BENTON COUNTY COLUMBIA GENERATING STATION EMERGENCY PREPAREDNESS PLAN

June, 2022

BCES RESOLUTION 12-2022-REP Plan

BEFORE THE BENTON COUNTY EMERGENCY SERVICES EXECUTIVE BOARD FOR THE OFFICE OF EMERGENCY MANAGEMENT, BENTON COUNTY (DBA Benton County Emergency Management)

APPROVAL OF THE BENTON COUNTY, COLUMBIA GENERATING STATION EMERGENCY PREPAREDNESS PLAN

WHEREAS, the Benton County, Columbia Generating Station Emergency Preparedness Plan has been re-written to be in compliance with the REP Program Manual issued by FEMA in December 2019;

WHEREAS, Washington State Emergency Management has reviewed the Benton County, Columbia Generating Station Emergency Preparedness Plan and approved the written document to be forwarded to FEMA for approval;

WHEREAS, FEMA has evaluated the Benton County, Columbia Generating Station Emergency Preparedness Plan and approved the written document on August 16, 2022;

NOW, THEREFORE, BE IT HEREBY RESOLVED that the Benton County Emergency Services Board for the Office of Emergency Management, Benton County hereby adopts the Benton County, Columbia Generating Station Emergency Preparedness Plan and subsequent revisions.

APPROVED this 8th day of December, 2022

ATTEST:

Secretary to the Board

BCES Board:

Jon Amundson, BCES Board Chairman

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Summary of Changes

Benton County's Radiological Emergency Preparedness Plan/procedures, letters of agreement (LOA), and memorandums of understanding (MOU) have been reviewed for accuracy and completeness of information, and appropriate changes have been made (P.4.ii, P.4.iii).

Annual Plan Review Date	Revision or Change Number	Location in the Plan	Summary of Revision or Change	Date of Review, Revision or Change	Name / Initials
January 3, 2022	Revision 0	Update of entire plan to meet requirements of NUREG-0654/FEMA-REP-1, Rev 2	Replacement of the Final Draft Benton County Columbia Generating Station Emergency Response Plan, June 2020 Changes made to meet the requirements of 2019 REP Program Manual and the EWAC Consolidation with Franklin Co Emergency Management	Submitted Revision 0 Draft of Plan to WA EMD on **05/09/2022** Approved with tracked corrections on **06/07/2022**	C.M. Luppold CML
				Submitted Revision 0 Draft of Plan to FEMA RAC R10 on **06/15/2022** Approved and Accepted as Plan of Record on **8/16/2022**	C.M. Luppold CML

Record of Distribution

JURISDICTION OR AGENCY	TITLE	DATE
Benton County Board of Commissioners	Commissioners	
Benton County Fire District 1	Chief	
Benton County Fire District 2	Chief	
Benton County Fire District 4	Chief	
Benton-Franklin District Health	Regional Emergency Response Coordinator & Benton-Franklin Health Officer	
Benton County Sheriff's Office Sheriff	Benton County Sheriff	
Ben Franklin Transit	Director of Operations	
Central and Southeastern Washington Chapter of American Red Cross	Disaster Program Manager	
Cherry Creek Radio (KONA)	Operations Manager	
City of Kennewick Police Department	City Manager	
City of Richland Fire Department	Chief	
City of Richland Police Department	City Manager	
City of West Richland Police Department	Mayor	
Columbia Basin College	Director for Campus Security & Emergency Management	

Energy Northwest	Emergency Preparedness	
Federal Emergency Management Agency, Region 10, Radiological Emergency Preparedness	RAC Chair Federal Regional Center FEMA Region 10	
Franklin County Emergency Management	Emergency Management Director	
Kadlec Medical Center	Emergency Department Clinical Educator	
Richland School District	Executive Director, Operations	
Southeast Communications, SECOMM	Communications Director	
Three Rivers AuxComm	Auxiliary Communications	
Townsquare Media (KORD)	Brand Manager	
Tri-City Regional Special Weapons and Tactics Team	Benton County Sheriff	
Trios Health	Administration	
United States Coast Guard, 13th District, Sector Columbia River	Chief, USCG ANT Kennewick, Officer-in-Charge United States Coast Guard	
Washington State Department of Agriculture	Rapid Response & Emergency Management, Program Manager	
Washington State Department of Health, Office of Radiation	Plans and Procedures Lead	
Washington State Department of Transportation	Safety and Emergency Operations Manager Washington State Department of Transportation Office of Emergency Management	

Washington State Emergency Management Division	Radiological Preparedness Program Manager Operations Unit	
Washington State Patrol	Homeland Security Section Commander, Washington State Patrol	

Table 1 - Record of Distribution (P.5.iii)

Chapter One – Introduction

Nuclear power plants produce about 20% of America's power (2020, USEIA). Almost 3 million Americans live within 10 miles of an operating nuclear power plant. Benton County has communities within the 10-mile emergency planning zone (EPZ) of Energy Northwest's Columbia Generating Station. The Columbia Generating Station is a boiling-water reactor located 10 miles north of Richland, Washington on a 1,089-acre site that borders the Columbia River.

Radiological emergencies at nuclear power plants should be planned for as they can range from a minor emergency with no offsite effects to a major emergency that may result in an offsite release of radioactive materials. State and local government officials have the overall responsibility of deciding and implementing the appropriate protective actions for the public during a nuclear power plant radiological emergency. They are responsible for notifying the public to take protective actions such as evacuation or sheltering. State and local officials base their decisions on the protective action recommendations by the nuclear power plant facility and their own radiological public health organizations.

The overall objective of radiological emergency response planning and preparedness is to minimize the potential radiation exposure from a spectrum of emergencies that could produce offsite radiation doses which exceed the protective action guidelines established by the Environmental Protection Agency (EPA, 2017). For communities surrounding commercial nuclear power plants, 44 CFR§350 directs FEMA's Radiological Emergency Preparedness Program to review and approve state, local, and tribal radiological emergency plans, and preparedness to ensure that they "provide reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency".

This document is prepared as a tool for Benton County to utilize in emergency planning for an incident at Energy Northwest's Columbia Generating Station. This plan is a "stand alone plan" and is referenced as a "incident annex" to Benton County's Comprehensive Emergency Management Plan. Included are those components/regulations that are required by NUREG 0654, FEMA REP-1, Rev. 2 Radiological Emergency Preparedness (REP) Program Manual, and 44 CFR§350.

1.1 Mission, Purpose, and Scope

WAC 118-30-060 directs each political subdivision of Washington State to maintain a current plan of operations which shall be based on a hazard analysis. This document comprises the Benton County preparedness plan for emergencies originating at the Columbia Generating Station operated by Energy Northwest that create off site impacts to Benton County. As such, its scope is limited to that portion of the overall response for which Benton County and its municipalities are primarily responsible and will only attempt to document those portions of the response for which it is primarily responsible. Other response organizations that function under separate command and control authorities maintain their plans and procedures separately. The National Incident Management System (NIMS) is part of the National Response Framework (NRF) that establishes a standardized incident response. NIMS provides a systematic, proactive approach to guide departments and agencies at all levels of government to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents.

Benton County Emergency Management's response for emergencies originating at the Columbia Generating Station will be conducted in accordance with concepts and procedures recognized by the NIMS model and the Incident Command System (ICS) (J.7.ii).

1.2 Radiological Emergency Classification Levels (ECLs)

Emergencies can change in classification – increase or decrease, but not necessarily in sequence – as the situation may be fluid. Each of the following classifications requires either notification of or action by Benton County Emergency responders including alerting, mobilizing, analyzing the situation, and making emergency response decisions.

Unusual Event

- Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated.
- No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occurs.
- BCES Emergency Management personnel will be notified and will monitor the situation. The Emergency Operations Center (EOC) will not be activated.

Alert

- Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION.
- Any Releases are expected to be limited to small fractions of the EPA Protective Action Guideline (PAG) exposure levels.

- Benton County Command Staff personnel will be notified and/or activated as appropriate for the situation. The Benton County Emergency Operations Center is activated at notification of an Alert.

- There are no Protective Action Decisions (PADs) made for the public at this classification level.

Site Area Emergency

- 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 PAG exposure levels beyond the site boundary.

- A Site Area Emergency requires activation of the Benton County Command Staff personnel and notification of pre-designated federal state, county, and local agencies. Monitoring, ingestion pathway control, and possible evacuation or sheltering of some of the public may be required.

