

1. This is (name) _____, at phone (509) 375-8350
2. Of the AREVA NP Inc. facility in Richland.
3. We have an event that is an: a. __ Actual emergency, b. __ Exercise.
4. The date and time of this classification status is:

Classification Status	Date	Time (24 hr)
a. __ Initial classification	_____	_____
b. __ Periodic Update	_____	_____
c. __ Reclassification	_____	_____
d. __ Termination	_____	_____
e. __ PAR Change Only	_____	_____

5. The emergency classification is:

a. __ Alert/ HazMat Level 2
b. __ Site Area Emergency/HazMat Level 3 *PAR REQUIRED*
c. __ None
d. __ Not Yet Classified

6. The type of incident is:

a. __ Fire/explosion
b. __ Radiological
c. __ Criticality (potential/actual)
d. __ Hazardous materials
e. __ Process problems
f. __ Electrical
g. __ Security
h. __ Other

Description of Incident: [Include, as applicable, information on chemicals/ radionuclide(s) involved, physical form of released material(s), quantity/rate of release, Emergency Action Levels (EALs) pertinent to event classification.]

_____

_____

_____

AREVA NP INC.

2101 Horn Rapids Road, Richland, WA 99354
Emergency Tel: (509) 375-8350 - Emergency Fax: (509) 375-8799

Figure 4-5 - AREVA NP, Inc., Incident Notification Form, Page 2 of 2

EHS&L Document
Emergency Preparedness – Part III
Incident Notification Form

E08-03-4.1
Version 4.0
Page 2

7. A release:
   a. __ Is not expected.
   b. __ May start/started at (time) _____ and may last for _____ hours.
   c. __ Has been terminated.
8. The weather:
   Wind speed approximately _____ mph; direction from _____ , to _____ .
   Precipitation: __Yes, __ None.
9. Offsite assistance requested is:
   a. __ None c. __ Fire e. __ Other: _____
   b. __ Ambulance d. __ Law enforcement _____
10. The prognosis of the situation is:
    a. __ Unknown b. __ Stable c. __ Escalating d. __ Improving
11. The Protective Action Recommendation (PAR) for offsite is:
    a. __ Shelter in the 1 Mi Zone (and): _____
    b. __ Evacuate the 1 Mi Zone (and): _____
    c. __ Not applicable
12. The basis for this PAR is:
    a. __ Plant conditions d. __ Other _____
    b. __ Radiological conditions e. __ Not applicable
    c. __ Hazardous chemicals
13. Protective Actions in effect onsite are:
    a. __ Partial shelter, areas: _____
    b. __ Site-wide shelter
    c. __ Building evacuations, buildings: _____
    d. __ Site-wide evacuation
    e. __ None

Authorized by:_____ _____ _____
Plant Emergency Director Date Time

Page 2 of 2

Figure 4-6 - Naval Nuclear Propulsion Program Civil Authority Notification Form, Page 1 of 2

NAVAL NUCLEAR PROPULSION PROGRAM CIVIL AUTHORITY NOTIFICATION FORM

1. NOTIFICATION PROVIDED BY: Name: _____ Phone No: _____ Date: _____

2. FACILITY: ☐ Naval Base Kitsap (NBK)-Bremerton ☐ NBK-Bangor ☐ NAVSTA Everett ☐ OTHER: _____

3. TYPE OF NOTIFICATION/TIME OF EVENT: a. ☐ Emergency b. ☐ Drill/Exercise c. Time of Event: _____

4. CLASSIFICATION STATUS:

a. ☐ Preliminary Classification Time: _____
b. ☐ Follow-up classification (Based on off-site surveys) Time: _____
c. ☐ Termination (Release stopped) Time: _____
d. ☐ Protective Action Recommendations: Change/Addition/Refinement Time: _____
e. ☐ Information Time: _____

5. TYPE OF EVENT:

a. ☐ Fire/Explosion (circle one) involving radioactive material
b. ☐ Reactor system (Loss of Coolant, Steam Line Rupture, Loss of Flow – if known, circle one)
YES / NO / UNKNOWN Reactor shutdown
YES / NO / UNKNOWN Reactor compartment containment set
YES / NO / UNKNOWN Ship containment set
c. ☐ Radiological (liquid spill associated with: ☐ Reactor system discharge ☐ Other: _____)
d. ☐ Transportation accident involving radioactive material. ☐ On-site ☐ Off-site
e. Further description of event: _____.

6. PLUME STAGE EMERGENCY CLASSIFICATION LEVEL & OFF-SITE PROTECTIVE ACTION RECOMMENDATIONS:

a. ☐ *UNUSUAL EVENT* *< 0.01 rem TEDE* *< 0.05 rem CDE Thyroid*	1. No specific action by state and local authorities or the public is required. 2. Facility monitoring teams have been dispatched off-site, if appropriate.
b. ☐ *ALERT* *0.01 to < 0.1 rem TEDE* *0.05 to < 0.5 rem CDE Thyroid*	1. State and Local authorities should standby. 2. No specific action by the public is required at this time. 3. Facility monitoring teams have been dispatched off-site.
c. ☐ *SITE AREA EMERGENCY* *0.1 to < 1 rem TEDE* *0.5 to < 5 rem CDE Thyroid*	1. Recommend steps be taken to control access and warn the general public: ☐ Establish Coast Guard Marine Safety Zone ☐ Public and private ferry traffic: _____, _____ ☐ Public and Private Buses ☐ Other: _____ 2. Recommend preparatory steps be taken for directing the general public in specific sectors to evacuate or take shelter. 3. Facility monitoring teams have been dispatched off-site.
d. ☐ *GENERAL EMERGENCY* *≥1 rem TEDE* *≥5 rem CDE Thyroid*	1. Recommend that the general public in specific sectors be directed to evacuate or take shelter. 2. Recommend steps be taken to control access: ☐ Establish Coast Guard Marine Safety Zone ☐ Public and private ferry traffic: _____, _____ ☐ Public and Private Buses ☐ Other: _____ 3. Facility monitoring teams have been dispatched off-site.

7. METEOROLOGICAL DATA:

Wind Direction (from): _____ degrees Wind Speed: _____ mph Precipitation: ☐ Yes ☐ No
Stability Class (Pasquill Category): A B C D E F (Circle one)

8. PROGNOSIS OF SITUATION:

a. ☐ Unknown b. ☐ Stable c. ☐ Escalating d. ☐ Improving

9. OFF-SITE ASSISTANCE RESPONDING:

a. ☐ None b. ☐ Ambulance # Injured: ____ @ _____ # Contaminated/Injured _____ @ _____ c. ☐ Fire
d. Other: ☐ Coast Guard (Water Safety Zone) ☐ Department of Energy (DOE) Aerial Measuring Service (AMS)
☐ _____ Hospital ☐ FAA (to restrict over-flights)

B-1

EOP 2-4-3
CH-23 (11/12)

Appendix B

Figure 4-7 - Naval Nuclear Propulsion Program Civil Authority Notification Form, Page 2 of 2

10. RELEASE INFORMATION:

a. On-site Release ☐ Yes ☐ No

b. Off-site release ☐ Yes ☐ No

c. Release: (Check all that apply)
☐ Airborne ☐ Direct Radiation
☐ Waterborne (to waterways – not from fallout)
☐ Cobalt 60, ☐ Fission Products
☐ Elevated Release ☐ Ground/Water level Release

d. Estimated Release Start: _____
Assumed Duration of Release: _____

e. Release Actually Terminated at _____
Actual Duration of Release: _____

f. Perimeter and Off-Site Data:

SURVEY LOCATION					RELEASE (Circle one)
_____	_____	mR/hr	at _____ (survey height)	_____ Time	During/After
_____	_____	mR/hr	at _____ (survey height)	_____ Time	During/After
_____	_____	mR/hr	at _____ (survey height)	_____ Time	During/After
_____	_____	uuCi/100 cm^2		_____ Time	During/After
_____	_____	uuCi/100 cm^2		_____ Time	During/After
_____	_____	uuCi/100 cm^2		_____ Time	During/After
_____	_____	uCi/ml (air)	(☐ Radioiodine sample)	_____ Time	During/After
_____	_____	uCi/ml (air)	(☐ Radioiodine sample)	_____ Time	During/After
_____	_____	uCi/ml (air)	(☐ Radioiodine sample)	_____ Time	During/After
_____	_____	uCi/ml (water)		_____ Time	During/After
_____	_____	uCi/ml (water)		_____ Time	During/After
_____	_____	uCi/ml (water)		_____ Time	During/After

g. Plume Stage Dose Rates and Airborne Levels at Site Boundary:

_____ mrem/hr (Whole Body) _____ uCi/ml airborne (☐ Radioiodine ☐ Cobalt 60)

h. Plume Stage DOSE at Site Boundary: _____ mrem (Whole Body) _____ mrem (Thyroid)

i. Post-Plume Stage Dose at Site Boundary – See attached NARAC Plot:

Total Effective Dose Equivalent (4-Days) (TEDE): _____ mrem Whole Body

11. POST PLUME STAGE PROTECTIVE ACTIONS:

Generally the State and County will determine post-plume protective actions. Some common sense protective actions are:
☐ Changing / Washing Clothes ☐ Showering ☐ Opening windows to vent residences / businesses

☐ N/A

B-2

EOP 2-4-3
CH-23 (11/12)

Appendix B

APPENDIX 5 - SUPPORTING PLANS AND PROCEDURES

This Plan is part of a group of plans and implementing procedures that support, and are supported by each other. These documents are designed to avoid needless repetition and to reduce the possibility of conflicting information.

These plans and procedures are implemented upon receipt of notification of an event or incident, and from the effected facility and/or competent authority.

I. WASHINGTON STATE COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

The Comprehensive Emergency Management Plan (CEMP) is an all-hazards plan which identifies the general emergency management concepts and responsibilities of state agencies. It includes the 15 National Response Frameworks Emergency Support Functions (ESFs) plus 1 state-established ESFs, and 2 Annexes. The ESF on the Defense Support to Civil Authorities (ESF-20) and 2 Annexes, Terrorism and Catastrophic Event have specific application to this Plan.

II. WASHINGTON STATE EMERGENCY OPERATIONS PLAN

The *Washington State Emergency Operations Plan* (EOP) establishes the procedures to be used within the State Emergency Operations Center (SEOC). Position specific checklists are provided for each position within the SEOC. These procedures include the process for bringing the SEOC to full operational status. The EOP contains a Basic Plan, 13 Annexes, and 3 Appendices. Procedures specific to the Command and General Staff of the SEOC, known as section books, include general and specific guidance on SEOC section-specific functions and tasks.

III. WASHINGTON STATE EMERGENCY OPERATIONS OFFICER (SEOO) PROCEDURES

The Washington State Emergency Operations Officer (SEOO) Procedures provide checklists for verifying and responding to facility emergencies and include state and local agency notification steps. C-4, Notification Forms for CGS, DOE-RL, AREVA, Navy, and Trojan; C-12 Terrorist Incidents; C-23 Emergency Management Assistance Compact; C-24 Hazardous Material Incident; G-4, Telecommunications Capabilities; G-5, Pager; G-6, Staff Call-Out; G-7, EOC Activation; G-8, Emergency Power; G-12 EOC Relocation Procedures; G-18 a &b, EAS & EAS Messages.

IV. WASHINGTON STATE AGENCY PROCEDURES

Several state agencies maintain their own Emergency Operations Center procedure documents due to the nature of their responsibilities during emergencies. These include the Washington State Patrol (WSP), and the Washington State Department of Transportation (WSDOT) as well as the following primary radiological response organizations.

A. *Washington State Department of Health Radiological Response Plan*

The *Washington State Department of Health, Office of Radiation Protection, Radiological Response Plan* provide detailed instructions and guidance for responding to radiological emergencies at Columbia Generating Station, the United States Department of Energy- Hanford Site and other non-fixed nuclear facility events. Topics covered include notification systems, specific actions for each site, accident assessment, field operations, Emergency Worker/Assistance Centers, and Protective Action Guides.

B. *Washington State Department of Agriculture Radiological Emergency Procedures*

The *Washington State Department of Agriculture Radiological Emergency Procedures* include specific guidance for Washington State Department of Agriculture (WSDA) personnel and provide up-to-date information on the agricultural communities around Hanford Site and the Columbia Generating Station. Food producers, processors, dairies, and commercial farms are also included.

C. *County Emergency Plans*

Plans for each of the six Washington counties (Adams, Benton, Franklin, Grant, Walla Walla, and Yakima) potentially impacted by a radiological release from CGS or DOE Hanford provide guidance for the local jurisdictions. As Washington is a home rule state, the impacted counties own responsibilities for notification, education, evacuation, and relocation. These documents are specific for NUREG 0654/FEMA-REP-1.

D. *Facility Plans and Procedures*

Each facility maintains its own set of plans and procedures to respond to onsite emergencies. The interface with offsite response organizations is a key part of these documents. Facilities documents are on file in the State EOC.

APPENDIX 6 – ATMOSPHERIC STABILITY CATEGORIES

These Atmospheric Stability Categories are used on the Washington State Emergency Operations Center (EOC) Weather Charts, Energy Northwest Classification Notification Form (CNF), United States Department of Energy Hanford Site Notification Form, and Naval Nuclear Propulsion Program Event Classification/Notification Form.

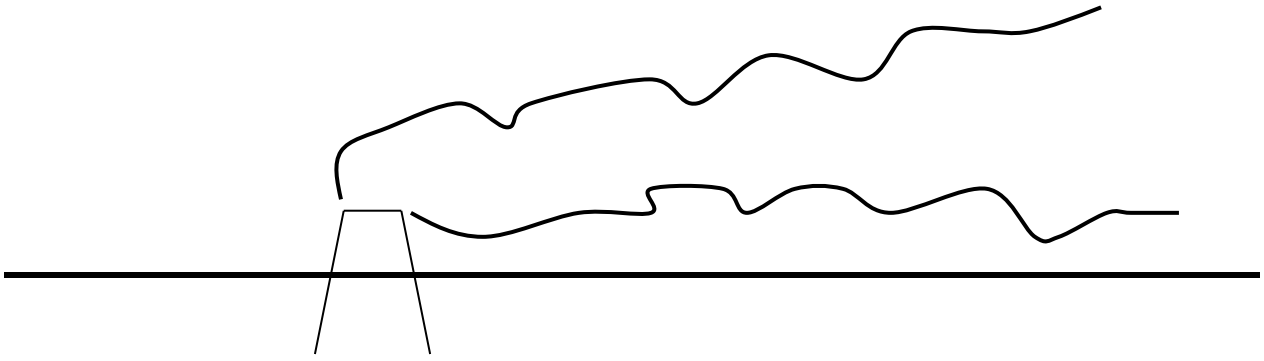
Figure 6-1 - Atmospheric Stability Categories

Classification	**Pasquill Stability Category**
Extremely Unstable (Very Unstable)	A
Moderately Unstable (Unstable)	B
Slightly Unstable (Slightly Unstable)	C
Neutral (Neutral)	D
Slightly Stable (Slightly Stable)	E
Moderately Stable (Moderately Stable)	F
Extremely Stable (Very Stable)	G

I. PASQUILL STABILITY CLASSES GENERAL DESCRIPTIONS AND DEFINITIONS

A. EXTREMELY UNSTABLE "A"

Weather conditions are very unpredictable. Wind speed average 1 meter/second but is "gusty." The temperature rapidly decreases with altitude. This condition is called superadiabatic. It is common on a hot sunny day. Due to these conditions, a contamination plume would loop and be unpredictable.



(Extremely Unstable "A")

B. MODERATELY UNSTABLE "B"

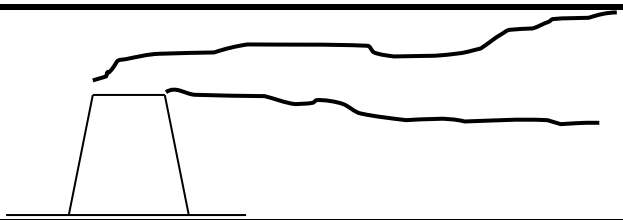
Weather conditions are still unpredictable, but less so than "A." Wind speed averages two meters/second, and is not gusty. The temperature still decreases, but not as rapidly, with altitude. Looping of a plume would still occur, but is not as severe. This condition is common on a sunny warm day.

C. SLIGHTLY UNSTABLE "C"

Weather conditions are somewhat unpredictable. Wind speeds average five meters/second. A little gustiness may be expected. The temperature still decreases and looping of a contamination plume may occur, but progressively less pronounced than "A" or "B" categories. This is an average day, slightly cloudy.