- The public within the EPZ will be notified of a Site Area Emergency. The portion of the Columbia River in the Plume Emergency Planning Zone (EPZ) will be evacuated, and Access Control Points (ACPs) will be established to prevent launching of craft into the Columbia River and entry into the Plume EPZ. Some recreational areas including the Horn Rapids Off-Road Vehicle Park and, Horn Rapids County Park, Rattlesnake Mountain Shooting Facility will be evacuated (J.11.g.i, J.11.g.ii).

General Emergency

- Events are in process or have occurred which involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility.

- Releases can be reasonably expected to exceed EPA PAG exposure levels offsite for more than the immediate site areas.

- A General Emergency requires activation of the Benton County Command Staff personnel and notification of pre-designated federal state, county, and local agencies. Monitoring and ingestion pathway control are required. Protective Action Decisions (PADs) for the public are required and may include sheltering in place (staying inside, shutting out outside air) and/or evacuation.

- The public within the EPZ will be notified of a General Emergency. The portion of the Columbia River in the Plume Emergency Planning Zone (EPZ) will be evacuated, and Access Control Points (ACPs) will be established to prevent launching of craft into the Columbia River and entry into the Plume EPZ. Some recreational areas including the Horn Rapids Off-Road Vehicle Park, Horn Rapids County Park, Rattlesnake Mountain Shooting Facility will be evacuated. Schools near the Plume EPZ may be evacuated, closed, or cancelled as appropriate for the time of year and day.

Hostile Action-Based Emergency

A Hostile Action-Based (HAB) Emergency will be classified within one of the four classification types/levels. These event types are dynamic and require individual assessment at the time of the incident/event by the on-scene Incident Commander and EOC. HAB events may deviate from standard operating procedures, they may not allow for predetermined actions based on the nature of those types of events. Incident Commanders and responders may need to utilize professional judgment and utilize methods not yet established as standards/procedures. Protective Action Decisions, for the general public, will be coordinated with the Incident Commander/Incident Command Post.

Emergencies at CGS **requiring response actions by Benton County Emergency Management** are classified as one of the following, with General Emergency being the most severe:

- Alert
- Site Area Emergency
- General Emergency
- *Hostile Action-Based Emergency

* In the event of a Hostile Action-Based Emergency directed against the Columbia Generating Station, the Tri-City Regional Special Weapons and Tactics Team (SWAT) is mobilized. The Tri-City Regional SWAT Team would assign an Incident Commander and Benton County Emergency Management would assume a supporting role in the EOC.

1.3 Radiological Incident Phases

Early Phase

The beginning of a radiological incident for which immediate decisions for effective use of protective actions are required and must therefore be based primarily on the status of the radiological incident 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 be used. Protective actions based on the PAGs may be preceded by precautionary actions during the period. This phase may last from hours to days.

For a CGS incident, no offsite organization makes Protective Action Recommendations (PARs) for the plume exposure pathway Emergency Planning Zone (EPZ) during the Early Phase. (J.6.i, J.6.ii.) Benton County relies upon Energy Northwest to provide timely Protective Action

Recommendations for consideration prior to making or implementing Protective Action Decisions.

Intermediate Phase

The period beginning after the source and releases have been brought under control (has not necessarily stopped but is no longer growing) and reliable environmental measurements are available for use as a basis for decisions on protective actions and extending until these additional protective actions are no longer needed. This phase may overlap the early phase and late phase and may last from weeks to months.

Late Phase

The period beginning when recovery actions designed to reduce radiation levels in the environment to acceptable levels are commenced and ending when all recovery actions have been completed. This phase may extend from months to years. A PAG level, or dose to avoid, is not appropriate for long-term cleanup.

The phases cannot be represented by precise periods of time – and may even overlap – but to view them in terms of activities, rather than time spans, can provide a useful framework for emergency response planning. In the early phase, sheltering-in-place and evacuation are the principal protective actions. These actions are meant to avoid inhalation of gases or particulates in an atmospheric plume and to minimize external radiation exposures. Administration of prophylactic drugs may be employed depending on the specific radionuclides released; in particular, KI, also called “potassium iodine,” may be administered as a supplementary protective action in incidents involving the release of significant quantities of radioactive iodine, from a nuclear power plant (NPP) incident. The Washington Department of Health’s policy does not call for the distribution of radioprotective drugs to the public. Some protective actions may begin prior to the release of radioactive material when there is advance notice. Planning considerations for re-entry and relocation are suggested and basic planning guidance for late phase cleanup is provided in the EPA PAG Manual in Chapters 4 and 5. Environmental Protection Agency, (2017).

1.4 Planning Assumptions

1. Energy Northwest, as the licensee of the Columbia Generating Station, must notify Benton and Franklin County within 15 minutes of emergency declaration at the plant and the NRC within 60 minutes. (10 CFR Part 50. Appendix E, Sec. IV.B. and C)
2. Benton County Emergency Management will coordinate emergency planning and preparedness activities for a CGS Emergency.
3. Principal organizations will identify the resources and personnel available. They will also provide needed staffing at the Benton County Emergency Operations Center, or incident command post.
4. Governmental officials within the county recognize their responsibilities regarding the safety and well-being of the public and they will assume their responsibilities when this plan is activated.
5. Emergency responders might be exposed to the plume or contaminated areas while performing their respective duties. However, it is recognized by Benton County Emergency Management that any response, into possibly contaminated areas, by Law or Fire/EMS agencies, is voluntary or in compliance with respective agency guidelines or procedures.
6. Some emergency response resources (Law/Fire) may already be committed to the emergency response at CGS, prior to Benton County's Emergency Operations Center Activation.
7. Releases of radioactive or non-radioactive hazardous materials from the CGS site can occur and could affect the health of the public, the environment, property, and economy of Washington State.
8. Actions taken under this plan are intended to be protective in nature for people in Benton County.
9. People in Benton County may be asked to take protective actions based on either immediate or anticipated hazards.
10. It is expected that some portion of the affected population will disregard or delay executing officially recommended protective actions.
11. It is expected that some portion of the population will most likely take actions in the absence of any officially recommended protective action.
12. Contamination of an affected area will disrupt normal activities and most likely will require that the entry into contaminated areas be controlled or prohibited for an unknown period.
13. Agricultural products with a 50-mile radius of CGS could be interdicted by the Washington Department of Agriculture. This would depend on the nature of the emergency.

14. When Benton County resources are insufficient to accomplish the initial response to the emergency, additional resources will be coordinated through mutual aid agreements or through the Washington State Emergency Operations Center.

15. It is expected that each individual or household will develop a family disaster plan and maintain the essential supplies to be self-sufficient for a minimum of 72 hours, but preferably for 2 weeks.

16. People who may require assistance with transportation, during an emergency, should arrange for assistance from family, friends, or neighbors, prior to an emergency.

1.5 Overview

Benton County, Washington has an estimated population of 209,300 for 2020. The City of Richland, Washington has an estimated population of 59,570 (OFM, 2021). Columbia Generating Station is located 10 miles north of Richland, Washington, on land leased from the United States Department of Energy-Richland, at the Hanford Site (DOE-RL).

Columbia Generating Station is a Boiling Water Reactor (BWR) designed to produce 1200 megawatts of electrical power. Fuel for this reactor consists of slightly enriched uranium dioxide pellets sealed in zirconium alloy – 2 fuel rods. The principal structures located on the plant site are:

i. Reactor Building
ii. Radwaste and Control Building
iii. Turbine Building
iv. Cooling Towers
v. Circulating Water Pumphouse
vi. Spray Ponds
vii. Service Building
viii. Plant Support Facility
ix. Plant Engineering Center

Several types of incidents could result in an emergency at CGS that could produce off site impacts. These events include, but are not limited to criticality events, explosions, malevolent acts, fires, aircraft crashes, seismic events, high winds or tornados and transportation accidents involving non-radiological hazardous materials.

The effects of radiological and non-radiological hazardous materials from such events will vary according to the mechanism of release, the material released and meteorological data and location where the release occurred. A release of these materials could impact the lives, health and economy of Benton County residents, both short and long term.

1.6 Emergency Planning Zones (EPZs)

Benton County's radiological preparedness encompasses two Emergency Planning Zones (EPZs) around the Columbia Generating Station's nuclear power plant with specified protective actions applied:

- The Columbia Generating Station 10-Mile Plume Exposure EPZ and.
- The 50-Mile Ingestion EPZ

The Columbia Generating Station Plume Exposure EPZ

The area where the principal 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 radioactive iodine from a plume released during a facility emergency. Benton County, whose jurisdiction falls within the Plume Exposure EPZ of the Columbia Generating Station reactor, is responsible for developing procedures for making protective action decisions, and for implementing appropriate response measures to protect the citizens of Benton County who live within the Columbia Generating Station Plume Exposure EPZ. The Washington State role in the Plume Exposure EPZ is to assist Benton County by assessing the scope of the incident, making recommendations for protective actions, making provision for radiological monitoring and providing other emergency response assistance upon request by the county. The Plume Exposure EPZ for the Energy Northwest Columbia Generating Station reactor is roughly 10 miles in radius and is centered on Columbia Generating Station.

CGS developed and maintains the map used in the Hanford Site Neighbors calendar which is used as the primary public education/information that is provided to residents and businesses within the 10-mile EPZ. The calendar map depicts the EPZ Sections, evacuation routes, the locations of Emergency Worker Assistance Centers and the Red Cross shelters collocated at those locations. (J.10.a.i)

The 10-mile Emergency Planning Zones for a CGS emergency in Benton County, for which Benton County Emergency Management develops plans for, are section 3B and 3C.

- Section 1 is within Franklin County only.
- Section 2 and 2A are within Franklin County only. Section 2A is wholly subsumed within Section 2 and is under the jurisdiction of the Department of Energy, not CGS.
- Section 3A is entirely on the Hanford Site and is southwest of the Columbia Generating Station and is not associated with CGS.
- Section 4 and 5, are not associated to CGS. These 2 EPZs are either on the Hanford Site or under the jurisdiction of the Department of Energy. Onsite workers will be notified if any protective actions are necessary for the Hanford Site or DOE by Energy Northwest using their own procedures.

Factors within the 10-mile EPZ that are considered in developing emergency plans for Benton County are: residential areas, recreational areas, major events and major employers. Principal

highways in Benton County are State Routes 240, 240 Bypass, and 225. State Route 240 runs east/west and State Route 225 runs north/south. State Route 240 is a primary route between Horn Rapids County Park and Richland. State Route 225 is a primary route between the Rattlesnake Mountain Shooting Range and Benton City. State Route 240 Bypass runs north/south through Richland from Jadwin Ave. to Interstate 182/US Route 12 junction. The Bypass has intersections at Van Giesen St., Swift Blvd., and Duportail St. and is part of a pre-designated evacuation route.

Description of the Columbia Generating Station Plume Exposure EPZ Sections

Benton and Franklin County have pre-defined, geographic areas that have been determined through analysis to require emergency planning. This pre-planning ensures that emergency management officials can make prompt and effective decisions to protect public health and safety. Benton County, along with Franklin County, in consultation with the Department of Energy and Energy Northwest, have created seven (1, 2, 2A, 3A, 3B, 3C, 4 and 5) Emergency Planning Zone Sections for those organizations' facilities located on the Hanford Site.

Section 1: That portion of Franklin County; (1) North of Eltopia West Road, West of Glade North Road, South of West Klamath Road, and East of the Columbia River, (2) North of West Klamath Road, West of Fair Way Road, South of Basin Hill Road, and East of the Columbia River, (3) North of Basin Hill Road, West of Wahluke Road, South of Hollingsworth Road, and East of the Columbia River. NOTE: A portion of Section 1 is on the Hanford Site and has no permanent population.

Section 2: That portion of Franklin County; (1) North of West Sagemoor Road, West of Glade North Road, South of Eltopia West Road, and East of the Columbia River, (2) North of Alder Road, West of Dayton Road, South of West Sagemoor Road, and East of the Columbia River, (3) North of Selph Landing Road, West of Taylor Flats Road, South of Alder Road, and East of the Columbia River and is inclusive of DOE Zone 2A. b. NOTE: A portion of Section 2 is on the Hanford Site has no permanent Population.

Section 3A: This is entirely on the Hanford Site and is southwest of the Columbia Generating Station and is not associated with CGS.

Section 3B: That portion of Benton County described as: South of SR 240, west of Kingsgate Way and north of West Richland and east of SR 225. It includes the Horn Rapids Master Planned Community and those homes and businesses that are accessed from Harrington Road, Yakima River Drive, Snively Road, Twin Bridges Road and Weidle Road. It also includes the Rattlesnake Mountain Shooting Facility and the Horn Rapids County Park.

Section 3C: That portion of Benton County described as: South of the Hanford Site and North of Battelle Boulevard between Stevens Drive and the Columbia River. It also includes the area west of Stevens Drive 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 Boulevard, Sullivan Boulevard and Robertson Drive or businesses on the west side of Stevens Drive south of Curie Street.

Section 3D: That portion of Benton County described as being: The area North of First Street and South of Battelle Boulevard, between Stevens Drive and the Columbia River.

Section 4: Is not associated to CGS. This EPZ is on the Hanford Site. Hanford Site workers will be notified if any protective actions are necessary by Energy Northwest.

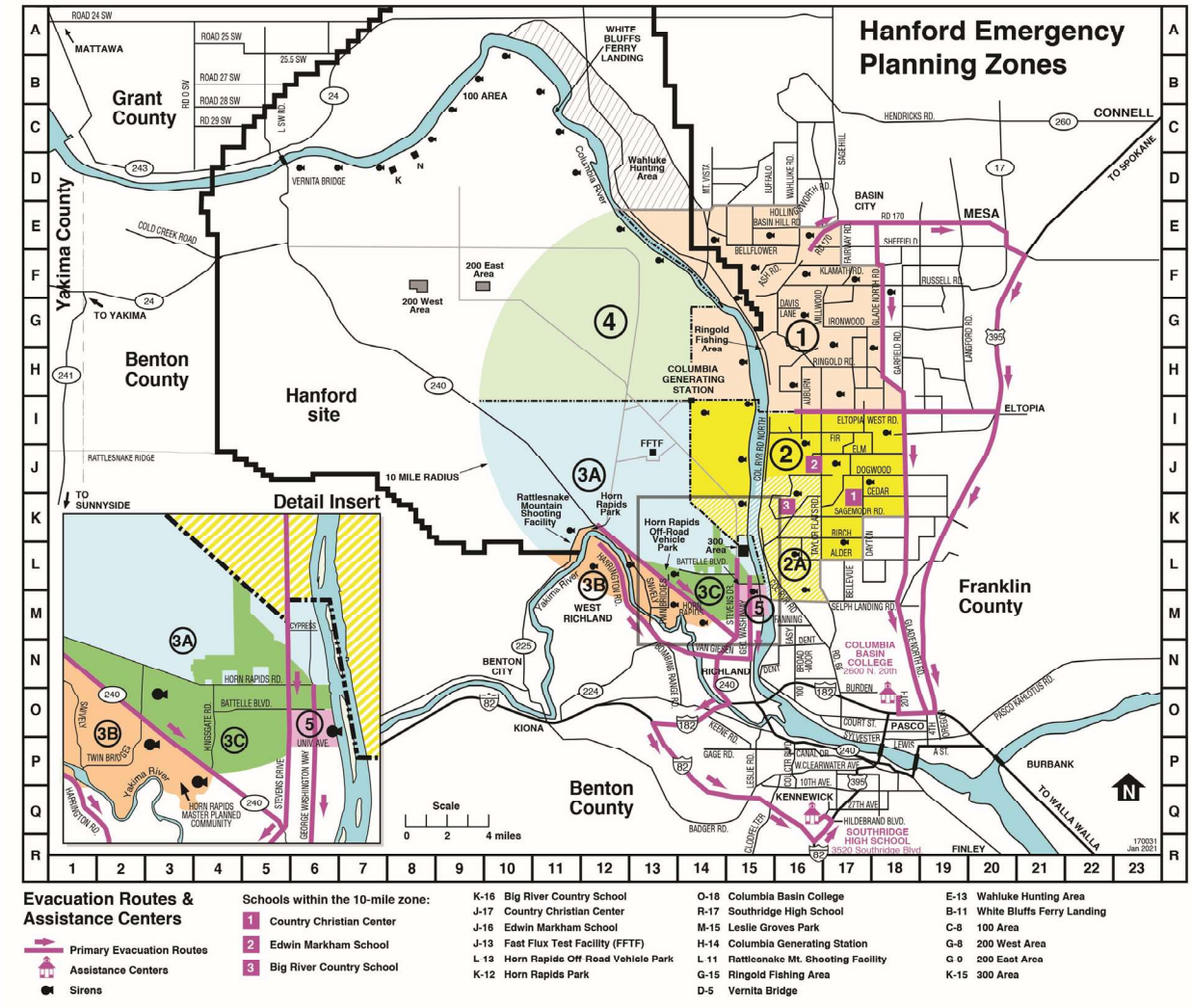
Section 5: Is not associated to CGS. This EPZ is part of the Hanford 300 Area EPZ. Hanford Site workers will be notified if any protective actions are necessary by Energy Northwest.