D. NEUTRAL "D"

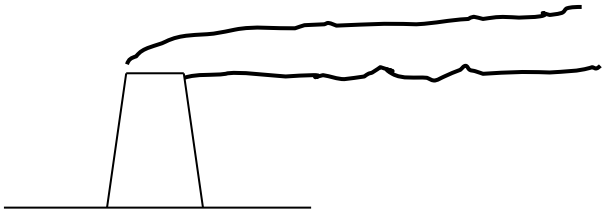
Weather conditions are more predictable. Wind speeds average five meters/second, with no expected gustiness. The temperature still decreases with altitude, but the change is less pronounced. At this point, the condition name changes from "superadiabatic" to "adiabatic." A contamination plume is more predictable, with minor looping. This condition is common on an overcast day or night (heavy overcast)



(Neutral "D")

E. SLIGHTLY STABLE "E"

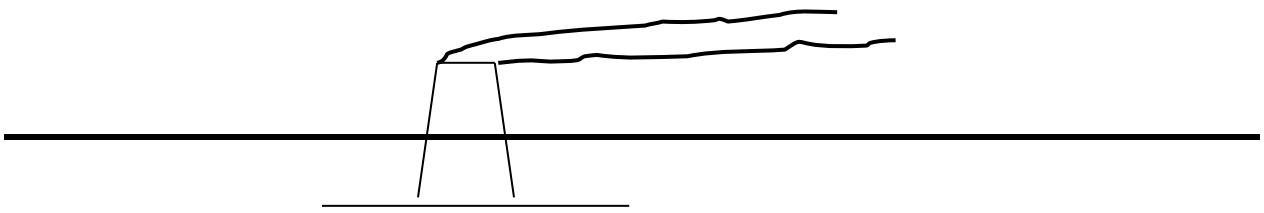
Weather conditions turn more predictable than with "D." Wind speeds average three meters/second. The temperature does not change with altitude. This condition is called "isothermic." A contamination plume is easy to predict with theis condition. "Coning" of the plume occurs. This condition generally occurs at night, and is considered an average night (partly cloudy).



(Slightly Stable "E")

F. MODERATELY STABLE "F"

Weather conditions become very predictable. Wind speeds average two meters/second. This is an inversion. Temperatures increase with altitude. This condition is opposite of a Category "A." With this condition, little vertical dispersion occurs, i.e., it doesn't reach the ground rapidly.



(Moderately Stable "F")

G. EXTREMELY STABLE "G"

This condition is very predictable, but rarely occurs. No winds blow and the temperature increases rapidly with altitude. This condition may occur over a city, which acts even less pronounced than the "F" condition.

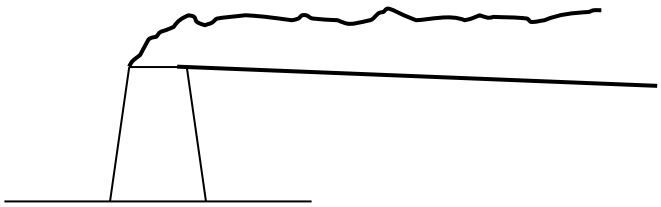
II. NOTES

- The **Unstable classes** (A, B, and C) occur during the daytime. Class A is 'Very Unstable' and corresponds to hot, calm days, which leads to the greatest amount of dispersion. A plume of smoke is broken up and spread widely with 'A' Stability.

- The **Neutral class** D can occur during day or night and corresponds to windy days or to the transform times of dawn and dusk. This is the most frequently occurring stability class.

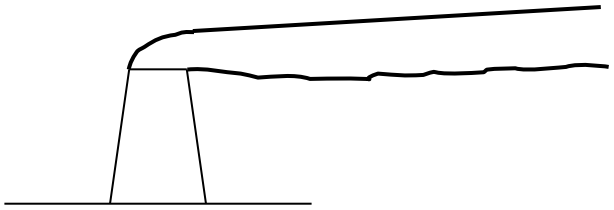
- The **Stable classes** (E and F) only occur at night. Class F is 'Very Stable' and corresponds to nights with low winds. A plume experiencing 'F' Stability will feature very little dispersion.

Stability classes also change with altitude, with day and night changes.
Inversions (stable) can occur at low altitudes, and can be topped by an unstable class. When this occurs "lofting" of a plume occurs, i.e., the contamination is carried higher into the atmosphere.



(Stable topped by an Unstable)

Or the opposite can occur. Closer to the ground it can be unstable while the inversion can exist at higher altitudes. When this occurs, fumigation occurs, i.e., plume rapidly disperses to the ground.



(Unstable at ground with inversion above)

APPENDIX 7 – EMERGENCY CLASSIFICATION LEVELS AND AGENCY NOTIFICATIONS

Figure 7-1 - Agency Notifications for ECLs

FACILITY → / AGENCY ↓	Columbia Generating Station Energy Northwest				U.S. DOE Hanford Site				AREVA NP, Inc.		U.S. Navy Naval Nuclear Propulsion Program			
	NOUE	Alert	SAE	GE	AE	Alert	SAE	GE	Alert	SAE	UE	Alert	SAE	GE
Governor	I	A	A	A	I	A	A	A	A	A	I	A	A	A
WA Emergency Management Division	I	A	A	A	I	A	A	A	A	A	I	A	A	A
WA State Department of Health	I	A	A	A	I	A	A	A	A	A	I	A	A	A
WA State Department of Agriculture	I	A	A	A	I	A	A	A	A	A	I	A	A	A
Washington State Patrol	N	A	A	A	N	A	A	A	A	A	N	A	A	A
WA State Department of Transportation	N	A	A	A	N	A	A	A	A	A	N	A	A	A
WA State Department of Ecology	I	I	I	A	N	A	A	A	A	A	N	A	A	A
WA National Guard	N	A	A	A	N	A	A	A	A	A	I	I	A	A
Energy Facility Site Evaluation Council	I	A	A	A	I	A	A	A	N	N	N	N	N	N
WA State Plume Counties	I	A	A	A	I	A	A	A	A	A	I	A	A	A
WA State Ingestion Counties	I	S	A	A	I	S	S	A	A	A	N	N	N	N
Other WA State Agencies	N	S	A	A	I	S	A	A	A	A	N	S	A	A
Oregon State	I	I	I	I	I	I	I	I	-	-	-	-	-	-
Facility Emergency Classification Levels used in this plan	**NOUE** – Unusual Event **Alert** – Alert **SAE** – Site Area Emergency **GE** – General Emergency				**AE** - Abnormal Event **Alert** – Alert **SAE** – Site Area Emergency **GE** – General Emergency				**Alert** – Alert **SAE** – Site Area Emergency		**UE** – Unusual Event **Alert** – Alert **SAE** – Site Area Emergency **GE** – General Emergency			

Legend: I – Information only, no further action necessary
S = Place organization on stand-by and wait for further instructions
A = Activate organization response as necessary
N = Not applicable

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APPENDIX 8 - AGENCY FUNCTIONAL RESPONSIBILITY MATRIX

In the event of an emergency, the affected facility, lead federal agency, lead state agencies for activated Emergency Support Functions (ESFs), and the Federal Emergency Management Agency (FEMA) should expect to send representatives to the SEOC to assist in coordinating the response to the emergency. These representatives will have access to communications information infrastructure, including telephone, conference lines, WebEOC, email, printer, and internet. The SEOC can accommodate two representatives from each of these agencies.

If resources are available, the EMD will send a liaison, typically the Radiological Program Manager, to the licensee's emergency operations facility (NUREG C.2.a.1).

The matrix below identifies who will carry out the five Incident Command Functions. The matrix identifies primary and support responsibilities with key Washington State individuals / agencies listed on the vertical axis and ESFs responsibilities along the horizontal axis (NUREG A.2.a).

Each ESF identifies the coordinating, primary and support agencies pertinent to the ESF. ESFs with multiple primary agencies may designate an ESF coordinating agency for the purposes of pre-incident planning and coordination of primary and supporting agency efforts throughout the emergency or disaster. Following is a discussion of the roles and responsibilities of the ESF coordinating, primary and support agencies.

A. COORDINATING AGENCY

The ESF coordinating agency is the entity with management oversight for a particular ESF with shared primacy. The role of the ESF coordinating agency is carried out through a collaborative approach, as agreed upon collectively by the designated primary agencies and, as appropriate, support agencies. Responsibilities of the ESF coordinating agency include the following.

- Coordination with stakeholders before, during and after an emergency or disaster, including pre-incident planning and coordination.
- Maintaining ongoing contact with ESF primary and support agencies.
- Conducting periodic ESF meetings and conference calls.
- Coordinating efforts with corresponding private-sector organizations.
- Coordinating ESF activities relating to catastrophic incident planning and critical infrastructure preparedness, as appropriate.

B. PRIMARY AGENCIES

An ESF primary agency is normally a state agency with significant authorities, roles, resources or capabilities for a particular function within an ESF. ESFs may have multiple primary

agencies and the specific responsibilities of those agencies are articulated within the relevant ESF. A state agency designated as an ESF primary agency serves as an executive agent of the SEOC to accomplish the ESF mission. When an ESF is activated in response to an emergency or disaster, a primary agency is responsible for the following.

- Supporting the ESF coordinating agency and the other primary and support agencies.
- Orchestrating state support within their functional area for affected local jurisdictions and tribes.
- Providing staff for the operations functions at fixed and field facilities.
- Notifying and requesting assistance from support agencies.
- Managing mission assignments and coordinating with support agencies, as well as appropriate local and tribal officials, operations centers, and agencies.
- Working with appropriate private-sector organizations to maximize use of all available resources.
- Supporting and keeping other ESFs and organizational elements informed of ESF operational priorities and activities through the SEOC.
- Conducting situational and periodic readiness assessments.
- Coordinating contracts and procurement of goods and services through the SEOC Logistics and Administration/Finance Sections.
- Ensuring financial and property accountability for ESF activities.
- Planning for short- and long-term response and recovery operations.
- Maintaining trained personnel to support interagency emergency response and support teams.

C. SUPPORT AGENCIES

Support agencies are those entities with specific capabilities or resources that support the primary agency in executing the mission of the ESF. When an ESF is activated, support agencies are responsible for the following.

- Participating in planning for short- and long-term response and recovery operations and the development of supporting operational plans, SOPs, checklists or other job aids, in concert with existing first-responder standards.
- Assisting in the conduct of situational assessments.
- Furnishing available personnel, equipment or other resource support as requested by the SEOC or the ESF primary agency(s).
- Providing input to periodic readiness assessments.
- Maintaining trained personnel to support interagency emergency response and support teams.

Matrix Key: **C = Coordinating Agency**

P = Primary Agency

S = Supporting Agency

Figure 8-1 - Agency Functional Responsibility Matrix

NUREG Planning Standards Functional Areas and Functions → / Incident Command System Emergency Support Functions ↑		Governor	Multi-Agency Coordination Group-- Disaster Manager	State EOC (SEOC)	ESF 1 (WSDOT) Transportation	ESF 2 (MIL) Communications	ESF 3 (DES) Public Works / Engineering	ESF 4 (WSP) Firefighting	ESF 5 (MIL) Emergency Management	ESF 6 (DSHS) Mass Care	ESF 7 (DES/MIL) Logistics / Resource Support	ESF 8 (WADOH) Public Health / Medical Services	ESF 9 (EMD) Search and Rescue	ESF 10 (Ecology / WSP) Oil Spill / Hazardous Materials	ESF 11 (WSDA) Agriculture / Natural Resources	ESF 12 (Consumers) Energy	ESF 13 (WSP) Public Safety / Security	ESF 14 (MIL) Long Term Recovery / Mitigation	ESF 15 (EMD) External Affairs	ESF 20 (WNG) Defense Support to Civil Authorities
Command and Control	Command & Control (MACG-DAC)	P	C	S																
	Alerting & Notification (ESF 2)			S		P					S									
	Telecommunications (ESF 2)					P					S						S			
	Public Information (ESF 15)			S	S		S	S			S	S		S	S	S	S		P	S
Operations	Fire & Rescue (ESF 4)							P												S
	Traffic Control (ESF 13)				S												P			S
	Emergency Medical Service (ESF 8)											P								S
	Law Enforcement (ESF 13)																P			S
Logistics	Public Health (ESF 8,10,11)											P		S	S					
	Sanitation (ESF 8)						S				S	S		P						
	Human Services (ESF 6)									P	S									
	Transportation (ESF 1)				P		S				S						S			
	Mass Care Facility (ESF 6)								S	P	S	S			S					
	Evacuation (Local)			S	S		S				S						S			
Planning	Radiological Exposure Control (ESF 8,10)											P		S			S			
	(Radiological) Public Education (ESF 8)											P								
	(Radiological) Prevention & Preparedness (ESF 8)											P			S		S			
	Protective Response Training (ESF 8)											P								

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APPENDIX 9 – EMERGENCY CLASSIFICATION SYSTEM AND EMERGENCY CLASSIFICATION LEVELS

I. EMERGENCY CLASSIFICATION SYSTEM

A standard emergency classification and action level scheme, which includes facility system and effluent parameters, is in use by the nuclear facility licensee. State and local response plans call for reliance on information provided by the facility licensees for determinations of minimum initial offsite response measures and generally consist of four Emergency Classification Levels (ECLs). The ECL system forms the basis for determining the level of response to a nuclear incident that will be consistent with the licensee (NUREG D.3).

Generic definitions for each level are below with specific site definitions and actions listed on the follow pages.