There are no schools, aging care facilities or correctional facilities within the Benton County portion of the Columbia Generating Station plume emergency planning zone. Benton County Emergency Management maintains a database of residents who have self-identified as being potentially without transportation or may otherwise need assistance during an evacuation of the plume emergency planning zone.

Benton County Sherriff's office has jurisdiction for the Benton County Portion of the Columbia River. Should sections of the Columbia River also need be closed, the river could be closed at various locations, ranging from the Vernita Bridge to White Bluffs Ferry Landing to Leslie Groves Park. The US Coast Guard may also be requested to issue a notice to mariners, regarding closures of the Columbia River.

Annual dissemination of information to the public is performed, and the information includes how the public will be notified and what their actions should be in an emergency. Calendars depicting information about the Emergency Planning Zones, and actions that the public may be requested to take, are mailed out to addresses in the Emergency Planning Zones annually. Evacuation routes are also included in the calendars (Figure 1) (G.1).

Figure 1- 10-Mile Emergency Planning Zones and Evacuation Routes (J.10.i)



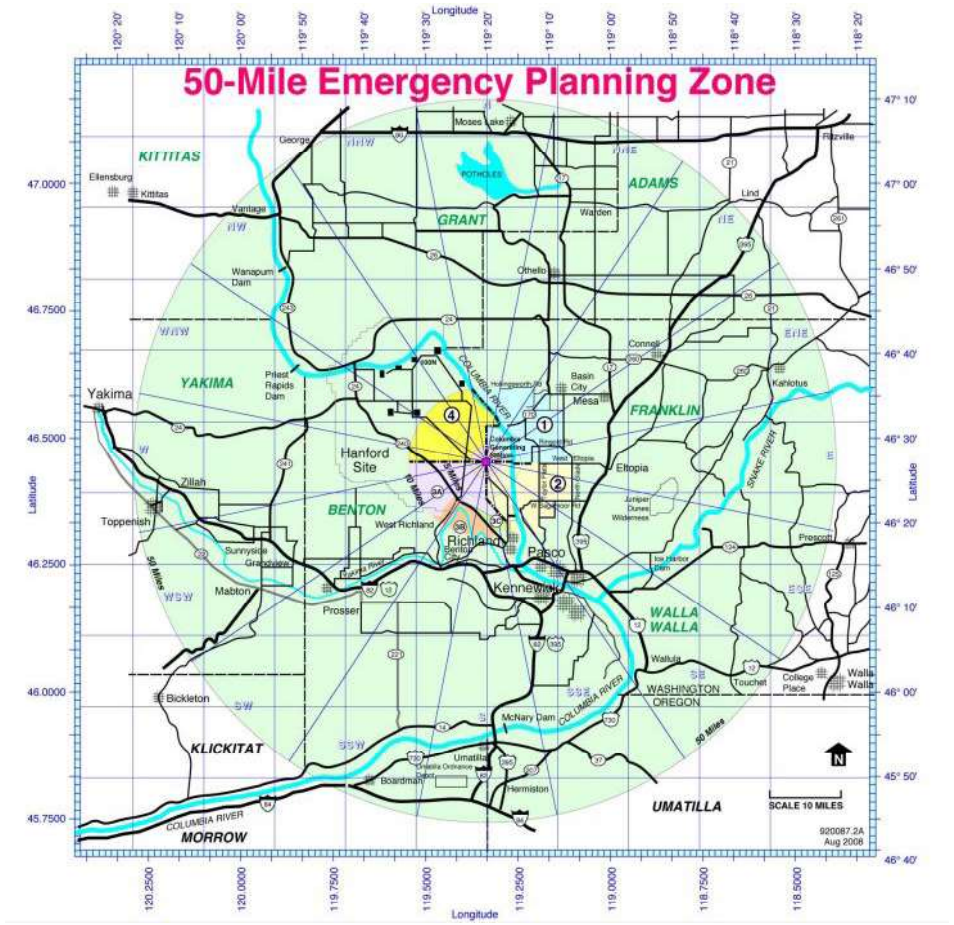
Ingestion EPZ

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 humans and animals through the consumption of food products contaminated by radioactive materials released during an emergency at the Columbia Generating Station. Benton County has no Ingestion EPZ responsibilities outside the county boundaries but may be requested or directed to assist in the implementation of protective actions (J.10.i).

Description of the Columbia Generating Station Ingestion EPZ

The Ingestion EPZ is roughly 50 miles in radius and is centered on the Columbia Generating Station. It incorporates the entirety of both Plume Exposure counties, Benton and Franklin, and extends out to portions of neighboring counties: Adams, Grant, Kittitas, Klickitat, Yakima and Walla Walla. The Ingestion EPZ also crosses the southern borders of Klickitat, Benton and Walla Walla counties and into the state of Oregon's Morrow and Umatilla Counties (Figure 2).

Figure 2 - 50-Mile Emergency Planning Zone (J.10.i)



Chapter 2 - Concept of Operations

2.1 Incident Initialization and Mobilization

Benton County Emergency Management will have primary responsibility for preparedness planning and for coordinating response activities for the offsite impacts in Benton County that may occur because of an emergency at CGS. Per agreement with FEMA Region 10, and due to sensitive and protected information contained within Annex D: Implementing Procedures, the Implementing Procedures for notification from the licensee to SECOMM are withheld from the plan and available for review in the BCEM EOC (E.1.i, E.3.ii).

Energy Northwest's Emergency Director must make offsite notifications within 15 minutes of an emergency. Meaning, from the time a declaration of an emergency which can be classified as an Unusual Event, Alert, Site Area Emergency, or a General Emergency incident occurs at CGS, Benton County Emergency Management must be notified. For Benton County, SECOMM is the 24-hour notification point, for such notifications. (E.1.i)

Energy Northwest (ENW) will also develop associated Protective Action Recommendations (PARs) to provide to Benton County Emergency Management for the early phase of an emergency.

Benton County has agreed to use CGS's Emergency Action Level/ECL systems in the emergency notification process (E.1.ii). The initial notification should consist of a phone call via the "ENW Crash" phone line, and a fax of the Columbia Generating Station Classification Notification Form (CNF) via the dedicated fax line (E.3.i, J.9.i). SECOMM will notify the appropriate personnel and agencies of the emergency, following their appropriate CGS procedure, based on the event classification (E.1.i, F.1.c.i).

Initial protective actions have been pre-planned for Site Area or General Emergency incidents for sections 3B and 3C as well as for parts of the Columbia River. Pre-recorded Emergency Alert System (EAS) messages are also maintained (E.4.i, J.9.i).

Either SECOMM or Emergency Management personnel, at both Benton and Franklin County, can activate systems to communicate protective actions, which involve activating sirens located in proximity to the Emergency Planning Zones, delivering a message over the electronic voice module for the sirens and sending out messages via the EAS. Messages may also be sent out via CodeRED, which is a telephonic emergency notification system, which people can register for and receive phone messages, text messages and e-mail messages in case of emergency. The system is TTY/TDD compatible.

If emergency management is going to activate the public warning systems, the messages and actions are discussed and coordinated between Benton County Emergency Management and Franklin County Emergency Management, as the sirens and EAS messages apply to both counties.

If emergency management personnel are not immediately available, SECOMM will activate the sirens and EAS messages, if needed, based on a matrix within their procedures (E.4.ii).

Benton County Emergency Management is responsible for communicating to the public within Benton County, protective actions that they may be requesting the public to take, and where to obtain additional information. Most likely the requested actions, for a CGS incident, will be to monitor and prepare, shelter in place, evacuate, or, for recreationalists, clear the river and evacuate the recreation areas located in EPZs (E.5.ii).

Information may be conveyed to the public via sirens, EAS messages, CodeRED messages, media releases and official governmental social media posts. Media releases will be approved by the Benton County Emergency Manger prior to dissemination (E.2.iv).

2.2 Direction and Control

The Benton County Emergency Manager, or their designee, will provide direction and control of the emergency response activities for a CGS Emergency that has off site impacts until the position and responsibilities are relinquished to another Incident Commander, the emergency terminates or until replaced at the direction of the Benton County Multi-Agency Coordination (MAC) Group.