Figure 9-1 - Emergency Classification Levels

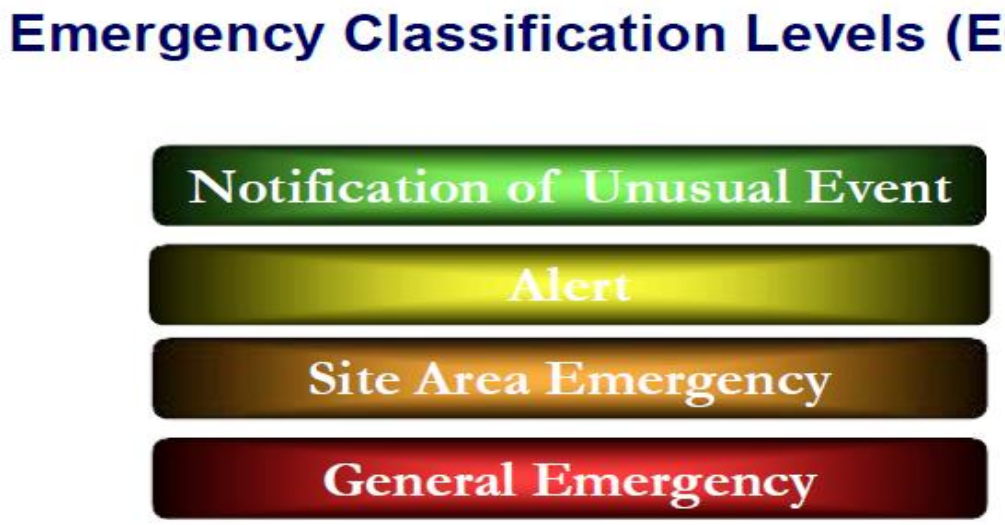


Figure 9-2 - Notification of Unusual Event

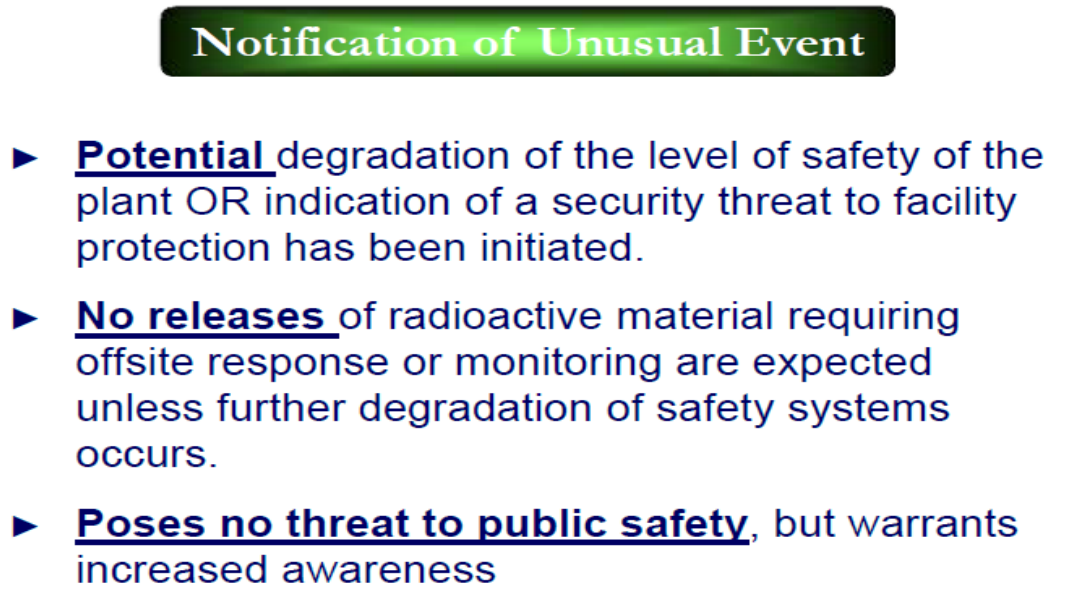


Figure 9-3 - Alert

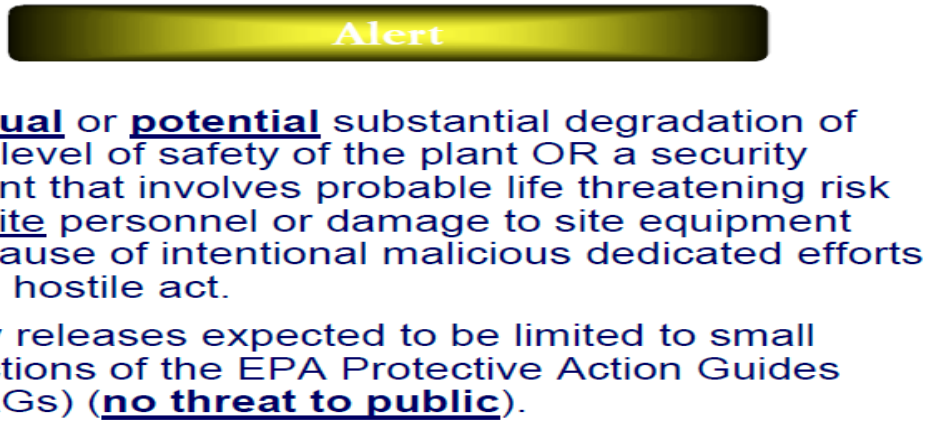


Figure 9-4 - Site Area Emergency

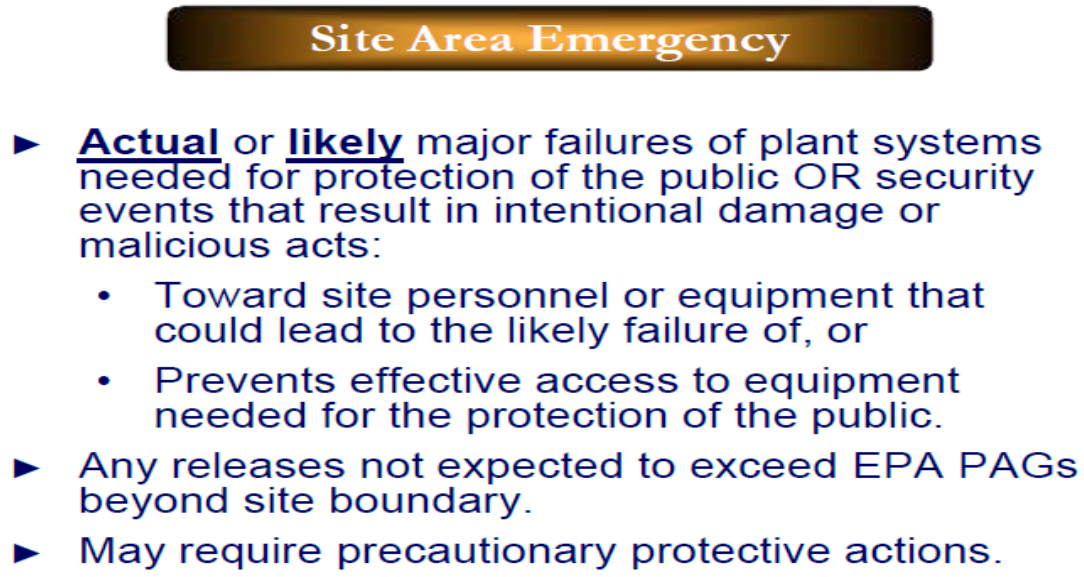
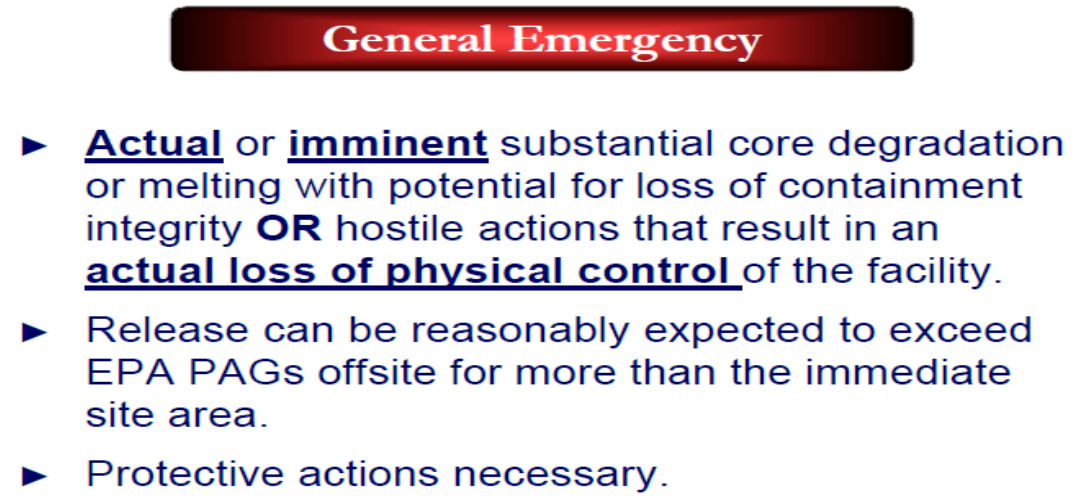


Figure 9-5 - General Emergency



II. EMERGENCY CLASSIFICATION LEVELS

A. COLUMBIA GENERATING STATION, ENERGY NORTHWEST

Emergency Action Levels (EALs) are established according to specific conditions relative to particular events or changes in instrument sensors that require emergency response measured to be performed.

An Emergency Classification is a set of plant conditions which indicate a level of risk to the public. Fuel cycle and materials facilities do not present nearly the degree of

radiological hazard that a nuclear plants do. The NRC classification system at the facility requires the use of only two emergency classification levels, Alert and Site Area Emergency. Alert represents the least severe condition and Site Area Emergency the more severe. If required to be classified, accidents involving activities licensed by the NRC shall be classified as one of these two classifications according to the definitions in 10 CFR 30.4, 40.4, and 70.4. The emergency classifications are listed below in order of increasing severity.

Figure 9-6 – CGS Emergency Classification Levels

Notice of Unusual Event Washington State EOC Operational Level – Phase I	
Description	Events are in process or have occurred which indicate a potential degradation of the level of safety of the plan or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occurs.
Action	Bring plant operating staff to a heightened state of readiness, provide for a more systematic handling of information and decision making, and ensure that notification is made to the emergency response organization, including all off-site emergency authorities.
Alert Washington State EOC Operational Level – Phase III	
Description	Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any Releases are expected to be limited to small fractions of the EPA Protective Action Guideline (PAG) exposure levels.
Action	Notify appropriate state and county agencies. Activate the Washington SEOC and plume exposure pathway county EOCs. Provide current information on the event. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.
Site Area Emergency Washington State EOC Operational Level – Phase III	
Description	A Site Area Emergency (SAE) classification indicates events are in process or have occurred that involve actual or likely major failures in the plant functions needed for protecting the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline (PAG) exposure levels beyond the site boundary.
Action	Notify appropriate state and county agencies. Activate the Washington State EOC and the plume and ingestion county EOCs. Provide current information on the

	event. Initiate automatic protective actions and dispatch emergency workers. SEOC drafts a Governor's Proclamation. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.
General Emergency Washington State EOC Operational Level – Phase III or IV	
Description	A General Emergency indicates events are in process or have occurred which involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more that the immediate site areas.
Action	Notify appropriate state and county agencies. Activate the Washington SEOC and the plume and ingestion county EOCs. Provide current information on the event, initiate automatic protective actions, dispatch of emergency workers, and prepare for relocation and food control measures. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.

B. U. S. DEPARTMENT OF ENERGY HANFORD SITE

Emergency Classification Level (ECL)

Event classification using ECLs forms the basis for notification and participation of the offsite organizations and for determining what and when protective actions will be implemented. As such, ECLs and related information must be consistent and integrated with the emergency plans and procedures of offsite Federal, tribal, state, and local organizations and should be reviewed annually, as appropriate by all parties involved in response activities.

Emergency Action Levels (EALs)

The DOE EALs are specific, predetermined, and observable criteria used to detect, recognize, and determine the classification of Hazardous Material Operational Emergencies identified by the Emergency Planning Hazards Assessment (EPHA). The EALs are typically identified as either event-based or symptom-based. The distinction arises from the available methods of detecting and recognizing the initiating conditions of the event. The development of symptom-based EALs is the preferred approach recognizing that there may be some initiating conditions that require an event-based approach. Initiating conditions must be identified specifically in the EAL procedures and must be observable and recognizable in a timely manner by responsible personnel.

Figure 9-7 - DOE Emergency Classification Levels

Alert Washington State EOC Operational Level – Phase III	
Description	An **Alert** shall be declared when events are predicted, are in progress, or have occurred that result in one or more of the following. • Actual or potential substantial degradation of level of control over hazardous materials (radiological and non-radiological). Releases are not expected to exceed applicable protective action criterion levels at or beyond the facility boundary. • An actual or potential substantial degradation in the level of safety or security that could, with further degradation, produce a Site Area Emergency or General Emergency.
Action	Notify appropriate state and county agencies. Activate the Washington SEOC and plume exposure pathway county EOCs. Provide current information on the event. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.
Site Area Emergency Washington State EOC Operational Level – Phase III	
Description	A Site Area Emergency shall be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations. • Actual or potential major failures of functions necessary for the protection of workers or the public. Releases could exceed applicable protective action criterion levels onsite but not offsite. • Actual or potential major degradation in the level of safety or security of a facility that could, with further degradation, produce a General Emergency.
Action	Notify appropriate state and county agencies. Activate the Washington SEOC and the plume and ingestion county EOCs. Provide current information on the event. Initiate automatic protective actions and dispatch emergency workers. SEOC drafts a Governor's Proclamation. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.
General Emergency Washington State EOC Operational Level – Phase III or IV	
Description	A General Emergency shall be declared when events are predicted, in progress, or have occurred that result in the actual or imminent catastrophic reduction of facility safety or security system with potential for the release of large quantities of hazardous materials(radiological or non-radiological) to the environment. The radiation dose from any release of radioactive material or a concentration in the air from any release of other hazardous material is expected to be equal to or exceed the applicable protective action criterion exposure levels at or beyond the Hanford Site boundary. Actual or imminent catastrophic reduction of facility safety or security systems, with potential for the release of large quantities of radiological or non-radiological materials to the environment have occurred. Releases are reasonably expected to exceed applicable protective action criterion levels offsite.

Action	Notify appropriate state and county agencies. Activate the Washington SEOC and the plume and ingestion county EOCs. Provide current information on the event, initiate automatic protective actions, dispatch of emergency workers, and prepare for relocation and food control measures. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.

Source: Table 4-1. Summary of Hazardous Material Operational Emergency Classifications, DOE/RL-94-02, Rev 4 June 2010

C. AREVA NP, INC.

Emergency Action Levels

Emergency Action Levels (EALs) are established according to specific conditions relative to particular events or changes in instrument sensors that require emergency response measured to be performed.

Emergency Classification System

An Emergency Classification is a set of plant conditions which indicate a level of risk to the public. Fuel cycle and materials facilities do not present near the degree of radiological hazard that a nuclear plants do. The NRC classification system at the facility requires the use of only two emergency classification levels, Alert and Site Area Emergency. Alert represents the least severe condition and Site Area Emergency the more severe. If required to be classified, accidents involving activities licensed by the NRC shall be classified as one of these two classifications according to the definitions in 10 CFR 30.4, 40.4, and 70.4. The two emergency classifications listed below in order of increasing severity.

Figure 9-8 - AREVA Emergency Classification Levels

Alert Washington State EOC Operational Level – Phase II	
Description	An Alert is defined as an incident that has led or could lead to a release to the environment of radioactive material or other hazardous material, but the release is not expected to require a response by an offsite response organization to protect persons offsite. An Alert reflects mobilization of the site emergency response organization, either in a standby mode that will activate some portions of the site emergency response organization or full mobilization, but does not indicate an expectation of offsite consequences. However, an Alert may require offsite response organizations to respond to an onsite condition.
Action	Notify appropriate state and county agencies. Activate the Washington SEOC and plume exposure pathway county EOCs. Provide current information on the event. If at any time the event becomes stabilized, the state Disaster Manager and/or EOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.
Site Area Emergency	

Washington State EOC Operational Level – Phase III	
Description	A Site Area Emergency is defined as an incident that has led to or could lead to a significant release to the environment of radioactive or other hazardous material and that could require a response by an offsite organization to protect person offsite. A Site Area Emergency reflects full mobilization of the site emergency response organization and may result in requests for offsite organizations to respond to the site.
Action	Notify appropriate state and county agencies. Activate the Washington State EOC and the plume and ingestion county EOCs. Provide current information on the event. Initiate automatic protective actions and dispatch emergency workers. SEOC drafts a Governor's Proclamation. If at any time the event becomes stabilized, the state Disaster Manager and/or SEOC Supervisor can make the decision to reduce the SEOC Activation Phase if the situation warrants it.

D. NAVAL NUCLEAR PROPULSION PROGRAM

Emergency Classification Levels: Everett, Bangor, and Kitsap Naval Bases

The Naval Nuclear Propulsion Program uses the four classes of Emergency Action Levels (EALs) specified in NUREG-0654/FEMA-REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. While the Naval Nuclear Propulsion Program uses the same four classes as commercial nuclear power plants, the Naval Nuclear Propulsion Program's methodology for establishing the EALs is different. See Annex D - Naval Nuclear Propulsion Program for additional details on this program.

Figure 9-9 - Naval Nuclear Propulsion Program Emergency Classification Levels

Notice of Unusual Event Washington State EOC Operational Level – Phase I	
Description	Unusual Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant. No release of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.
Action	Immediately notify appropriate state and local authorities and provide current information of the event. Confirm that no specific action by civil authorities or the public is required. Dispatch facility offsite monitoring personnel if appropriate.
Alert Washington State EOC Operational Level – Phase II	
Description	Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the EPA PAG exposure levels near the Federal Government property boundary.
Action	Immediately notify appropriate state and local authorities to stand by and provide

	current information on the event. Confirm that no specific protective actions are required at this time for the public. Dispatch facility offsite monitoring personnel.
Site Area Emergency Washington State EOC Operational Level – Phase III	
Description	Events are in progress or have occurred which involve actual or likely major failure or plan functions needed for protection of the public. Any releases are not expected to exceed EPA PAG exposure levels beyond the Federal Government property boundary.
Action	Immediately notify appropriate state and local authorities and provide current information on the event. Recommend steps be taken to control access and warn the general public. Recommend preparatory steps be taken for directing the general public in specific sectors to evacuate or take shelter. Dispatch facility offsite monitoring personnel.
General Emergency Washington State EOC Operational Level – Phase III or IV	
Description	Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases may exceed EPA PAG exposure levels near the Federal Government property boundary.
Action	Immediately notify appropriate state and local authorities and provide current information on the event. Recommend steps be taken to control access. Recommend the general public in specific sectors be directed to evacuate or take shelter. Dispatch facility offsite monitoring personnel.

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APPENDIX 10 – DOE EMERGENCY RESPONSE ASSETS

Resource Responsible Office	Specialty	Response Time
Radiological Assistance Program (RAP) Richland Operations Office Richland, Washington	DOE's first responders for radiological emergencies. Provides initial assessment on scene, assisting mitigation, and assists in ascertaining of additional DOE assets are requested	Response: 24/7, within 2-4 hours after request received
Federal Radiological Monitoring and Assessment Center (FRMAC) Nevada Site Office Las Vegas, Nevada	Responds to major radiological emergencies. Coordinates all federal monitoring and assessment resources.	Response: 24/7
National Atmospheric Release Advisory Capability (NARAC) Livermore Site Office Livermore, California	Computer based atmospheric dispersion and deposition modeling. Near real-time assessments of the consequences of radiation releases	Response: 24/7, within 30 minutes to 2 hours after request received.
Aerial Measuring System (AMS) Nevada Operations Office Las Vegas, Nevada	Determines extent and degree of the dispersal of airborne or deposited radioactivity.	Response: 24/7, within 8-12 hours after request received.
Radiation Emergency Assistance Center / Training Site (REAC/TS) Oak Ridge Site Office Oak Ridge, Tennessee	Prepared to handle all types of medical radiation exposure emergencies, provides medical and heal physics advice and assistance.	Response: on call 24 hours a day.
Accident Response Group (ARG) NNSA Service Center Albuquerque, New Mexico	Manages or supports the successful resolution of a U.S. nuclear weapon accident anywhere in the world	Response: 24/7, within 4-6 hours after request received.
Nuclear Emergency Support Team (NEST) Nevada Site Office Las Vegas, Nevada	Provides technical specialized assistance in the response to nuclear or radiological terrorist's threats and activities involving special nuclear material,	Response: 24/7, within 4-6 hours after request received.