The MAC Group will consist of representatives from stakeholder municipalities and agencies. It will generally consist of agency administrators, Benton County executives or their designees who are authorized to represent and commit agency resources and funds.

2.3 Coordination

Benton County Emergency Management staff provide the means for coordinating capabilities, resources, and assets necessary to alleviate the impact of disasters or emergencies on people and public entities. Benton County Emergency Services (BCES) coordinates licensee, state, and local resources to support the local response, including access to WebEOC, telephone, fax, and radio communications. Washington State EMD provides communication capability to federal representatives working in the SEOC, including access to WebEOC, telephone, fax, and radio communications. The Governor, through the Director of the Washington State Military Department, Emergency Management Division, and the State EOC (SEOC), may provide liaisons to federal agencies, using the Emergency Support Function (ESF) concept. The SEOC may also provide liaisons to British Columbia, other states and other entities based upon the scope of the disaster or emergency.

2.4 EOC Mobilization and Operation

The Benton County Emergency Operations Center is in the Benton County Emergency Services facility at 651 Truman Ave., Richland, Washington. It is the initial location for direction and control activities for non-hostile action related emergency response to a Columbia Generating Station emergency. The Benton County Emergency Operations Center will activate for an Alert, Site Area or General Emergency. The activation may or may not remain in place for an extended time, depending on the nature of the emergency.

Access to the Benton County Emergency Operations Center is limited to Benton County Emergency Services personnel and personnel from coordinating and supporting agencies participating in command-and-control activities as part of the incident command organization or multi-agency coordination group. Others may be admitted on an ad hoc basis. Controlling access to the facility rarely requires armed law enforcement personnel, but armed access control for the facility will be established if needed.

The Manager of Benton County Emergency Management, or designee, is responsible for monitoring and providing for the maintenance and readiness of the Benton County Emergency Operations Center.

The Franklin County Emergency Management building at 1011 E. Ainsworth, in Pasco, is the pre-identified alternate emergency operations center for Benton County Emergency Management (Figure 3). If both Benton and Franklin County Emergency Management's buildings are not safe or accessible, an alternate command post site will need to be located.

Primary Alternate Facility	
Name of Alternate Site	Franklin County Emergency Operations Center
Point of Contact Name	Sean Davis

Phone Number	509-492-1317 (Cell phone)
Alternate Number	509-545-3546 (Office)
Complete Address of Site	1011 E. Ainsworth, Pasco WA
Equipment and Facilities	EAS Siren Controller CEMNET / Amateur radios Dual Band handheld radios Telephones /Crash phones/Satellite phones Computers/Internet access Generator Television Copy/Fax machines Kitchen Facilities Restroom/Shower Facilities Furnished EOC

Figure 3 - Benton County's Alternate EOC Facility (H.6.vi)

Declaring EOC Operational

Upon notification of a CGS Emergency, Benton County Emergency Management will elevate the EOC operations level based upon the Emergency Classification Level. When Benton County Emergency Management has an Incident Commander, an Operations Section Chief, a Public Information Officer and Safety Officer present in the EOC and has transitioned the notification point from SECOMM to the EOC, the EOC is considered operational (Figure 4). Usually, the EOC is activated at an ALERT emergency classification level and declared operational shortly thereafter (Table 1).

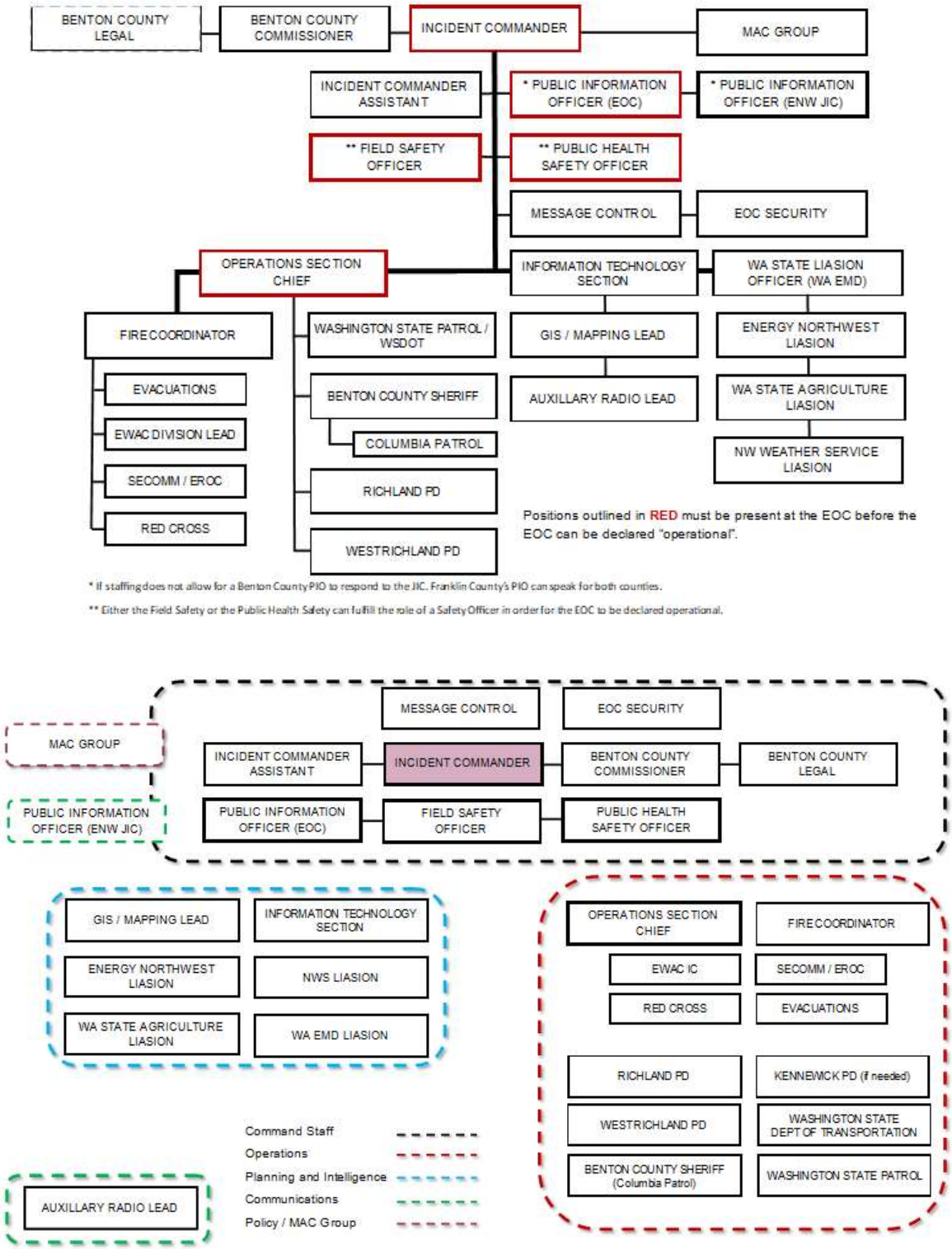


Figure 4 - Benton County's EOC Incident Command Structure for CGS and EOC Seating Arrangement (A.1.b.i)

Monitoring	Routine activation level in which Benton County Emergency Management personnel conduct their daily emergency management responsibilities. SECOMM retains and monitors the dedicated “ENW Crash” phone line, and the dedicated fax line. Upon notification of an UNUSUAL EVENT, SECOMM will conduct the notifications via CAD page or by phone. A detailed description of SECOMM’s CGS notification procedures is published separately.
Activated	When an emergency at CGS reaches a level at or above ALERT and the notification point is transferred from SECOMM to the EOC, the Benton County Emergency Manager, or their designee, will activate into the role of Incident Commander and additional Command and General Staff positions may also activated. Additional support and coordinating agency representatives may also be notified. At an Alert or higher-level emergency, SECOMM will conduct the notifications specified in their procedures via CAD page or by phone, requesting support staff report to the EOC. A detailed description of SECOMM’s CGS notification procedures is published separately.
Operational	When Benton County Emergency Management has an Incident Commander, an Operations Section Chief, a Public Information Officer and Safety Officer present in the EOC and has transitioned the notification point from SECOMM to the EOC, the EOC is considered operational. Additional support and coordinating agency representatives will have been notified and requested to respond depending on the incident details.

Figure 5 - Activation Levels

Command Staff

Benton County Emergency Management personnel will initially provide an Incident Commander (Emergency Manager), an Operations Section Chief (Emergency Planner), a Public Information Officer in the Benton County Emergency Operations Center and a person to staff Message Control in the Emergency Operations Center. Benton County Emergency Management normally provides a Public Information Officer at the Energy Northwest Joint Information Center (JIC), located at 3000 George Washington Way, Richland.

Safety officers are provided by local response agencies and the Benton-Franklin District Health.

Upon activation of the EOC or notification of an emergency at ALERT level or higher, SECOMM will notify both Benton and Franklin County Commissioners via CAD page.

General Staff

Additional EOC personnel will be staffed by local agencies as necessary, depending on the nature of the emergency.

Local Emergency Response Agencies will support Benton County Emergency Management in response activities, such as staffing the Emergency Operations Center, access control points and establishing the Emergency Worker Assistance Center (EWAC).

Support from other state or local agencies or organizations may be requested.

2.5 Legal Authorities and Emergency Proclamations

Authorities

RCW 38.52.070 directs each political subdivision of Washington State to establish a local organization for emergency management according to the State emergency management plan and program (A.2.i, A.2.ii). Benton County Emergency Management is established through an Interlocal Cooperative Agreement between Benton County, The Cities of Richland, Kennewick, West Richland, Prosser, and Benton City, as authorized by RCW 38.52.091.

Local Political Subdivision Emergency Declaration Process

Pursuant to RCW 38.52.070 and as defined in RCW 38.52.010(9)(a) Each political subdivision is authorized to exercise the powers vested under this section 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.

Benton County Emergency Management will advise/recommend when an Emergency Declaration/Proclamation should be issued by the county or municipalities. The county or municipality will follow their code, charter or ordinance when issuing a Proclamation of Emergency. A signed copy of the local Declaration of Emergency from Benton County would then be submitted to the Washington State Department of Emergency Management.

The purpose of a local Declaration of Emergency (C.2.b.iv):

- Authorizes the undertaking of extraordinary police powers.
- Provides limited immunity for emergency actions of public employees and governing bodies.
- Authorizes the issuance of orders and regulations to protect life and property (e.g., evacuations, agricultural interdictions).

- Activates pre-established local emergency provisions such as special purchasing and contracting.
- Prerequisite for requesting a Governor's Proclamation of a State of Emergency and/or a Presidential Declaration of an Emergency or Major Disaster.

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). (A.2.iii). A declaration of emergency must be made by Benton County Commissioners and City Councils to request state or federal assistance (C.2.b.iv). The Governor is empowered with this responsibility at the state level. The Governor's authority to proclaim a state of emergency is identified in RCW 38.08, and 43.06.010(12).

A Governor's proclamation of emergency allows the state and local governments to mobilize their communities for impending or existing disasters and emergencies and facilitates response activities (A.2.iii). 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.

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 (A.2). 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 RCWs 38.08, 38.52 and 43.06 is a broad grant of police power to the Governor in times of emergency (C.2.b.iv).

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 Washington State Comprehensive Emergency Management Plan (CEMP) to manage the emergency or disaster.
- A political subdivision, such as Benton County, declares a local state of emergency.
- The Multi-Agency Coordination Group (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 10 Regional Administrator.

All proclamations shall indicate the nature of emergency, the area or areas threatened and the conditions creating the emergency, 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.

2.6 Key Roles and Functional Areas

Benton County recognizes several types of Federal, state, local, and private-sector organizations within the scope of its Columbia Generating Station response plan (A.1.i, A.1.ii, A.1.a.i). These categories are pre-defined in the FEMA REP-1, Rev. 2 Radiological Emergency Preparedness (REP) Program Manual.

- **Principal Agencies/Organizations:** the nuclear utility (licensee) and any Federal, state, local, and tribal government agency, department, or executive office having a major or lead role in emergency planning and preparedness.
- **Supporting Agencies/Organizations:** any organization, such as an agency, department, office, or local jurisdiction, having a supportive role to the principal or lead organization(s) in emergency planning and preparedness.
- **Cooperating Agencies/Organizations:** an organization supplying assistance other than direct operational or support functions or resources to the incident management effort.

Principal Agencies/Organizations

Those having a major role in emergency planning, preparedness as well as direct operational and support include the following:

Benton County Emergency Management Staff

Benton County Emergency Management Staff is responsible for assuming, or designating, various roles in the EOC during a CGS emergency. Those roles include the following:

Benton County Emergency Manager

Responsibilities: The Benton County Emergency Manager ensures the County is prepared to deal with any radiological disaster or emergency by administering the Radiological Emergency Preparedness Program within Benton County Emergency Management. The Benton County Emergency Manager is also responsible for activating the EOC and assuming, or designating, the Incident Commander role in the EOC during a CGS emergency (A.1.c.i, C.3.iv) and making the decision to activate the Alert and Notification System (ANS) system (E.2.a.iii.a).

Authority: RCW 38.52.030, RCW 38.52.070 and RCW 38.52.110 authorize Benton County Emergency Manager to assume the responsibilities and to assign lead responsibility for emergency preparedness to a particular agency for a non-hostile action based emergency (A.2.i).

Benton County Code 5.04 provides for the preparation and carrying out of plans, including mock or practice drills, for the protection of persons and property within this county in the event of a disaster.

Duties: The duties of the Benton County Emergency Management Manager include, but not limited to the following:

a. The BCEM Manager is responsible to the executive heads of government for carrying out the emergency management program for the county.

b. Emergency Coordination: Maintain facility and necessary equipment. Ensure that staff is prepared to fulfill EOC or Field duties. Ensure resources are available for 24-hour per day operations.

c. Exercises and Drills: Provide input and/or develop scenario for drills and exercises. Prepare for drills and exercises (Mail Outs, readying the EOC, etc.). Participate in drills, exercises, and prepare critiques.

d. Public Information: Develop public information materials. Respond to the questions and concerns of Benton County residents. Conduct public meetings as necessary.

e. Maintain CodeRED system and special population database records. Activate sirens, EAS and CodeRED systems.

Benton County Emergency Planner(s)

Responsibilities: The Benton County Emergency Planner(s) updates and reviews radiological emergency plans, maintains dosimetry equipment, and facilitates trainings for Supporting Agencies/Organizations who have the potential to respond to a radiological disaster or emergency within Benton County. The Benton County Emergency Planner(s) is also responsible for assuming, or designating, the Operations Section Chief role at Benton County's EOC and / or the JIC PIO role at Energy Northwest's EOF during a CGS emergency (C.1.i, C.3.iv, G.4.iv, O.1.i).

Duties: The duties of the Benton County Emergency Management Planner include, but not limited to the following:

a. Plan and Procedures: Develop and/or revise the plan and procedures contained Benton County Radiological Emergency Response: Energy Northwest. Maintain distribution records and distribute new revisions to all plan and procedure holders.

b. Training: Develop training programs. Train Benton County emergency workers, federal, state, and Benton-Franklin County organizations, EOC representatives and staff.

c. Exercises and Drills: Provide input and/or develop scenario for drills and exercises. Prepare for drills and exercises (Mail Outs, readying the EOC, etc.). Participate in drills, exercises, and prepare critiques.

d. Emergency Coordination: Maintain facility and necessary equipment. Ensure that staff is prepared to fulfill EOC or Field duties. Ensure resources are available for 24-hour per day operations (A.1.c.ii).

e. Public Information: Develop public information materials. Respond to the questions and concerns of Benton County residents. Conduct public meetings as necessary.

f. Maintain CodeRED system and special population database records. Activate sirens, EAS and CodeRED systems.

g. Emergency Worker Kits and equipment: Maintain records for Benton County Emergency Worker Kits and equipment for all state, local, and federal agencies that have EW kits pre-positioned in Benton County.

Benton County Emergency Management Accounting Specialist

Responsibilities: The Benton County Emergency Management Accounting Specialist updates, reviews and maintains fiduciary information including those associated with the REP Program.

Duties: The Benton County Emergency Management Accounting Specialist, or their designee, is also responsible for assuming, or designating, the PIO role in the EOC during a CGS emergency (C.3.iv), and can update Benton County Emergency Management's social media platforms (E.5.iii)

Benton County Emergency Services Information Specialist, Technical Services Coordinator and GIS Technician (J.12.x)

Responsibilities: To serve as a technical service expert(s) within the EOC.