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APPENDIX 11 – NUREG-0654 PLAN CRITERIA RESPONSIBILITIES

The figure below lists the NUREG-0654 / FEMA-REP-1 Planning Standard and Evaluation Criteria and the agency responsible for developing plans and procedures to meet those requirements.

Figure 11-1- Responsibilities for REP Criteria

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard A – Assignment of Responsibility (Organization Control)							
A.1.a	X	X	X	X	X	X	
A.1.b	X	X	X	X	X	X	
A.1.c	X	X	X	X	X	X	
A.1.d	X	X	X	X	X	X	
A.1.e	X	X	X	X	X	X	
A.2.a		X	X	X	X	X	
A.2.b		X	X	X	X	X	
A.3	X	X	X	X	X	X	
A.4	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard B – On-Site Emergency Organization							
B.1	X						
B.2	X						
B.3	X						
B.4	X						
B.5	X						
B.6	X						
B.7	X						
B.8	X						
B.9	X						

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard C – Emergency Response Support and Resources							
C.1.a	X	X	X	X			
C.1.b	X	X	X	X			
C.1.c	X	X	X	X	X	X	
C.2.a		X	X	X	X	X	
C.2.b	X						
C.3	X	X	X	X			
C.4	X	X	X	X	X	X	
C.5	X						
C.6	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard D – Emergency Classification System							
D.1	X						
D.2	X						
D.3		X	X	X	X	X	
D.4		X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard E – Notification Methods and Procedures							
E.1	X	X	X	X	X	X	
E.2	X	X	X	X	X	X	
E.3	X						
E.4	X						
E.5	X	X	X	X	X	X	
E.6	X	X	X	X	X	X	
E.7	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard F – Emergency Communications							
F.1.a	X	X	X	X	X	X	
F.1.b	X	X	X	X	X	X	
F.1.c	X	X	X	X	X	X	
F.1.d	X	X	X	X	X	X	
F.1.e	X	X	X	X	X	X	
F.1.F	X						
F.2	X	X	X	X	X	X	
F.3	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard G – Public Education and Information							
G.1	X	X	X	X	X	X	
G.2.	X	X	X	X	X	X	
G.3.a	X	X	X	X	X	X	
G.3.b	X						
G.4.a	X	X	X	X	X	X	
G.4.b	X	X	X	X	X	X	
G.4.c	X	X	X	X	X	X	
G.5	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard H – Emergency Facilities and Equipment							
H.1	X						
H.2	X						
H.3		X	X	X	X	X	
H.4	X	X	X	X	X	X	
H.5	X						
H.6	X						
H.7	X	X	X	X	X	X	
H.8	X						
H.9	X						
H.10	X	X	X	X	X	X	
H.11	X	X	X	X	X	X	
H.12	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard I –Accident Assessment							
I.1	X						
I.2	X						
I.3	X						
I.4	X						
I.5	X						
I.6	X						
I.7	X	X	X	X	X	X	
I.8	X	X	X	X	X	X	
I.9	X	X	X	X	X	X	
I.10	X	X	X	X			
I.11		X	X	X			

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard J – Protective Response							
J.1	X						
J.2	X	X	X	X	X	X	
J.3	X						
J.4	X						
J.5	X						
J.6	X						
J.7	X						
J.8	X						
J.9		X	X	X	X	X	
J.10.a	X	X	X	X	X	X	
J.10.b	X	X	X	X	X	X	
J.10.c	X	X	X	X	X	X	
J.10.d		X	X	X	X	X	
J.10.e		X	X	X	X	X	
J.10.f		X	X	X	X	X	
J.10.g		X	X	X	X	X	
J.10.h		X	X	X	X	X	
J.10.i		X	X	X	X	X	

J.10.j		X	X	X	X	X	
J.10.k		X	X	X	X	X	
J.10.l		X	X	X	X	X	
J.10.m	X	X	X	X			
J.11		X	X	X			
J.12		X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard K - Radiological Exposure Control							
K.1	X						
K.2	X						
K.3.a	X	X	X	X	X	X	
K.3.b	X	X	X	X	X	X	
K.4		X	X	X	X	X	
K.5.a	X	X	X	X	X	X	
K.5.b	X	X	X	X	X	X	
K.6	X						
K.7	X						
NUREG-0654 / FEMA-REP-1	**Licensee**	**State Agriculture**	**State Health**	**State EMD**	**Plume County**	**Ingestion County**	**Notes**
Planning Standard L – Medical and Public Health Support							
L.1	X	X	X	X	X	X	
L.2	X						
L.3		X	X	X			
L.4	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard M – Recovery and Reentry Planning and Post-Accident Operations							
M.1	X	X	X	X	X	X	
M.2	X						
M.3	X	X	X	X	Page II-123 RPM, June 2013	Page II-123 RPM, June 2013	Page II-123 RPM, June 2013 for explanation
M.4	X	X	X	X			

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard N – Exercises and Drills							
N.1.a	X	X	X	X	X	X	
N.1.b	X	X	X	X	X	X	
N.1.c	X						
N.1.d		X	X	X	X	X	
N.2.a	X	X	X	X	X	X	
N.2.b	X						
N.2.c	X				X	X	
N.2.d	X	X	X	X	X	X	
N.2.e (1)	X	X	X	X			See Page II-134 RPM, June 2013 for explanation
N.2.e (2)	X						See Page II-135 RPM, June 2013 for explanation
N.3	X	X	X	X	X	X	
N.4	X	X	X	X	X	X	
N.5	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard O – Radiological Emergency Response Training							
O.1	X	X	X	X	X	X	
O.1.a	X						
O.1.b		X	X	X	X	X	
O.2	X						
O.3	X						
O.4.a	X	X	X	X	X	X	
O.4.b	X	X	X	X	Page 11-140 RPM June 2013	Page 11-140 RPM June 2013	See Page II-140 RPM, June 2013 for explanation
O.4.c	X	X	X	X	Page 11-141 RPM June 2013	Page 11-141 RPM June 2013	See Page II-141 RPM, June 2013 for explanation
O.4.d	X	Page 11-141 RPM June 2013	Page 11-141 RPM June 2013	Page 11-141 RPM June 2013	X	X	See Page II-141 RPM, June 2013 for explanation
O.4.e	X						
O.4.f	X	Page 11-142 RPM June 2013	Page 11-142 RPM June 2013	Page 11-142 RPM June 2013	X	X	See Page II-142 RPM, June 2013 for explanation
O.4.g	X				X	X	
O.4.h	X	X	X	X	X	X	
O.4.i	X						
O.4.j	X	X	X	X	X	X	
O.5	X	X	X	X	X	X	

NUREG-0654 / FEMA-REP-1	Licensee	State Agriculture	State Health	State EMD	Plume County	Ingestion County	Notes
Planning Standard P – Responsibility for the Planning Effort Development, Periodic Review and Distribution of Emergency Plans							
P.1	X	X	X	X	X	X	
P.2	X	X	X	X	X	X	
P.3	X	X	X	X	X	X	
P.4	X	X	X	X	X	X	
P.5	X	X	X	X	X	X	
P.6	X	X	X	X	X	X	
P.7	X	X	X	X	X	X	
P.8	X	X	X	X	X	X	
P.9	X						
P.10	X	X	X	X	X	X	

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APPENDIX 12 - NUREG-0654/FEMA-REP-1 CROSS-REFERENCE

Abbreviation	**Description**
App	Appendix
BP	Basic Plan (Sections are part of the Basic Plan)
CGS	Columbia Generating Station
DOH	Washington State Department of Health
DOH RERPP	Department of Health, Radiological Emergency Response Plan and Procedures
ENW	Energy Northwest
F	Foreword
Fig	Figure
LO	Licensee Only
NA	Not Applicable
Para	Paragraph
TOC	Table of Contents
PO	Plan Overview
P	Promulgation Page
RR	Record of Revisions
WSDA	Washington State Department of Agriculture

EXAMPLE: BP, Section VII, Para 5, 2.1 a and b = "Basic Plan, Section VII, Paragraph 5.0 Sub-paragraph 2.1, a and b"

NUREG-0654 / FEMA-REP-1CROSS-REFERENCE
(Planning Standard P-8)

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard A – Assignment of Responsibility (Organization Control)				
A.1.a	***Each plan shall identify the State, local, Federal, and private sector organizations (including utilities), that are intended to be part of the overall response organization for Emergency Planning Zones (See [NUREG-0654/FEMA-REP-1] Appendix 5).*** ✓ Describe all Federal, State, local, Tribal, and private-sector organizations comprising the overall ORO. Tribal governments submit their own plans /procedures or may choose to be included as part of the State plans/procedures within which the Tribal land falls. ✓ Identify the principal response organizations.	Licensee State Local	BP III.A	N/A
A.1.b	***Each organization and suborganization having an operational role shall specify its concept of operations and its relationship to the total effort.*** ✓ Specify the organization's role in an emergency. Specify how the organization will carry out its role in an emergency.	Licensee State Local	BP II.E	N/A
A.1.c	***Each plan shall illustrate these interrelationships in a block diagram.*** ✓ Include an illustration of each organization and its relationship to the total emergency response effort.	Licensee State Local	BP IV Fig 5 & 6	N/A
A.1.d	***Each organization shall identify a specific individual by title who shall be in charge of the emergency response.*** ✓ Identify a specific individual, by title/position, who is in	Licensee State	BP II.D	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	charge of the emergency response. ✓ Specify who, by title/position, coordinates response activities under the authority of the person in charge.	Local		
A.1.e	***Each organization shall provide for 24-hour per day emergency response, including 24-hour per day manning of communications links.*** ✓ Specify who, by title/position, is responsible for managing the communications center. ✓ Describe the procedures to provide for 24-hour emergency response. ✓ Specify where the 24-hour communications center is located. ✓ Refer to a personnel roster for maintaining 24-hour communication. ✓ Specify primary and backup means of notification.	Licensee State Local	BP II.E	N/A
A.2.a	***Each organization shall specify the functions and responsibilities for major elements and key individuals by title, of emergency response, including the following:*** ***Command and Control, Alerting 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. The description of these functions shall include a clear and concise summary such as a table of primary and support responsibilities using the agency as one axis, and the function as the other. (See Section B for licensee.)*** ✓ Identify key individuals, by title/position, who have emergency response roles. ✓ Describe the responsibilities by functional areas ✓ Include a matrix of these responsibilities by functional area that identifies organizations responsible for primary and	State Local	BP II.D BP III.B App 8	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	support roles. A sample matrix /table is shown in Exhibit II-1.			
A.2.b	***Each plan shall contain (by reference to specific acts, codes, or statutes) the legal basis for such authorities.*** ✓ Identify the legal authority to assign lead responsibility for emergency preparedness to a particular State agency. ✓ Indicate who (e.g., the Governor) may declare a "state of emergency" (or "state of disaster emergency") and what special powers may ensue. ✓ Identify the legal authority to delegate responsibility and authority for preparedness and response at the local level. ✓ Identify any limitations on the authority of Letter of Agreement (LOA) signatories that are relevant to State, local, or tribal statues and not policy.	State Local	BP II.D BP II.F App 3	N/A
A.3	***Each plan shall include written agreements referring to the concept of operations developed between Federal, State, and local agencies and other support organizations having an emergency response role within the Emergency Planning Zones. The agreements shall identify the emergency measures to be provided and the mutually acceptable criteria for their implementation, and specify the arrangements for exchange of information. These agreements may be provided in an appendix to the plan, or the plan itself may contain descriptions of these matters and a signature page in the plan may serve to verify the agreements. The signature page format is appropriate for organizations where response functions are covered by laws, regulations, or executive orders where separate written agreements are not necessary.*** ✓ Identify assisting organizations and the type of assistance (capabilities and resources) they will provide. ✓ Include LOAs by reference or in a suitable appendix. ✓ Include or reference applicable LOAs between the licensee and ORO including arrangements for access to the NPP site, if appropriate. ✓ State that the LOAs include details on what services will be	Licensee State Local	App 3	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	provided and how the agreements will be activated. ✓ State that LOAs are reviewed annually to verify their validity. (See also Criterion P.4)			
A.4	***Each principal organization shall be capable of continuous (24-hour) operations for a protracted period. The individual in the principal organization who will be responsible for assuring continuity of resources (technical, administrative, and material) shall be specified by title.*** ✓ Identify key individuals, by title/position, who are responsible for ensuring continuity of resources in support of 24-hour operations. ✓ Include a reference to a roster that identifies at least two shifts of key staff, as well as provisions for its maintenance. ✓ Identify who is responsible, by title/position, for maintaining the roster and where the roster is located. ✓ Indicate the shift period (e.g., 8 or 12 hours), and specify that the outgoing staff will brief the incoming staff on the status of the emergency and the response activities occurring. ✓ Describe the responsibilities by the functional areas listed above.	Licensee State Local	BP II.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard B – On-Site Emergency Organization (LICENSEE ONLY)				
B.1	***Each Licensee shall specify the onsite emergency organization of plant staff personnel for all shifts and its relation to the responsibilities and duties of the normal staff complement.***	Licensee		
B.2	***Each licensee shall designate an individual as emergency coordinator who shall be on shift at all times and who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations to authorities responsible for implementing offsite emergency measures.***	Licensee		
B.3	***Each licensee shall identify a line of succession for the emergency coordinator position and identify the specific conditions for higher level utility officials assuming this function.***	Licensee		
B.4	***Each licensee shall establish the functional responsibilities assigned to the emergency coordinator and shall clearly specify which responsibilities may not be delegated to other elements of the emergency organization . . .***	Licensee		
B.5	***Each licensee shall specify the positions or title and major tasks to be performed by the persons to be assigned to the functional areas of emergency activity. . .***	Licensee		
B.6	***Each licensee shall specify the interfaces between and among the onsite functional areas of emergency activity, licensee headquarters support, local service support, and State and local government response organizations . . .***	Licensee		
B.7	***Each licensee shall specify the corporate management, administrative, and technical support personnel who will***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	augment the plant staff as specified in the table entitled "Minimum Staffing Requirements for Nuclear Power Plant Emergencies (Table B-1) and in the following areas. . .			
B.8	***Each licensee shall specify the contractor and private organizations who may be requested to provide technical assistance to and augmentation of the emergency organization.***	Licensee		
B.9	***Each licensee shall identify the services to be provided by local agencies for handling emergencies, e.g., police, ambulance, medical, hospital, and fire-fighting organizations shall be specified. . .***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard C – Emergency Response Support and Resources				
C.1.a	***Specific persons by title authorized to request Federal assistance; see A.1.d and A.2.a.*** ✓ Identify, by title/position, the key officials authorized to request Federal assistance.	Licensee State	BP II.D	N/A
C.1.b	***Specific Federal resources expected, including expected times of arrival at specific nuclear facility sites;*** ✓ A process for identifying potential shortfalls in resources. ✓ Information on and a list of resources that an ORO can expect to receive from the Federal Government. ✓ An estimate of how long it will take those resources to arrive at the desired location.	Licensee State	Licensee Plan App 10	N/A
C.1.c	***Specific licensee, State, and local resources available to support the Federal response, e.g., airfields, command posts, telephone lines, radio frequencies, and telecommunications centers.*** ✓ Describe the facilities that may be made available to Federal response personnel. ✓ Identify the general geographical areas for the locations of these facilities and the unique features of the area. ✓ Describe the interoperable communications plans/procedures, equipment, and protocols that may be made available to Federal response personnel.	Licensee State Local	BP IV.C	N/A
C.2.a	***Each principal offsite organization may dispatch representatives to the licensee's Emergency Operations Facility. (State technical analysis representatives at the EOF are preferred.)*** ✓ Indicate whether the ORO plans to send a representative to the licensee's emergency operations facility and if so, which person, by title/position, would be dispatched.	State Local	App 8	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
C.2.b	***The licensee shall prepare for the dispatch of a representative to principal offsite governmental emergency operations centers.***	Licensee		
C.3	***Each organization shall identify radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring and analyses services which can be used in an emergency.*** ✓ List the laboratories that are qualified to analyze samples of materials that may have been contaminated with radionuclides. ✓ Indicate the radiochemical and analytical capabilities of each laboratory (e.g., the ability to analyze milk and other foodstuffs, soil samples, and water samples). ✓ Indicate the number of samples the laboratories would be able to process in a given period. ✓ Include the location and potential availability of the laboratories.	Licensee State	DOH RERPP	N/A
C.4	***Each organization shall identify nuclear and other facilities, organizations, or individuals that can be relied upon in an emergency to provide assistance. Such assistance shall be identified and supported by appropriate letters of agreement.*** ✓ Meet the requirements specified in Criterion A.3.	Licensee State Local	BP III.B App 3 App 10	N/A
C.5	***The offsite response organization* shall identify liaison personnel to advise and assist State and local officials during an actual emergency in implementing those portions of the offsite plan where State and local response is identified***	Licensee		
C.6	***Each organization shall make provisions to enable onsite response support from OROs in a hostile action-based incident as needed.*** ✓ Include provisions to allow ORO law enforcement and other initial first responders prompt access to the NPP site. ✓ Include provisions for coordination between in-bound response resources and evacuation efforts. ✓ Identify any mutual aid agreements for alternate personnel to supplement local resources (see also Criterion A.3)	Licensee State Local	Annex H VI.D	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	✓ Address radiological training requirements for the primary and alternate personnel. ✓ Include procedures for activating qualified alternate personnel.			

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard D – Emergency Classification System				
D.1	***An emergency classification and emergency action level scheme as set forth in [NUREG-0654/FEMA-REP-1] Appendix 1 must be established by the licensee . . .***	Licensee		
D.2	***The initiating conditions shall include the example conditions found in [NUREG-0654/FEMA-REP-1] Appendix 1 and all postulated accidents in the Final Safety Analysis Report (FSAR) for the nuclear facility.***	Licensee		
D.3	***Each State and local organization shall establish an emergency classification and emergency action level scheme consistent with that established by the facility licensee.*** ✓ Include reference to the standard Emergency Classification Levels (ECLs) ✓ Acknowledge that the ECL system will form the basis for determining the level of response to a nuclear incident that will be consistent with the licensee.	State Local	App 9	N/A
D.4	***Each State and local organization should have procedures in place that provide for emergency actions to be taken which are consistent with the emergency actions recommended by the nuclear facility licensee, taking into account local offsite conditions that exist at the time of the emergency.*** ✓ Indicate the emergency actions to be taken to protect the public at each ECL, given the local conditions at the time of the emergency.	State Local	App 7 App 9 Fig 9-6 Fig 9-7 Fig 9-8 Fig 9-9	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard E – Notification Methods and Procedures				
E.1	***Each organization shall establish procedures that describe mutually agreeable bases for notification of response organizations consistent with the emergency classification and action level scheme set forth in [NUREG-0654/FEMA-REP-1] Appendix 1. These procedures shall include <u>means for verification of messages</u>. The specific details of verification need not be included in the plan.*** ✓ Initial notification from the licensee to a designated offsite 24-hour warning point (e.g., fire or police department dispatch, 911 emergency center). Offsite plans/procedures indicate the location of the warning point and the method of notification and backup (e.g., commercial telephone, dedicated telephone, fax machine, or pager). If the initial notification from the licensee to the warning point is over a non-secure system, the criterion requires message verification (e.g., via a return call). If the primary means of notification from the licensee to the warning point is on a dedicated system (i.e., one capable of being used only by a known, limited number of organizations), OROs may choose whether to verify receipt of notification. ✓ Initial notification to licensee and the ORO when a notification originates from an entity other than the licensee. The plans/procedures identify the points of contact for the licensee and ORO, method of notification and backup, and method of verifying notification. ✓ Subsequent notifications from the licensee and/or ORO to other offsite organizations. The plans/procedures may call for subsequent notifications to locations other than the warning point or other designated entities. For example, after the EOC is operational, the plans /procedures may state that	Licensee State Local	BP II.E App 7 App 9	SEOO Emergency Response Procedures C-4A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	all further notifications are made directly to the EOC rather than to the warning point.			
E.2	***Each organization shall establish procedures for alerting, notifying, and mobilizing emergency response personnel.*** ✓ Indicate who, by title /position, is responsible for notifying each staff member, either by including a notification call list or making reference to such a list. ✓ Describe the process used to notify all applicable OROs once the 24-hour warning point, or other designated entity, has received and verified the initial notification, if necessary. ✓ Describe who, by title/position, has the responsibility for notifying all appropriate organizations once the initial notification to the 24-hour warning point has been made. For example, the responsibility of the warning point for notifications may end after it places a call to the State and county emergency management agencies. A diagram that shows how the notification process works (e.g., call-down) may supplement a plan/procedure description. ✓ Indicate the specific notifications made at each ECL. ✓ Indicate the means by which notifications will be accomplished (e.g., pagers, telephones, radios, auto dialers).	Licensee State Local	BP II.B BP II.E App 7 App 9	SEOO Emergency Response Procedures C-4A
E.3	***The licensee, in conjunction with State and local organizations, shall establish the contents of the initial emergency messages to be sent from the plant . .***	Licensee		
E.4	***Each licensee shall make provisions for follow-up messages from the facility to offsite authorities . . .***	Licensee		
E.5	***State and local government organizations shall establish a system for disseminating to the public appropriate information contained in initial and follow-up messages received from the licensee, including the appropriate notification to appropriate broadcast media, e.g., the Emergency Alert System (EAS.)*** ✓ List the broadcast stations and other systems (e.g., tone alert	Licensee State Local	Annex E VIII.D County responsibilities detailed in relevant county plans	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	radios, route alerting) used to provide emergency instructions to the public. ✓ Establish individual responsibilities for each broadcast station and system and document commitments between them and the ORO (e.g., MOUs and/or LOAs) to honor these responsibilities in a radiological emergency. (Also see Criterion A.3.) ✓ Document or reference the broadcast stations' or systems' capability to participate in the public notification process. A statement that the station participates in a "Local Emergency Alert System Operational Area Plan" is considered satisfactory. ✓ Identify broadcast station and system points of contact, by title/position, who are accessible 24 hours a day, 7 days a week. (Also see Criterion A.4.) ✓ Establish the interval for broadcasting official information statements. ✓ Identify an alternate station, if a selected station does not have a backup power supply.			
E.6	***Each organization shall establish administrative and physical means, and the time required for notifying and providing prompt instruction to the public within the plume exposure pathway Emergency Planning Zone. (See [NUREG-0654/FEMA-REP-1] Appendix 3) It shall be the licensee's responsibility to demonstrate that such means exist, regardless of who implements this requirement. It shall be the responsibility of the State and local governments to activate such a system.*** ✓ State that the Alert and Notification System (ANS) is capable of meeting the 15-minute design objective. ✓ Describe the primary and backup 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, and their respective point(s) of activation.	Licensee State Local	Annex E VIII.D.2 County responsibilities detailed in relevant county plans	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	✓ Describe the administrative means of alert and notification, including: o The title of the organizations or individuals responsible for: (1) making the decision to activate the ANS and (2) activating the system; o The ANS activation procedures and time required to implement these procedures; and o A discussion of how the requirements for periodic siren testing will be accomplished.			
E.7	***Each organization shall provide written messages intended for the public, consistent with the licensee's classification scheme. In particular, draft messages to the public giving instructions with regard to specific protective actions to be taken by occupants of affected areas shall be prepared and included as part of the State and local plans. Such messages should include the appropriate aspects of sheltering, ad hoc respiratory protection, e.g., handkerchief over mouth, thyroid blocking, or evacuation. The role of the licensee is to provide supporting information for the messages. For ad hoc respiratory protection see "Respiratory Protective Devices Manual" American Industrial Hygiene Association, 1963, pp. 123-126.*** ✓ EAS message templates that would be modified as necessary and sent to the EAS station(s) for broadcast; ✓ Provisions for special news broadcasts as supplements to the EAS message; ✓ Provisions for foreign language translations of EAS messages and special news broadcasts, if required; ✓ The process for selecting, modifying, approving, and releasing messages; and ✓ The methodology for EAS message rebroadcast, along with the frequency (how many times and at what interval, such as every 15 minutes).	Licensee State Local	Annex E VIII.D.2 App 5 C	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard F – Emergency Communications				
F.1.a	***Provision for 24-hour per day notification to and activation of the State/local emergency response network; and, at a minimum, a telephone link and alternate, including 24-hour per day manning of communications links that initiate emergency response actions;*** ✓ Describe the equipment used (e.g., dedicated telephone line or specific radio net) for notifying and communicating with the organization's personnel and other response organizations. The equipment must include a primary link and alternate means of communication. ✓ Describe the system used to ensure 24-hour availability to receive and pass along notifications. The system is generally a continuously staffed warning point (e.g., a police dispatch center) or a duty officer system in which the designated duty officer carries a pager.	Licensee State Local	BP II.E	N/A
F.1.b	***Provision for communication with contiguous State/local governments within the Emergency Planning Zones;*** ✓ Primary and backup communication capability between all local governments within the plume EPZ; ✓ Primary and backup communication capability between each local government and any associated host/support counties located outside the plume EPZ; and ✓ Primary and backup communication capability between each State government and all local governments within its jurisdiction and with other State governments within the plume and/or ingestion EPZ.	Licensee State Local	BP II BP V	N/A
F.1.c	***Provision for communications, as needed, with Federal emergency response organizations;*** ✓ The system(s) available for communicating with Federal response organizations (e.g., ordinary commercial telephone, dedicated telephone lines, or radio nets). ✓ The primary system and at least one backup system.	Licensee State Local	BP II.E	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
F.1.d	***Provision for communications between the nuclear facility and the licensee's Emergency Operations Facility, State and local emergency operations centers, and radiological monitoring teams;*** ✓ The primary and backup communication systems that provide links to the emergency operations facility; and ✓ For jurisdictions that deploy radiological monitoring and other field teams, the primary and backup systems used to communicate with the teams.	Licensee State Local	BP II.E Fig 4	N/A
F.1.e	***Provision for alerting or activating emergency personnel in each response organization;*** ✓ Contain a general description of how personnel are activated (i.e., notified of an incident and requested to report to their emergency duty station). ✓ Include or reference lists of names and phone numbers of personnel to alert or activate based on the ECL.	Licensee State Local	BP II.B BP II.E Fig 4	SEOO Emergency Response Procedures C-4A
F.1.f	***Provision for communication by the licensee with NRC headquarters and NRC Regional Office Emergency Operations Centers and the licensee's Emergency Operations Facility and radiological monitoring team assembly area.***	Licensee		
F.2	***Each organization shall ensure that a coordinated communication link for fixed and mobile medical support facilities exists.*** ✓ Identification of communications links between the ambulance and the designated hospital /medical facilities; and ✓ A description of primary and backup communications among the hospital/medical facilities, the jurisdiction's EOC, and the licensee.	Licensee State Local	BP II BP V	N/A
F.3	***Each organization shall conduct periodic testing of the entire emergency communications system (see [NUREG-0654/FEMA-REP-1] Evaluation Criteria H.10 and N.2.a, and Appendix 3.)*** ✓ Describe the test method and period (e.g., monthly, quarterly or annually) for each communication system used for the functions identified in Criteria F.1. and F.2.	Licensee State Local	BP II.E	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard G – Public Education and Information				
G.1	***Each organization shall provide a coordinated periodic (at least annually) dissemination of information to the public regarding how they will be notified and what their actions should be in an emergency. This information shall include, but not necessarily be limited to:*** ***a. educational information on radiation; b. contact for additional information; c. protective measures, e.g., evacuation routes and relocation centers, sheltering, respiratory protection, radioprotective drugs; and d. special needs of the handicapped. Means for accomplishing this dissemination may include, but are not necessarily limited to: information in the telephone book; periodic information in utility bills; postings in public areas; and publications distributed on an annual basis.*** ✓ A description of each item (e.g., brochure, calendar, utility bill insert) used to disseminate public information annually. Copies of these items must be provided to FEMA for review on an annual basis through the ALC. In addition to the ALC submission, new public information brochures /calendars, etc. will be sent to FEMA prior to dissemination for a baseline review, and will then be submitted annually thereafter with the ALC or for review during a SAV, exercise, separate mailing, etc. ✓ Provisions for identifying individuals needing assistance with evacuation and how personal information will be protected. ✓ A description of materials directed to transient populations. ✓ A description of materials addressing information for the ingestion pathway, if separate from the general public information materials. ✓ A description of each item translated into non-English languages that are spoken within the EPZ as well as information accessible to other persons with disabilities and access/functional needs located within the EPZ.31	Licensee State Local	Annex E.VII	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
G.2	***The public information program shall provide the permanent and transient adult population within the plume exposure EPZ an adequate opportunity to become aware of the information annually. The programs should include provision for written material that is likely to be available in a residence during an emergency. Updated information shall be disseminated at least annually. Signs or other measures (e.g., decals, posted notices, or other means placed in hotels, motels, gasoline stations, and phone booths) shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an emergency or accident occurs. Such notices should refer the transient to the telephone directory or other source of local emergency information and guide the visitor to appropriate radio and television frequencies.*** ✓ Methods used to disseminate public information, assuring that all residences in the plume EPZ will be covered, and that written material will likely be available in a residence during an emergency; ✓ Methods for distributing ingestion exposure pathway information annually within the 10-mile EPZ, and provisions for distribution within the 50-mile EPZ if needed; and ✓ Methods used to disseminate and maintain public information for transient populations.	Licensee State Local	Annex E.VII	N/A
G.3.a	***Each principal organization shall designate the points of contact and physical locations for use by news media during an emergency.*** ✓ Identify the location where the jurisdiction will brief the media, whether at a Joint Information Center (JIC), separate facility, or both. ✓ Include a physical description of the facility, including its location and size, and any steps necessary to activate it for use (e.g., coordination with other organizations consistent with ICS, installation of equipment, and rearranging of furnishings), for jurisdictions that operate a media facility. ✓ If the primary facility is located within the EPZ, identify an	Licensee State Local	Annex E.VII	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	alternate facility located outside the EPZ available to provide the same capabilities, and describe the facility with the same level of detail specified for the primary facility. ✓ Describe the organization's capability to answer media telephone inquiries. ✓ Describe the mechanism for coordination between the team of personnel designated to answer media calls and the organization's public information officer (PIO), as well as with points of contact located at other facilities supporting the JIC.			
G.3.b	***Each licensee shall provide space that may be used for a limited number of the news media at the Emergency Operations Facility.***	Licensee		
G.4.a	***Each principal organization shall designate a spokesperson who should have access to all necessary information.*** ✓ Identify who, by title/position, will serve as the main PIO for the organization and where the PIO will be located. If media interaction is planned for more than one location, a main PIO is designated for each location. ✓ Describe how the PIO will obtain access to information about the emergency and the organizations' response efforts, gather and verify such information, and coordinate /communicate with the appropriate personnel for approval in advance of disseminating any information to the public and/or the media. ✓ If the PIO will be operating at a location remote from the EOC, describe: • Who, by title/position, will be the main point of contact in the EOC for exchanging information with the PIO; and • What physical means (e.g., telephone, fax, or computer network) will be used for communicating information between the EOC and the PIO. ✓ Include procedures for authorizing release of information and, in particular, for control and release of sensitive information.	Licensee State Local	Annex E VII	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
G.4.b	***Each organization shall establish arrangements for timely exchange of information among designated spokespersons.*** ✓ The exchange, discussion, and coordination of information among PIOs, if information is provided to the media primarily through a JIC (e.g., meetings to coordinate and share information prior to press briefings / conferences, circulation of press releases among the PIOs and their staffs); ✓ If the jurisdiction has a PIO at a separate facility (in addition to or instead of the JIC), equipment and procedures for timely exchange of information with other PIOs, including: • Who, by title/position, is responsible for ensuring that the exchange takes place; and • What physical communication means (e.g., telephone, fax, computer network, electronic mail, video, or Internet-based teleconference system) will be used.	Licensee State Local	Annex E VII.B.2	N/A
G.4.c	***Each organization shall establish coordinated arrangements for dealing with rumors.*** ✓ Describe the capability to receive and effectively respond to numerous simultaneous telephone calls from the general public and respond to questions, requests, or comments posed by the public. ✓ Identify the method for publicizing the dedicated telephone number(s) and other contact information (e.g.,Website address) for public inquiries and/or media information. ✓ Include or describe procedures to effectively monitor media information messages to identify incomplete, inaccurate, or ambiguous information related to the emergency in the public domain. ✓ If a jurisdiction sends a delegate to a joint public inquiry program or relies on another organization to answer public inquiries, identify which organization provides or coordinates the public inquiries program and the method for contacting that organization.	Licensee State Local	Annex E VII.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
G.5	***Each organization shall conduct coordinated programs at least annually to acquaint news media with the emergency plans, information concerning radiation, and points of contact for release of public information in an emergency.*** ✓ Provisions for an annual media briefing. ✓ Distribution of written materials (media kits) covering topics described below. ✓ Each item provided as baseline information about REP to the local media.	Licensee State Local	Annex E VIII.A	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard H – Emergency Facilities and Equipment				
H.1	***Each licensee shall establish a Technical Support Center and an onsite operations support center (assembly area) in accordance with NUREG-0696.35***	Licensee		
H.2	***Each licensee shall establish an Emergency Operations Facility from which evaluation and coordination of all licensee activities related to an emergency is to be carried out and from which the licensee shall provide information to Federal, State, and local authorities responding to radiological emergencies in accordance with NUREG-0696.36***	Licensee		
H.3	***Each organization shall establish an emergency operations center for use in directing and controlling response functions.*** ✓ A description of or reference to the location and layout of the EOC; ✓ A listing of facility equipment necessary to support operations; ✓ The EOC's backup power capability, if available; ✓ Details and methods for access control to the facility; ✓ Reference to the location of the alternate EOC, if applicable; and ✓ The organization and official, by title/position, responsible for maintaining the operational readiness of the EOC.	State Local	BP II.B	N/A
H.4	***Each organization shall provide for timely activation and staffing of the facilities and centers described in the plan.*** ✓ Detailed procedures for activation and staffing of all emergency facilities. ✓ Criteria used for declaring facilities operational. ✓ A list of staff, by title/position, assigned to each facility and rosters of key positions.	Licensee State Local	BP II.B Washington State Emergency Operations Plan	SEOO Emergency Response Procedures C-4A
H.5	***Each licensee shall identify and establish onsite monitoring systems that are to be used to initiate emergency measures in accordance with [NUREG-0654/FEMA-REP-1] Appendix 1, as well as those to be used for conducting assessment.***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
H.6	***Each licensee shall make provision to acquire data from or for emergency access to offsite monitoring and analysis equipment, including . . .***	Licensee		
H.7	***Each organization, where appropriate, shall provide for offsite radiological monitoring equipment in the vicinity of the nuclear facility.*** ✓ Radiological monitoring equipment, by type and number, that is located or stored near the NPP or that will be brought in by the ORO; and ✓ Fixed radiological monitoring stations near the NPP.	Licensee State-DOH Local	Annex H III.A Annex H V. A DOH RERPP	N/A
H.8	***Each licensee shall provide meteorological instrumentation and procedures that satisfy the criteria in [NUREG-0654/FEMA-REP-1] Appendix 2 and provisions to obtain representative current meteorological information from other sources.***	Licensee		
H.9	***Each licensee shall provide for an onsite operations support center (assembly area) that shall have adequate capacity and supplies, including, for example, respiratory protection, protective clothing, portable lighting, portable radiation monitoring equipment, cameras, and communications equipment for personnel present in the assembly area.***	Licensee		
H.10	***Each organization shall make provisions to inspect, inventory, and operationally check emergency equipment/instruments at least once each calendar quarter and after each use. There shall be sufficient reserves of instruments/equipment to replace those that are removed from emergency kits for calibration or repair. Calibration of equipment shall be at intervals recommended by the supplier of the equipment.*** ✓ The organization(s) responsible for maintenance of all radiological equipment; and ✓ Specifics regarding the inventory, operational checks, and calibration for dosimetry, portal monitors, radiological survey equipment, air sampling equipment, and laboratory equipment.	Licensee State-DOH Local	Annex H V.A DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
H.11	***Each plan shall, in an appendix, include identification of emergency kits by general category (protective equipment, communications equipment, radiological monitoring equipment, and emergency supplies).*** ✓ The number and contents of emergency kits by location and general category; and ✓ The quantity of each item per kit.	Licensee State-DOH Local	Annex H V.A DOH RERPP	N/A
H.12	***Each organization shall establish a central point (preferably associated with the licensee's Emergency Operations Facility), for receipt and analysis of all field monitoring data and coordination of sample media.*** ✓ The organization(s) responsible for assessing radiological data; ✓ The location of the central point for compiling and analyzing all field monitoring data, including the means used by FMTs to relay information to the central point; and ✓ The coordination and analysis of sample media, including procedures for transporting samples and transferring the data from the laboratory to the central point.	Licensee State-DOH Local	Annex H V.B DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard I – Accident Assessment				
I.1	***Each licensee shall identify plant system and effluent parameter values characteristic of a spectrum of off-normal conditions and accidents and shall identify the plant parameter values or other information that correspond to the example initiating conditions of [NUREG-0654/FEMA-REP-1] Appendix 1 . . .***	Licensee		
I.2	***Onsite capability and resources to provide initial values and continuing assessment throughout the course of an accident shall include post-accident sampling capability, radiation and effluent monitors, in-plant iodine instrumentation, and containment radiation monitoring . . .***	Licensee		
I.3	***Each Licensee shall establish methods and techniques to be used for determining: a. the source term of releases of radioactive material within plant system . . .***	Licensee		
I.4	***Each licensee shall establish the relationship between effluent monitor readings and onsite and offsite exposures and contamination for various meteorological conditions.***	Licensee		
I.5	***Each licensee shall have the capability of acquiring and evaluating meteorological information sufficient to meet the criteria of [NUREG-0654/FEMA-REP-1] Appendix 2 . . .***	Licensee		
I.6	***Each licensee shall establish the methodology for determining the release rate/projected doses if the instrumentation used for assessment is off-scale or inoperable.***	Licensee		
I.7	***Each organization shall describe the capability and resources for field monitoring within the plume exposure Emergency Planning Zone that are an intrinsic part of the concept of operations for the facility.*** ✓ Which organizations have primary responsibility for field monitoring activities; and ✓ The capabilities and resources State, local, Tribal, and non-governmental organizations will contribute.	Licensee State-DOH Local	App 5 App 6 DOH RERPP	N/A
I.8	***Each organization, where appropriate, shall provide methods, equipment, and expertise to make rapid assessments of the***	Licensee State-DOH	App 8	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways. This shall include activation, notification means, field team composition, transportation, communication, monitoring equipment, and estimated deployment times. The process for activating and notifying field teams; ✓ The composition of the FMTs (e.g., organizations involved, number of teams [two or more], number of members on each team); ✓ The types and sources of transportation resource(s) for FMTs and estimated deployment times to reach a site from various locations, if applicable; ✓ The location of any staging areas; ✓ The title/position of the person responsible for directing FMTs to proper locations for monitoring and air sampling; ✓ The monitoring, sampling, and communications equipment that will be used by FMTs; ✓ The procedures that will be followed for field monitoring, sample collection, and field sample analysis; ✓ The laboratories to which specific samples will be sent for analysis, including estimated delivery and analysis times, transportation and temporary storage arrangements, and procedures for chain-of custody records; and ✓ How the ORO will obtain centerline measurements.	Local	Annex E DOH RERPP	
I.9	***Each organization shall have a capability to detect and measure radioiodine concentrations in air in the plume exposure EPZ as low as 10-7 Ci/cc (microcuries per cubic centimeter) under field conditions. Interference from the presence of noble gas and background radiation shall not decrease the stated minimum detectable activity.*** ✓ The capability to collect air samples within the plume and perform analysis that will detect radioiodine concentrations as low as 10-7 μCi/cc under field conditions; and	Licensee State-DOH Local	Annex D DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	The process used for collecting air samples, including location of sampling points, timing of sample collection, and techniques used to collect and count (see Criterion I.8).			
I.10	***Each organization shall establish means for relating the various measured parameters (e.g., contamination levels, water, and air activity levels) to dose rates for key isotopes (i.e., those given in [NUREG-0654/FEMA-REP-1] Table 3, page 18) and gross radioactivity measurements. Provisions shall be made for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with the protective action guides.***41 ***The detailed provisions shall be described in separate procedures.*** ✓ Personnel and equipment that will be involved in dose assessment; ✓ Computer software and documentation, including data input procedures, that will be used; ✓ Alternate methods that may be used (e.g., hand calculations); ✓ Information/variables to run the model, including proper units of measure; ✓ Means for obtaining initial information (e.g., from licensee monitors or inventory estimates); ✓ Use of field data to verify and modify model results; and ✓ Procedures for comparing dose results with those of other organizations that perform dose assessments.	Licensee State-DOH	Annex F DOH RERPP	N/A
I.11	***Arrangements to locate and track the airborne radioactive plume shall be made, using either or both Federal and State resources.***	State-DOH	DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard J – Protective Response				
J.1	***Each licensee shall establish the means and time required to warn or advise onsite individuals and individuals who may be in areas controlled by the operator, including:*** ***a. Employees not having emergency assignments;*** ***b. Visitors;*** ***c. Contractor and construction personnel; and*** ***d. Other persons who may be in the public access areas on or passing through the site or within the owner-controlled area.***	Licensee		
J.2	***Each licensee shall make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density, and specific radiological conditions.*** ✓ Assistance that will be provided to licensees during an evacuation of the site or a statement that no assistance is required; ✓ The alternatives that will be implemented during inclement weather and/or high traffic densities; and ✓ Provisions for coordinating arrangements with other offsite organizations to expedite evacuation of onsite personnel.	Licensee State Local	BP III.B Annex A App1 App 2	N/A
J.3	***Each licensee shall provide for radiological monitoring of people evacuated from the site.***	Licensee		
J.4	***Each licensee shall provide for the evacuation of onsite non-essential personnel in the event of a Site or General Emergency and shall provide a decontamination capability at or near the monitoring point specified in J.3.***	Licensee		
J.5	***Each licensee shall provide for a capability to account for all individuals onsite at the time of the emergency and ascertain the names of missing individuals within 30 minutes of the start of an emergency and account for all onsite individuals continuously thereafter.***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
J.6	***Each licensee shall, for individuals remaining or arriving onsite during the emergency, make provisions for:*** ***a. Individual respiratory protection;*** ***b. Use of protective clothing; and*** ***c. Use of radioprotective drugs (e.g., individual thyroid protection).***	Licensee		
J.7	***Each licensee shall establish a mechanism for recommending protective actions to the appropriate State and local authorities. These shall include Emergency Action Levels corresponding to projected dose to the population-at-risk, in accordance with [NUREG-0654/FEMA-REP-1] Appendix 1 and with the recommendations set forth in Tables 2.1 and 2.2 of the Manual of Protective Actions for Nuclear Incidents (EPA-400-R-92-001).***41 ***As specified in NUREG-0654/FEMA-REP-1] Appendix 1, prompt notification shall be made directly to the offsite authorities responsible for implementing protective measures within the plume exposure pathway Emergency Planning Zone.***	Licensee		
J.8	***Each licensee's plan shall contain time estimates for evacuation within the plume exposure EPZ. These shall be in accordance with [NUREG-0654/FEMA-REP-1] Appendix 4.***	Licensee		
J.9	***Each State and local organization shall establish a capability for implementing protective measures on the basis of Protective Action Guides and other criteria. This shall be consistent with the recommendations of the EPA regarding exposure resulting from passage of radioactive airborne plumes, (EPA-400-R-92-001)***42 ***and with those of DHEW (HHS)/FDA regarding radioactive contamination of human food and animal feeds as published in the Federal Register of August 13, 1998 (63 FR 4340***43***).*** ✓ The organization's procedures for making PADs and implementing protective actions based upon PAGs that are consistent with EPA recommendations; and ✓ The process followed to ensure coordination of PADs with all appropriate jurisdictions.	State Local	BP III.B App 9	Planning Section Book