Duties: To provide, to the extent available: suitable maps, including GIS maps for recording various data accessibility to telecommunications, internet connectivity and to assist with troubleshooting (J.12.x).

Benton-Franklin District Health

Responsibilities: The Benton-Franklin District Health Officer is responsible for public health in Benton County. The Benton-Franklin District may provide a Health Officer, or designee, to assume the Public Health Safety role in the Benton County EOC (C.3.iv).

Authority: RCW 70.05.060 and 70.05.070 authorize the Benton-Franklin District Health Officer to assume and execute these responsibilities. WAC 246-100-070 authorizes the application and enforcement of lawful rules adopted by the state board of health in accordance with RCW 43.20.050.

Duties:

a. Coordinate with Field Safety Officer and Operations Section when implementing Protective Action Decisions for the public who may not be able to evacuate quickly.

b. Upon receiving recommendation from Energy Northwest's PAR, obtain authorization from the Washington State Health Officer to direct Emergency Workers to take potassium iodide (KI) (J.11.b.i).

c. Assist all offsite emergency responders on a case-by-case basis for re-entry into evacuated areas, providing health effects and radiation.

d. Request guidance on radiological related problems from the affected facility health physics personnel or Washington State Department of Health Representative.

e. Ensure that ingestion exposure protective actions within the plume EPZ are relayed to the Washington State Health Officer.

f. Assist with protective action decision making for individuals who have access or functional needs.

Benton County Board of Commissioners

Responsibilities: Benton County operates under the non-chartered "commission" or "plural executive" form of government. Three commissioners share administrative aegis with several other partisan officials independently elected to four-year terms of office. The commissioners serve as the chief administrators for several important county operations and have some quasi-judicial duties, as well.

Authority:

a. Proclaim local declaration of emergency as prescribed in RCW 36.40.180.

Duties:

a. Provide liaison to mayors, other county commissioners or to the Governor in emergency or disaster related matters. This is the Multi-Agency Coordination Group (MAC Group).

b. Establish emergency policies for the county during an emergency or disaster.

c. To request state assistance from either the Governor or other appropriate state agencies.

d. Issue, amend, or rescind necessary orders, rules and regulation to carry out emergency management operations.

Benton County Fire Districts

Responsibilities: Benton County Fire Districts; 1, 2 and 4, provide fire and emergency medical services within Benton County.

Authority: RCW's 38.52.070, 43.43.960(5), 52.12.111, 52.12.121, 52.12.131, 52.12.140 authorize Benton County Fire Districts to assume and execute fire response responsibilities.

Duties: During a CGS emergency, Benton County Fire Districts will send a representative to the EOC to support the emergency response by providing command and control, evacuation assistance, and coordinate mutual aid within the Operations Section (C.3.iv).

Agency	Station	Address
Benton County Fire District 4	Station 420 (HQ)	2604 Bombing Range Rd., W. Richland
	Station 410	1400 N Harrington Rd., W. Richland
	Station 430	8031 Keene Road, W. Richland
Benton County Fire District 2	Station 210	1304 Dale Ave, Benton City
	Satellite Station	49504 Whitmore PRNW, Benton City

Benton County Fire District 1	Station 110	2700 S Olympia St., Kennewick
	Station 120	30004 S Finley Rd., Finley
	Station 130	1321 N Grant St., Kennewick
	Station 140	7704 S Bermuda Rd, Kennewick
	Station 150	56205 Badger Rd, Benton City
	Station 160	144610 E Law Lane, Kennewick
	Station 170	101108 E Badger Rd, Kennewick

Benton County Sheriff's Office

Responsibilities: Safeguarding life and property, preserving the peace, prevention and detection of crime, enforcement of the law, and to protect the rights of the people who live, work and visit Benton County.

Authority: RCW 36.28.010, RCW 38.52.070, RCW 38.52.400 authorize Benton County Sheriff's Office to assume and execute their responsibilities. Benton County Code 5.04 provides for the preparation and carrying out of plans, including mock or practice drills, for the protection of persons and property within this county in the event of a disaster.

Duties: The duties of the Benton County Sheriff and their representatives during a CGS emergency include, but may not be limited to:

a. Performing plume exposure protective actions, as required.

b. Continuing Benton County Sheriff's Office law enforcement mission.

c. Providing for access and traffic control for implementation of evacuation orders.

d. Assisting the United States Coast Guard (USCG) as required to close portions of the Columbia River within the EPZ.

e. Assisting with access & traffic control and security at Food Control Points.

f. During a CGS non-hostile action based emergency, Benton County Sheriff's Office will send a representative to the EOC to support the emergency response by providing command and control, access control assistance, and coordinate mutual aid within the Operations Section (C.3.iv).

g. Assuming the role of the Benton County EOC liaison to the Law Enforcement Incident Command Post/Commander to coordinate Protective Action Recommendations/Decisions during a Hostile Action Based/security event (C.3.iv).

City of Kennewick

Responsibilities: Providing for the protection of life, health, and property of the residents and Emergency Workers in Kennewick, Washington.

Agency	Station	Address
Kennewick Fire Department	Station 71	7009 W Grandridge, Kennewick

Authority:

a. RCW 38.52.070 authorizes the City of Kennewick Police Department to assume and execute these responsibilities.

b. Kennewick Municipal Code 18.09.620 authorizes public services.

Duties:

a. The City Manager, or their designee, will be "on-call" or at their normal places of work if they are needed for consultation and may participate in the Benton County MAC Group to provide legal and financial authority for the response either in person or virtually.

b. Kennewick Police Department may provide law enforcement services for the response.

c. Kennewick Fire Department may provide response personnel and equipment to the Emergency Worker Assistance Center.

d. Other city departments may be assigned coordinated disaster functions according to their normal operational functions and capabilities and are responsible to prepare procedures to fulfill disaster functions.

City of Richland

Responsibilities: Provide for the protection of life, health, and property of the residents and Emergency Workers in Richland, Washington.

Agency	Station	Address
Richland Fire Department	Station 63	1000 George Washington Way
	Station 72	710 Gage Blvd
	Station 73	1900 Jadwin Ave
	Station 74	2710 Duportail St
	Station 75	460 Battelle Blvd

Authority:

a. RCW's 38.52.070, 35A.38.10, 43.43.960(5), 52.12.111, 52.12.121, 52.12.131 authorize the City of Richland Fire Department to assume and execute fire response responsibilities.

b. RCW 38.52.070 authorizes the City of Richland Police Department to assume and execute these responsibilities.

c. Richland Municipal Code(s) 2.08.010 through 2.08.100 provide for the preparation and carrying out of plans, including mock or practice drills, for the emergency assistance and aid of persons and property within this city in the event of a disaster.

Duties:

a. Richland City Manager, or their designee, will be "on-call" or at their normal places of work if they are needed for consultation and may participate in the Benton County MAC Group to provide legal and financial authority for the response either in person or virtually.

b. Richland Police shall continue to perform their law enforcement mission, and carry out plume exposure protective actions, as required.

c. Richland Police may also provide a representative to the Operations Section in the EOC during a CGS emergency (C.3.iv).

d. Richland Police may assist with access and traffic control for implementation of evacuation orders and /or access & traffic control and security at Food Control Points.

e. Richland Fire Department shall provide response personnel and equipment and may also provide a representative to the Operations Section in the EOC during a CGS emergency.

f. Other city departments may be assigned coordinated disaster functions according to their normal operational functions and capabilities and are responsible to prepare procedures to fulfill disaster functions.

City of West Richland

Responsibilities: Provide for the protection of life, health, and property of the residents and Emergency Workers in West Richland, Washington.

Authority:

a. RCW 38.52.070 authorizes the City of West Richland police department to assume and execute these responsibilities.

b. WRMC 8.28.010 authorizes the city to be included within the Benton-Franklin District health department, pursuant to the provisions of Chapter 70.46 RCW. It is the city's intent that all powers vested in it or its officers and all duties imposed upon it or its officers by general law for the protection of the life and health of the people within its jurisdiction shall be exercised and performed by the Benton-Franklin District health department and its district health officer.