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
J.10.a	***Maps showing evacuation routes, evacuation areas, pre-selected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas (identification of radiological sampling and monitoring points shall include the designators in [NUREG-0654/FEMA-REP-1] Table J-1 or an equivalent uniform system described in the plan);*** ✓ Include clearly legible maps of all evacuation routes, evacuation areas, preselected radiological sampling and monitoring points (including water supplies), reception and congregate care centers in host / support jurisdictions, decontamination facilities, and shelter areas; and ✓ Describe the procedures and organization(s) responsible for updating and maintaining maps, as necessary, using the most current and accurate data (e.g., census data, State and county records, etc).	Licensee State Local	BP III.B Annex A App 1 App 2 Licensee plans	N/A
J.10.b	***Maps showing population distribution around the nuclear facility. This shall be by evacuation areas (licensees shall also present the information in a sector format);*** ✓ Clear, legible maps showing population distribution around the NPP, possibly in a separate appendix.	Licensee State Local	Annex A App 1 App 2	N/A
J.10.c	***Means for notifying all segments of the transient and resident population;*** ✓ Meet the requirements listed under Criteria E.5, E.6, and E.7	Licensee State Local	BP III.B App 7 App 9	N/A
J.10.d	***Means for protecting those persons whose mobility may be impaired due to such factors as institutional or other confinement;*** ✓ Describe the means to protect those persons whose mobility may be impaired because of institutional or other confinement (e.g., children in schools and licensed day care centers and persons in nursing homes, hospitals, and correctional facilities). ✓ Describe the methods for determining the number of persons	State Local	BP III.B App 7 App 9	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	who may need assistance and the type of assistance, per planning area. ✓ Reference lists of documented individuals who need assistance in an evacuation of the EPZ and processes for keeping the lists up to date. ✓ Describe processes for evacuating persons with disabilities and access/functional needs and for sheltering in place those who cannot be moved. ✓ Describe any special transportation needs for these groups and the transportation resources, including types and quantities of vehicles, used to move them.			
J.10.e	***Provisions for the use of radioprotective drugs, particularly for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult, including quantities, storage, and means of distribution;*** ✓ What groups might be advised to take KI; ✓ Adequate supply of radioprotective drugs for each individual, including quantities, storage locations, and means of distribution; ✓ Adequate maintenance, shelf life extensions, and timely replacement of radioprotective drugs; and ✓ 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.	State-DOH Local	BP III.B Annex H VI.A.2 DOH RERPP	N/A
J.10.f	***State and local organizations' plans should include the method by which decisions by the State Health Department for administering radioprotective drugs to the general population are made during an emergency and the pre-determined conditions under which such drugs may be used by offsite emergency workers;*** ✓ Identify, by title/position, those who will make decisions regarding the use of KI during an emergency. ✓ Describe the criteria and decision-making processes for	State-DOH	Annex G Annex H VI.A.2 DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	recommending the use of KI.			
J.10.g	***Means of relocation*** ✓ Means for controlling traffic to assure a safe and efficient evacuation; ✓ Procedures for implementing alternate evacuation routes, if warranted; ✓ Transportation resources, including drivers; ✓ The methods for determining the number of persons without private transportation, per planning area; and ✓ Designated pickup points for persons without private transportation.	State Local	BP III.B Annex H VI.A.1 Annex H VI.A.2 Benton County Franklin County	N/A
J.10.h	***Relocation centers in host areas which are at least 5 miles, and preferably 10 miles, beyond the boundaries of the plume exposure emergency planning zone (see [NUREG-0654/FEMA-REP-1 Criterion] J.12);*** ✓ All relocation centers and host schools for evacuees and students by name and address; ✓ Organizations responsible for managing the centers and staffing requirements for each center; ✓ Arrangements for handling students at relocation centers and/or host schools; ✓ Arrangements for handling service animals; ✓ Hospitals, correctional facilities, and nursing homes that will receive evacuees; ✓ Provisions for the radiological monitoring of evacuees, service animals, and evacuee vehicles, according to the plans / procedures (if students are taken to host schools where monitoring capabilities are not present, the plans / procedures address any special considerations for radiological monitoring of student evacuees following a release); and ✓ Provisions for students at schools outside the EPZ who reside within the EPZ.	State Local	BP III.B Annex A App 1 Annex H VI.B.3.b DOH RERPP Benton County Franklin County	N/A
J.10.i	***Projected traffic capacities of evacuation routes under emergency conditions;*** ✓ Reference the evacuation time estimate (ETE) studies and	State Local	BP III.B Annex A App 1	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	include the results of the ETEs. ✓ Reference the traffic capacities of the evacuation routes. ✓ Discuss the potential need to use alternate routes because of traffic impediments, adverse weather conditions, an airborne radioactive plume, areas affected by hostile actions, or other factors that might hinder a timely, safe evacuation. ✓ Provide maps as described in Criterion J.10.a.		Benton County Franklin County	
J.10.j	***Control of access to evacuated areas and organization responsibilities for such control;*** ✓ Procedures for controlling road access to sheltered and/or evacuated areas, including organization(s) responsible for staffing TCPs and Access Control Points (ACPs); ✓ Maps identifying TCPs/ACPs (may be incorporated by reference); ✓ Equipment and resources needed (e.g., cones or barricades); ✓ Procedures and responsibilities for controlling access via other transportation modes; ✓ Procedures and responsibilities for controlling ingress and egress to other areas affected by an incident; and ✓ Procedures for providing TCP/ACP staff with the status of emergency response activities.	State Local	BP III.B Annex A App 1 Benton County Franklin County	N/A
J.10.k	***Identification of and means for dealing with potential impediments (e.g., seasonal impassability of roads) to use of evacuation routes, and contingency measures;*** ✓ Resources available (e.g., personnel and equipment) to clear impediments to evacuation and emergency response in areas affected by incidents; and ✓ Responsibility for directing resources and rerouting traffic, as needed.	State Local	BP III.B Benton County Franklin County	N/A
J.10.l	***Time estimates for evacuation of various sectors and distances based on a dynamic analysis (time-motion study under various conditions) for the plume exposure pathway emergency planning zone (see [NUREG-0654/FEMA-REP-1] Appendix 4);*** ✓ Time estimates for evacuation of various sectors or evacuation areas; and	State Local	BP III.B Annex A App 1 Benton County	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	✓ The times required for the movement of school children and other persons with disabilities and access/functional needs.		Franklin County	
J.10.m	***The bases for the choice of recommended protective actions from the plume exposure pathway during emergency conditions. This shall include expected local protection afforded in residential units or other shelter for direct and inhalation exposure, as well as evacuation time estimates.*** ✓ The rationales for any preplanned precautionary actions, including the triggering events that would lead to the decision to implement these actions; ✓ The rationales used to make initial PADs; and ✓ The rationales used for subsequent PADs, including the consideration of various possible options.	Licensee State	Annex A II.A Annex C III Annex D Annex H App 9	Planning Section Book
J.11	***Each State shall specify the protective measures to be used for the ingestion pathway, including the methods for protecting the public from consumption of contaminated food-stuffs. This shall include criteria for deciding whether dairy animals should be put on stored feed. The plan shall identify procedures for detecting contamination, for estimating the dose commitment consequences of uncontrolled ingestion, and for imposing protection procedures such as impoundment, decontamination, processing, decay, product diversion, and preservation. Maps for recording survey and monitoring data, key land use data (e.g., farming), dairies, food processing plants, water sheds, water supply intake and water treatment plants and reservoirs shall be maintained. Provisions for maps showing detailed crop information may be made by including reference to their availability and location and a plan for their use. The maps shall start at the facility and include all of the 50-mile ingestion pathway EPZ. Up-to-date lists of the name and location of all facilities which regularly process milk products and other large amounts of food or agricultural products originating in the ingestion pathway Emergency Planning Zone, but located elsewhere, shall be maintained.***53 ✓ The individual(s), by title /position, and organization with the	State	BP III.B Annex F Annex H App 2	Planning Section Book

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	authority to make decisions in the ingestion pathway planning zone. ✓ The ingestion protective actions planned and the rationale for the selection of actions, also see Criteria J.9. and J.10.m. ✓ The methodology used to designate the areas of concern where monitoring and sampling will be implemented. ✓ The methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of contact points to obtain permission to collect samples, and chain of custody procedures. ✓ The analytical laboratory capability to analyze various samples and the procedure for reporting analytical results to the appropriate organization. ✓ The location and means of obtaining up-to-date information on licensed agribusiness facilities within the EPZ. This information includes dairies, food processing plants, surface water supplies, water intakes, farmers markets, farm stands, nurseries, and other permanent facilities. Information also includes facilities outside the EPZ that could receive potentially contaminated products from within the EPZ, including names and telephone numbers for points of contact. ✓ The location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas). This information includes the status of harvesting. ✓ The DILs that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs. ✓ The availability of suitable maps for recording various data. The use of electronic means to capture and map survey and dose data (e.g., geographic information systems) are acceptable.			
J.12	***Each organization shall describe the means for registering and monitoring of evacuees at relocation centers in host areas. The***	State Local	BP III.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	personnel and equipment available should be capable of monitoring within about a 12-hour period all residents and transients in the plume exposure EPZ arriving at relocation centers. ✓ Radiological monitoring of evacuees, service animals, vehicles, and possessions. OROs need to be capable of monitoring 20 percent of the EPZ population (including transients) assigned to each facility within a 12-hour period. ✓ Decontamination procedures, including the trigger/action levels that indicate the need for decontamination activities and procedures for medical attention referral. ✓ Contamination control measures, such as safety requirements, decontamination site layout, and decontamination protocol.		Annex H VI.B.3 DOH RERPP Benton County Franklin County	

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard K – Radiological Exposure Control				
K.1	***Each licensee shall establish onsite exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides (EPA 520/1-75/001*57*) for:*** ***a. removal of injured persons;*** ***b. undertaking corrective actions;*** ***c. performing assessment actions;*** ***d. providing first aid;*** ***e. performing personnel decontamination;*** ***f. providing ambulance service; and*** ***g. providing medical treatment services.***	Licensee		
K.2	***Each licensee shall provide an onsite radiation protection program to be implemented during emergencies, including methods to implement exposure guidelines . . .***	Licensee		
K.3.a	***Each organization shall make provision for 24-hour-per-day capability to determine the doses received by emergency personnel involved in any nuclear accident, including volunteers. Each organization shall make provisions for distribution of dosimeters, both self-reading and permanent record devices.*** ✓ Methods or options for emergency worker exposure control, to include exposure from inhalation; ✓ Dose limits for emergency workers; ✓ Types and quantities of dosimeters and dosimeter chargers available per location and the number of emergency workers needing dosimetry devices; ✓ Process for reading PRDs and any early reading of PRDs (e.g., when an emergency worker's task assignment is completed or as otherwise specified); ✓ Specific dosimetry instructions, including when, where, and to whom individuals return their dosimetry devices; ✓ Dosimetry storage locations; ✓ Distribution of dosimetry to all emergency workers and, when permitted, members of the public	Licensee State-DOH Local	DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	needing access to the restricted area; and ✓ Proper documentation of authorization to exceed administrative dose limits.			
K.3.b	***Each organization shall ensure that dosimeters are read at appropriate frequencies and provide for maintaining dose records for emergency workers involved in any nuclear accident.*** ✓ The method for obtaining dose information from emergency workers; ✓ The timeframes for reading dosimeters (e.g., every 15 or 30 minutes); ✓ The methods for recording doses (e.g., the form used); and ✓ Appropriate reporting if administrative limits have been reached or exceeded (refer to Criterion K.4.).	Licensee State-DOH Local	Annex H VI.A.3 DOH RERPP Benton County Franklin County	N/A
K.4	***Each State and local organization shall establish the decision chain for authorizing emergency workers to incur exposures in excess of the EPA General Public Protective Action Guides (i.e., EPA PAGs for emergency workers and lifesaving activities).*** ✓ Dose limits (TEDE) for missions, accounting for dose from inhalation; ✓ Actions taken when exposure limits have been reached; ✓ Any special conditions requiring additional limitations (e.g., pregnant emergency workers); ✓ Authorization to exceed pre-authorized exposure limits and management of emergency workers' exposure above the limits; ✓ Points of contact for authorization to remain in the hazard area and receive additional exposure (e.g., for special lifesaving missions) if the allowable upper limit has been reached; ✓ Information on risk and threshold doses for health effects to be provided to emergency workers volunteering for higher dose exposure; and ✓ Administrative limits.	State-DOH Local	Annex H VI.A.2 DOH RERPP	N/A
K.5.a	***Each organization as appropriate, shall specify action levels for determining the need for decontamination.***	Licensee State-DOH	BP III.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	✓ Facilities for monitoring and decontaminating emergency workers, equipment, and vehicles, along with operating and implementing procedures; ✓ Locations of monitoring and decontamination facilities (preferably located outside the plume EPZ); ✓ Methods for controlling the spread of contamination at the emergency worker monitoring facilities; ✓ Radioactive contamination levels that will trigger decontamination of emergency workers, equipment, and vehicles, expressed in applicable units (e.g., cpm, mR/hr); ✓ Survey instruments (i.e., specific appropriate equipment and sensitivity, including radiation type) used to monitor emergency workers, equipment, and vehicles; and ✓ Procedures for monitoring individuals and equipment.	Local	DOH RERPP Benton County Franklin County	
K.5.b	***Each organization, as appropriate, shall establish the means for radiological decontamination of emergency personnel wounds, supplies, instruments and equipment, and for waste disposal.*** ✓ Supplies and equipment for decontamination; ✓ Decontaminating people, equipment, and vehicles; ✓ Re-monitoring people, equipment, and vehicles and recording the results; ✓ Criteria for sending individuals with fixed contamination for medical attention; ✓ Controlling the spread of contamination; ✓ Number of people needed to perform decontamination in the event of an emergency; and ✓ Contaminated waste collection, handling, and storage.	Licensee State-DOH Local	BP III.B DOH RERPP	N/A
K.6	***Each licensee shall provide onsite contamination control measures including:*** ***a. area access control;*** ***b. drinking water and food supplies;*** ***c. criteria for permitting return of areas and items to normal use, see EPA-400-R-92-001.***60	Licensee		
K.7	***Each licensee shall provide the capability for decontaminating relocated onsite personnel, including provisions for extra***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	clothing and decontaminants suitable for the type of contamination expected, with particular attention given to radioiodine contamination of the skin.			

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard L – Medical and Health Support				
L.1	***Each organization shall arrange for local and backup hospital and medical services having the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately prepared to handle contaminated individuals.*** ✓ Reference written agreements or LOAs with hospitals/ medical facilities. ✓ Reference written agreements or LOAs for technical staff that are not employed by the hospital/medical facility. ✓ Include individual facility capabilities, including the number of radiologically trained medical personnel and support staff. ✓ Describe hospital/medical facility and support service operations for treating contaminated, injured, or exposed individuals. ✓ Describe dosimetry procedures, including record keeping and final receipt for processing.	Licensee State Local	App 3	N/A
L.2	***Each licensee shall provide for onsite first aid capability.***	Licensee		
L.3	***Each State shall develop lists indicating the location of public, private and military hospitals and other emergency medical services facilities within the State or contiguous States considered capable of providing medical support for any contaminated injured individual. The listing shall include the name, location, type of facility and capacity, and any special radiological capabilities. These emergency medical services should be able to radiologically monitor contamination personnel, and have facilities and trained personnel able to care for contaminated injured persons.*** ✓ Lists of additional hospitals/medical facilities capable of providing medical support for contaminated, injured, or exposed individuals.	State	App 3	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
L.4	***Each organization shall arrange for transporting victims of radiological accidents to medical support facilities.*** ✓ The method for determining an appropriate hospital/medical facility and the person, by title/position, responsible for the determination; ✓ Means of transporting individuals, including how to request additional emergency medical services; ✓ Communications between the transport crew and hospital/medical facility staff; ✓ Specifics of radiological monitoring; ✓ Contamination control measures during transport; ✓ Decontamination techniques, including trigger/action levels; ✓ Dosimetry for the transport crew; and ✓ LOAs with transportation providers (see Criterion A.3).	Licensee State Local	DOH RERPP Benton County Franklin County	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard M – Recovery and Reentry Planning and Post-Accident Operations				
M.1	***Each organization, as appropriate, shall develop general plans and procedures for reentry and recovery and describe the means by which decisions to relax protective measures (e.g., allow reentry into an evacuated area) are reached. This process should consider both existing and potential conditions.*** ✓ Continuing environmental radiation measurements and dose assessments; ✓ Establishing restricted and buffer zones; ✓ Relocation; ✓ Controlled reentry into restricted areas; ✓ Return of the public to previously evacuated areas; and ✓ Recovery, including a list of actions that may be needed and organizations responsible for carrying them out.	Licensee State Local	BP II.I.2 DOH RERPP	Planning Section Book
M.2	***Each licensee plan shall contain the position/title, authority, and responsibilities of individuals who will fill key positions in the facility recovery organization. This organization shall include technical personnel with responsibilities to develop, evaluate, and direct recovery and reentry operations. The recovery organization recommended by Functional Criteria for Emergency Response Facilities, NUREG-0696 (February 1981) and Clarification of TMI Action Plan Requirements, Requirements for Emergency Response Capability, NUREG-0737, Supplement 1 (January 1983), is an acceptable framework.***	Licensee		
M.3	***Each licensee and State plan shall specify means for informing members of the response organizations that a recovery operation is to be initiated, and of any changes in the organizational structure that may occur.*** ✓ Means used to keep all involved response organizations (e.g., OROs with affected populations and/or areas) informed of recovery phase plans/procedures being developed, such as remedial measures, how long they will take, and what final	Licensee State	App 4 CEMP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	outcome is expected; and ✓ Changes that might take place in the organizational structure (e.g., the Governor being in charge under a "state of emergency" that may then revert to a new or other authority).			
M.4	***Each plan shall establish a method for periodically estimating total population exposure.*** ✓ Identify agencies responsible for and involved in long-term dose assessment activities after an incident.	Licensee State	Annex H VI.C DOH RERPP	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard N – Exercises and Drills				
N.1.a	***An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. Exercises shall be conducted as set forth in NRC and FEMA rules and policy.*** ✓ REP exercises will be conducted in accordance with NRC and FEMA rules and policy.	Licensee State Local	Annex I	N/A
N.1.b	***An exercise shall demonstrate the key skills of response organizations to adequately respond to an incident scenario. The scenarios shall vary such that the major elements of emergency plans are exercised within an eight-year exercise cycle. Each scenario variation shall be demonstrated at least once during the eight-year exercise cycle and shall include, but not be limited to, the following:*** ***a. Hostile action directed at the plant site involving the integration of offsite resources with onsite response;*** ***b. An initial classification of or rapid escalation to a Site Area Emergency or General Emergency;*** ***c. No radiological release or an unplanned minimal radiological release that requires the site to declare a Site Area Emergency, but does not require declaration of a General Emergency. For this scenario variation the following conditions shall apply:*** ***i. The licensee is required to demonstrate the ability to respond to a no/minimal radiological release scenario at least once within the 8- year exercise cycle. State, Tribal and local response organizations have the option, and are encouraged, to participate jointly in this demonstration.*** ***ii. When planning for a joint no/minimal radiological release exercise, affected State, Tribal and local jurisdictions, the licensee, and FEMA will identify offsite capabilities that may still need to be valuated and agree upon appropriate alternative evaluation methods to satisfy FEMA's biennial criteria requirements.***	Licensee State Local	Annex I VI.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	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. ***iii. If the offsite organizations elect not to participate in the licensee's required minimal or no-release exercise, they will still be obligated to meet the exercise requirements as specified in 44 CFR § 350.9.67*** ✓ All major elements of the plans/procedures will be tested at minimum at the frequency specified by the REP Program Manual, Exhibit III-2; and ✓ Scenarios for exercises will be varied from exercise to exercise and include all required scenario variations during the exercise cycle.			
N.1.c	***Provisions must be made to start a drill or exercise between 6:00 p.m. and 4:00 a.m. at least once in every eight-year exercise cycle. Some drills or exercises should be unannounced.***	Licensee		
N.1.d	***An exercise shall include mobilization and implementation of State and local (as appropriate) personnel and resources adequate to verify the capability and response to a large radiological release requiring ingestion pathway protective actions beyond the 10 mile EPZ at least once every 8 years. Organizations shall specify who is responsible for the decision-making process. OROs shall reference or include the organization's procedures for making PADs and implementing protective actions based upon PAGs that are consistent with EPA recommendations, and the process for ensuring coordination of PADs with all applicable jurisdictions.*** ✓ The State and other OROs (as appropriate) will participate in an ingestion pathway exercise at least once every 8 years. ✓ States that do not have an NPP located within their borders, but are located within the 50-mile EPZ of a bordering State's NPP, must fully participate in at least one exercise at least once every 8 years at the bordering State's site(s).	State Local	Annex I V.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	✓ OROs within the 50-mile EPZ that are not part of the full-participation ingestion exercise with the State participate in an ingestion tabletop exercise or other ingestion pathway training activity at least once during the exercise cycle. ✓ The number and types of personnel participating in ingestion aspects of an exercise will be sufficient for carrying out those ingestion measures required by the incident scenario.			
N.2.a	***Communications Drills. Communications with State and local governments within the plume exposure pathway Emergency Planning Zone shall be tested monthly. Communications with Federal emergency response organizations and States within the ingestion pathway shall be tested quarterly. Communications between the nuclear facility, State and local emergency operations centers, and field assessment teams shall be tested annually. Communication drills shall also include the aspect of understanding the content of messages.*** ✓ ORO communications systems are tested monthly. ✓ Communications with the Federal response organizations and States within the ingestion pathway are tested quarterly. ✓ Communications with the NPP, ORO EOCs, and field assessment teams are tested annually. ✓ All communications drills include a message content check.	Licensee State Local	Annex I V	N/A
N.2.b	***Fire Drills. Fire drills shall be conducted in accordance with the plant (nuclear facility) technical specifications.***	Licensee		
N.2.c	***Medical Emergency Drills. A medical emergency drill involving a simulated contaminated individual which contains provisions for participation by the local support services agencies (i.e., ambulance and offsite medical treatment facility) shall be conducted annually. The offsite portions of the medical drill may be performed as part of the required biennial78 exercise.*** ✓ Medical emergency drills are conducted annually .	Licensee Local	Annex I V	N/A
N.2.d	***Radiological Monitoring Drills. Plant environs and radiological monitoring drills (onsite and offsite) shall be conducted annually. These drills shall include collection and analysis of all***	Licensee State-DOH Local	Annex I V	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	sample media (e.g., water, vegetation, soil and air), and provisions for communications and record keeping. The State drills need not be at each site. Where appropriate, local organizations shall participate. ✓ Radiological monitoring drills are conducted annually.			
N.2.e (1)	***Health Physics Drills (1). Health physics drills shall be conducted semi-annually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment. The State drills need not be at each site.*** ✓ Health physics drills are conducted semi-annually.	Licensee State-DOH	Annex I V	N/A
N.2.e (2)	***Health Physics Drills (2). Analysis of inplant liquid samples with actual elevated radiation levels shall be included in Health Physics drills by licensees annually.***	Licensee		
N.3	***Each organization shall describe how exercises and drills are to be carried out to allow free play for decision making and to meet the following objectives. Pending the development of exercise scenarios and exercise evaluation guidance by the NRC and FEMA the scenarios for use in exercises and drills shall include, but not be limited to, the following:*** ***a. The basic objective(s) of each drill and exercise and appropriate evaluation criteria;*** ***b. The date(s), time period, place(s), and participating organizations;*** ***c. The simulated events;*** ***d. A time schedule of real and simulated initiating events;*** ***e. A narrative summary describing the conduct of the exercises or drills to include such things as simulated casualties, offsite fire department assistance, rescue of personnel, use of protective clothing, deployment of radiological monitoring teams, and public information activities; and*** ***f. A description of the arrangements*** ✓ Each of the items a through f above will be addressed in the scenario developed for the exercise.	Licensee State Local	Annex I V.B	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
N.4	***Biennial exercises shall be evaluated and critiqued as required. FEMA evaluators shall evaluate offsite emergency response organization performance in the biennial exercise in accordance with FEMA REP exercise methodology.*** ✓ ORO exercise performance is evaluated according to FEMA REP exercise methodology.	Licensee State Local	Annex I V	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard O – Radiological Emergency Response Training				
O.1	***Each organization shall assure the training of appropriate individuals.*** ✓ Identify organizations responsible for coordinating radiological training. ✓ Identify organizations that will ensure radiological emergency response training will be included as part of fire, police, and ambulance/rescue training, if appropriate. ✓ Describe provisions to ensure availability of just-in-time training on basic radiation protection for all emergency workers, as needed. ✓ Describe provisions to ensure appropriate personnel participate in training courses designed for individuals who will assist in radiological emergency response (e.g., transportation providers).	Licensee State Local	Annex I V.C.10	N/A
O.1.a	***Each facility to which the plan applies shall provide site-specific emergency response training for those offsite emergency organizations who may be called upon to provide assistance in the event of an emergency.***	Licensee		
O.1.b	***Each offsite response organization shall participate in and receive training. Where mutual aid agreements exist between local agencies such as fire, police, and ambulance/rescue, the training shall also be offered to the other departments that are members of the mutual aid district.*** ✓ Training is offered to the mutual aid district, if mutual aid plans/procedures have been established between local agencies.	State Local	Annex I	N/A
O.2	***The training program for members of the onsite emergency organization shall, besides classroom training, include practical drills in which each individual demonstrates ability to perform his assigned emergency function. During the practical drills, on-the-spot correction of erroneous performance shall be made and a demonstration of the proper performance offered by the instructor.***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
O.3	***Training for individuals assigned to licensee first aid teams shall include courses equivalent to Red Cross Multi-Media.***	Licensee		
O.4.a	***Directors or coordinators of the response organizations;*** ✓ Training programs specific to directors/coordinators; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee State Local	Annex I	N/A
O.4.b	***Personnel responsible for accident assessment;*** ✓ Training programs specific to accident assessment personnel; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee State Local	Annex I	N/A
O.4.c	***Radiological monitoring teams and radiological analysis personnel;*** ✓ Training programs specific to radiological monitoring teams and radiological analysis personnel; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee State-DOH Local	Annex I	N/A
O.4.d	***Police, security, and fire-fighting personnel;*** ✓ Training programs specific to police, security, and firefighting personnel; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee State	Annex I	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
O.4.e	***Repair and damage control/correctional action teams (onsite);***	Licensee		
O.4.f	***First aid and rescue personnel;*** ✓ Training programs specific to first aid and rescue personnel; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee Local		
O.4.g	***Local support services personnel including Civil Defense/Emergency Service personnel;*** ✓ Training programs specific to medical support personnel, including specific training for hospital/medical facility staff and transportation providers; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee Local		
O.4.h	***Medical support personnel;***	Licensee State Local	Annex I	N/A
O.4.i	***Licensee's headquarters support personnel;***	Licensee		
O.4.j	***Personnel responsible for transmission of emergency information and instructions.*** ✓ Training programs specific to personnel responsible for transmission of emergency information and instructions; ✓ Scope of the training programs; ✓ Time intervals at which these training programs will be offered; and ✓ Organizations (e.g., licensee, FEMA) that will provide training assistance, if applicable.	Licensee State Local	Annex I	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
O.5	***Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.*** ✓ State which organizations will provide initial training as well as retraining.	Licensee State Local	Annex I	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
Planning Standard P – Responsibility for the Planning Effort; Development, Periodic Review, and Distribution of Emergency Plans				
P.1	***Each organization shall provide for the training of individuals responsible for the planning effort.*** ✓ Identify, by title/position, individuals responsible for oversight of plan/procedure development and maintenance, including the positions referred to in Criteria P.2 and P.3, and any other positions with planning responsibilities. ✓ Specify the training regimen for the identified individuals.	Licensee State Local	BP VII Fig 0-9 Annex I	N/A
P.2	***Each organization shall identify by title the individual with the overall authority and responsibility for radiological emergency response planning.*** ✓ Identify, by title/position, the individual responsible for radiological emergency response planning.	Licensee State Local	BP VII	N/A
P.3	***Each organization shall designate an Emergency Planning Coordinator with responsibility for the development and updating of emergency plans and coordination of these plans with other response organizations.*** ✓ Identify, by title/position, the individual responsible for developing and updating emergency plans / procedures as well as coordinating plans / procedures with other response organizations.	Licensee State Local	BP VII	N/A
P.4	***Each organization shall update its plan and agreements as needed, review and certify it to be current on an annual basis. The update shall take into account changes identified by drills and exercises.*** ✓ Evidence that plans/procedures and agreements have been reviewed for accuracy and completeness of information and appropriate changes made within the last year (e.g., a signature page, etc.); ✓ A process for correcting plan issues identified in drills and exercises; ✓ A process for periodic update of maps; and ✓ A process for periodic updating of ingestion pathway	Licensee State Local	BP III.B BP VII	N/A

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
	information (e.g., a list of food processing facilities, etc.) (See also Criterion J.11.).			
P.5	***The emergency response plans and approved changes to the plans shall be forwarded to all organizations and appropriate individuals with responsibility for implementation of the plans. Revised pages shall be dated and marked to show where changes have been made.*** ✓ List the organizations and individuals who are given the updated plans/procedures. ✓ Identify individual(s), by title/position, responsible for distributing plan/procedure updates and what the update cycle is. ✓ Include revision bar markings or equivalent visual indications on revised pages to reflect where changes were made and on what date, or a summary list of changes in cases where changes are so numerous or extensive that revision bars are impractical.	Licensee State Local	BP VII RR App 13	N/A
P.6	***Each plan shall contain a detailed listing of supporting plans and their source.*** ✓ A list of supporting radiological emergency plans/procedures.	Licensee State Local	App 5	N/A
P.7	***Each plan shall contain an appendix listing, by title, procedures required to implement the plan. The listing shall include the section(s) of the plan to be implemented by each procedure.*** ✓ Include a list of all implementing procedures associated with the body of the plan. The list indicates which section(s) of the plan are implemented by each procedure.	Licensee State Local	App 5	N/A
P.8	***Each plan shall contain a specific table of contents. Plans submitted for review should be cross-referenced to these criteria.*** ✓ A specific table of contents; and ✓ A cross-reference between the plans/procedures and the NUREG-0654/FEMA-REP-1 Evaluation Criteria.	Licensee State Local	TOC App 12	N/A
P.9	***Each licensee shall arrange for and conduct independent reviews of the emergency preparedness program at least every 12 months . . .***	Licensee		

Planning Standards and Evaluation Criteria		Applicability	Plan Location	Procedure
P.10	***Each organization shall provide for updating telephone numbers in emergency procedures at least quarterly.*** Who, by title/position, is responsible for quarterly updates of each procedure that contains telephone numbers.	Licensee State Local	BP VII	N/A

Planning Guidance, Part II: REP Program Planning Guidance, REP Program Manual, June 2013

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APPENDIX 13 – PLAN DISTRIBUTION

DISTRIBUTION -WASHINGTON STATE AGENCIES			
Distribution	Organization	Street Address	Mailing Address
1	Department of Agriculture	1111 Washington Street SE Olympia, WA 98504-2560	PO Box 42560 Olympia, WA 98504-2560
1	Department of Commerce, State Energy Office	1011 Plum St. SE Olympia, WA 98504-2525	PO Box 42525 Olympia, WA 98504-2525
1	Department of Ecology	300 Desmond Drive SE Lacey, WA 98503	PO Box 47600 Olympia, WA 98504-7600
1	Department of Fish and Wildlife	Natural Resources Building 1111 Washington Street SE Olympia, WA 98504	600 Capitol Way N. Olympia, WA 98501-1091
1	Department of Health, Office of Radiation Protection	111 Israel Road SE, TC2 Tumwater, WA 98501	PO Box 47827 Olympia, WA 98504-7827
1	Department of Health, Office of Environmental Health, Safety, and Toxicology	243 Israel Road SE, TC3 Tumwater, WA 98501	PO Box 47825 Olympia, WA 98504-7825
1	Department of Labor and Industries	7273 Linderson Way SW Tumwater, WA 98501-5414	PO Box 44810 Olympia, WA 98504-4810
1	Washington Military Department, Emergency Management Division	Building 20, MS TA-20 Camp Murray, WA 98430-5112	Building 20, MS TA-20 Camp Murray, WA 98430-5112
1	Washington Military Department, National Guard	Bldg 1, Camp Murray Tacoma, WA 98327-5000	Bldg 1, Camp Murray Tacoma, WA 98327-5000
1	Washington State Parks and Recreation Commission	1111 Israel Road SW Olympia, WA 98501-2650	PO Box 42650 Olympia, WA 98504-2650
1	Washington State Patrol	210 - 11th Avenue SW Olympia WA 98504-1000	General Admin. Building PO Box 42600 Olympia WA 98504-2600
1	Department of Transportation	310 Maple Park Ave SE Olympia, WA 98504-7300	PO Box 47300 Olympia, WA 98504-7300

DISTRIBUTION -WASHINGTON STATE AGENCIES			
Distribution	Organization	Street Address	Mailing Address
1	Washington State Utilities and Transportation Commission, Energy Facility Site Evaluation Council	1300 S. Evergreen Park Dr. SW Olympia, WA 98504-7250	1300 S. Evergreen Park Dr. SW Olympia, WA 98504-7250
1	Governor's Office of Indian Affairs	210-11th Avenue SW, Ste 415; Olympia, WA 98504-0909	PO Box 40909 Olympia, WA 98504-0909

DISTRIBUTION - COUNTY EMERGENCY MANAGEMENT ORGANIZATIONS		
Distribution	Organization	Address
1	Adams County Emergency Services	2069 W. Highway 26 Othello, WA 99344 Office Phone: 509-488-3704 24hr Phone: 509-488-2061
1	Benton County Emergency Services	651 Truman Avenue Richland, WA 99352 Office Phone: 509-628-2600
1	Franklin County Emergency Management	502 Boeing Street Pasco, WA 99301 Office Phone: 509-545-3546 24 hr. Phone: 509-545-3510
1	Grant County Department of Emergency Management	3953 Airway Dr NE, Bldg 2 Moses Lake, WA 98837 Office Phone: 509-762-1462 24hr Phone: 509-762-1160
1	Kitsap County Department of Emergency Management	911 Carver Street Bremerton, WA 98312 Office Phone: 360-307-5870 24hr Phone: 360-307-5910
1	Kittitas County Sheriff Department of Emergency Management	307 West Umptanun Road Ellensburg, WA 98926 Office Phone: 509-962-7525 24hr Phone: 509-925-8534
1	Klickitat County Department of Emergency Management	228 West Main, MS 19 Goldendale, WA 98620 Office Phone: 509-493-6029 24hr Phone: 509-773-4545
1	Snohomish County Department of Emergency Management	3509 109th Street SW Everett, WA 98204 Office Phone: 425-338-5060
1	Walla Walla Department of Emergency Management	27 North 2nd Avenue Walla Walla, WA 99362 24hr Phone 509-527-1960 (911)
1	Yakima Valley Office of Emergency Management	2403 S. 18th Street, Suite 200 Union Gap, WA 98903 Office Phone: 509-574-1900 24hr Phone: 509-574-2500

DISTRIBUTION - FEDERAL AGENCIES		
Distribution	Organization	Address
1	United States Department of Homeland Security, Federal Emergency Management Agency	FEMA REP Headquarters 1800 South Bell Street Arlington, VA 20598-3025
1	United States Department of Homeland Security, Federal Emergency Management Agency	Federal Regional Center FEMA Region X 130-228th Street SW Bothell, WA 98021-9796
1	United State Department of Energy – Richland Operations	U.S. DOE Hanford 825 Jadwin Avenue MSIN 88-40 Richland, WA 99352
1	United States Coast Guard	Thirteenth Coast Guard District Jackson Federal Building 915 Second Avenue Seattle, WA 98174-1067
1	United States Coast Guard	Sector Columbia River 6767 North Basin Avenue Portland, OR 97217-3992
1	United States Coast Guard	Sector Puget Sound 1519 Alaskan Way South Seattle, WA 98134-1192
1	United States Navy	Puget Sound Naval Shipyard 1400 Farragut Avenue Radiological Control Director Bremerton, WA 98314-5001
1	United States Nuclear Regulatory Commission	Office of Nuclear Security and Incident Response U.S. Nuclear Regulatory Commission Mail Stop: T3-B46-M Washington, DC 20555

DISTRIBUTION - OTHER AGENCIES		
Distribution	Organization	Address
1	American Red Cross (Tri-Cities Chapter)	7202 W. Deschutes Ave. Kennewick, WA, 99336
1	Areva NP, Inc.	Emergency Preparedness 2101 Horn Rapids Road Richland, WA 99352-5102
1	Emergency Management British Columbia (EMBC)	PO Box 9201 Stn. Provincial Government Victoria, BC V8W 9J1
1	Energy Northwest, Columbia Generating Station	Emergency Preparedness PO Box 968 / MD PE30 Richland, WA 99352-0968
1	State of Idaho, Bureau of Homeland Security	4040 Guard Street Building 600 Boise, ID 83705-5004
1	Oregon Department of Agriculture	635 Capitol St. NE Salem, OR 97301-2532
1	Oregon Department of Energy	Nuclear Safety & Energy Emergency Preparedness Division 625 Marion Street Northeast Salem, OR 97310
1	Oregon Emergency Management	PO Box 14370 Salem, OR 97309-5062
1	Oregon Health Authority	Radiation Protection Services 800 NE Oregon St. Suite 640 Portland, OR 97232
1	Morrow County Emergency Management	325 Willow View Drive Post Office 622 Heppner, OR 97836
1	Umatilla County Emergency Management	4700 NW Pioneer Plaza Pendleton, OR 97801

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