Duties:

a. The West Richland Mayor, or their designee, will be "on-call" or at their normal places of work if they are needed for consultation and may participate in the Benton County MAC Group to provide legal and financial authority for the response either in person or virtually.

b. West Richland Police shall continue to perform their law enforcement mission, and carry out plume exposure protective actions, as required.

c. West Richland Police may provide a representative of Sergeant rank or higher the Operations Section in the EOC during a CGS emergency (C.3.iv).

d. West Richland Police Department may establish and staff temporary access control points at predetermined locations within Benton County.

e. Other city departments may be assigned coordinated disaster functions according to their normal operational functions and capabilities and are responsible to prepare procedures to fulfill disaster functions

Energy Northwest (ENW)

Energy Northwest owns and operates Columbia Generating Station. Licensed by the Nuclear Regulatory Commission in 1983, Columbia first produced electricity in May 1984, and entered commercial operation in December 1984.

Responsibilities:

a. Meet preparedness requirements of their site certification agreement.

b. Develop and maintains emergency plans, procedures, and maps to provide for the safety of the public and onsite personnel.

c. Assess the nature and extent of the incident or emergency at the affected Energy Northwest facility and make appropriate emergency classifications and notifications to counties and states.

d. Solicits and includes information from Benton County Emergency Management for the annual Columbia Generating Station calendar which includes EPZ information, evacuation direction and map.

e. Maintain MOUs with applicable federal, state, and local response organizations.

Authority: Energy Northwest, as the licensee of the Columbia Generating Station, must notify Benton and Franklin County within 15 minutes of emergency declaration at the plant and the NRC within 60 minutes. (10 CFR Part 50. Appendix E, Sec. IV.B. and C).

Duties: The duties of Energy Northwest include, but are not limited to:

a. Conducts the "Crash Call" and provides the CGS Notification Form information to SECOMM and/or Benton County EOC (E.3.i).

b. Provides Benton County Emergency Management with Protective Action Recommendations (PARS).

c. ENW may also provide a representative to serve in the EOC as a facility liaison during a CGS emergency (C.3.iv).

d. Energy Northwest will activate the CGS Joint Information Center (JIC) at either the primary location, the Energy Northwest Multipurpose Facility at 3000 George Washington Way, in Richland, Washington, or a secondary location. This activation would occur at Alert, Site Area Emergency or General Emergency.

Southeast Communications (SECOMM), 9-1-1 Dispatch Center

Responsibilities:

a. Serve as the public safety answering point (PSAP) for people within Benton and Franklin counties and dispatch service to all local law enforcement, fire/EMS, and emergency response agencies within both counties along within the 10-mile Plume Emergency Planning Zone.

b. SECOMM is responsible for activating a communication link between the Columbia Generating Station and providing 24-hour staffing. The dispatch center is collocated with the Benton County Emergency Operations Center.

c. SECOMM Manager maintains a roster of personnel to operate on 24 hours a day basis.

Authority: SECOMM operates under the authority of RCW 38.52.070 and WAC 118-66-030(65). The Dispatch Director is responsible for coordinating response activities.

Duties: The duties of SECOMM Dispatch include, but are not limited to:

a. Notification of the appropriate personnel and agencies of the emergency, following their procedures, based on the event classification.

b. Maintaining radio communications with Benton County first responders and other communications nodes as directed throughout the emergency event.

c. SECOMM may also provide a representative to serve in the EOC during a CGS emergency (C.3.iv) to support the Operations Section with situational awareness of any concurring emergencies.

d. Activate sirens, EAS and CodeRED systems (E.2.iii.a)

Tri-City Regional Special Weapons and Tactics Team (SWAT)

Responsibilities: Tri-City Regional Special Weapons and Tactics Team provides specialized law enforcement services.

Authority: 39.34 RCW, and the Washington Mutual Aid Peace Officers Powers Act, Ch. 10.93 RCW, authorizes for law enforcement agency to contract with any other law enforcement agency to provide mutual law enforcement assistance.

Duties: Should a response to a hostile action directed against the Columbia Generating Station occur, internal law enforcement duties and policies will apply. The Tri-City Regional Special Weapons and Tactics Team Operational Guidelines Manual shall apply to any SWAT tactical operations.

Townsquare Media (KORD FM Radio) & Cherry Creek Radio (KONA FM Radio)

Responsibilities: Townsquare Media, which owns and operates KORD 102.7 FM, or KZHR 92.5 FM (Spanish language), and Cherry Creek Radio, which owns and operates KONA 105.3 FM / KONA 610 AM, will provide notification, communications, and public information services. KORD FM is a back-up station to KONA that is capable of broadcasting tones that will activate distributed tone alert radio.

Authority: KONA & KORD Radio Stations participate in the "Local Emergency Alert System Operational Area Plan". Authority for Townsquare Media and Cherry Creek Radio to participate in this plan is provided by the FCC under eCFR :: 47 CFR Part 11- - Emergency Alert System.

Duties:

a. Broadcast follow-on emergency information providing additional instruction and guidance to portions of the public impacted by a Columbia Generating Station emergency (E.2.iv).

Washington Emergency Management Division

Responsibilities: 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.

Authority: State Emergency Management Act, RCW 38.52

Duties:

i. Prepare and maintain plan and procedures to address radiological incidents from fixed nuclear facilities.

ii. Train staff responsible for the planning effort and those that would respond to the State EOC during an incident.

iii. Provide support by sending liaisons to impacted jurisdiction EOC/ECC (C.3.iv).

iv. Manages and maintains the State Emergency Operations Center.

v. Coordinates state resources to support local jurisdictions in need of supplemental emergency or disaster assistance.

vi. Receives and processes requests from local jurisdictions for specific state and federal emergency and disaster-related resources and services.

vii. Prepares state disaster proclamations and the Presidential disaster requests for the Governor's signature.

viii. Provides liability coverage and indemnification to registered emergency workers of local jurisdictions operating in a good faith attempt to protect lives, property, and the environment in accordance with RCW 38.52.180.

Washington State Department of Agriculture

Responsibilities: To notify the agricultural community quickly during a radiological emergency by distributing emergency information through contact points such as granges and food processing plants. If appropriate, WSDA will recommend actions to reduce contamination and public consumption of adulterated food, milk and water. Decisions or recommended actions will be based on a variety of factors (J.12.xi).

Authority: The authority for Washington State Department of Agriculture is based on two mandates. RCW 69.04 establishes the Department of Agriculture as the agency responsible for safeguarding the public from injury due to adulterated or misbranded food. RCW 15.36 establishes legislation to safeguard the public from milk products that are unsafe for consumption (J.12.iii).

Duties:

a. Issue agricultural advisories and will collaborate with Washington EMD and DOH, and local county jurisdictions to help notify agribusiness of any PADs that would affect the ability to sell or move foodstuffs or agricultural products. Benton County will issue initial EAS messages and follow-up messages with PADs and updates with the assistance of local radio stations (J.12.xi).

b. To implement protective actions and the rationale and assumptions for controlling the food flow so that items contaminated with a radioactive substance or toxic chemical that exceed DOH's Derived Intervention Levels (DILs), or as directed by the executive Section will not enter commerce (J.12.viii, J.12.ix).

c. To obtain and maintain the location and up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting (J.12.viii).

d. Provide support by sending liaisons to impacted jurisdiction EOC/ECC (C.3.iv).

Washington State Department of Health

Responsibilities: The secretary of health shall be director of the state radiation control agency, who shall appoint a state radiological control officer, and in accordance with the laws of the state, fix his or her compensation and prescribe his or her powers and duties.

Authority: RCW 43.70.130(7)

The Washington State Secretary of Health shall Have the same authority as local health officers, except that the secretary shall not exercise such authority unless the local health officer fails or is unable to do so, or when in an emergency the safety of the public health demands it, or by agreement with the local health officer or local board of health.

a. The Secretary of Health shall be director of the state radiation control agency, who shall perform the functions vested in the agency.

Washington State Department of Health, Office of Radiation Protection

Responsibilities: Washington State Department of Health, Office of Radiation Protection provides health physics support for the Benton County response and technical support.

Authority: RCW 70A.388.040 The department of health is designated as the state radiation control agency and is the state agency having sole responsibility for administration of the regulatory, licensing, and radiation control.

Duties:

a. Assess and minimize the impact to Public Health from the effects of radiological emergencies.

b. 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.

c. Provide guidance on radiological related problems to the affected facility health physics personnel or to Benton-Franklin District Health representatives.

d. Calculate Derived Intervention Levels (DILs) that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs. (J.12.ix)

e. Assist in the development of the means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products. (Annex B of WSDA Radiological Emergency Response Procedures)

f. Assist in the development of map(s) in the Washington Information Sharing Environment (WISE) showing the recommended agriculture advisory area to the affected counties. (County Liaison Procedure of WSDA Radiological Emergency Response Procedures, J.12.x)

Washington State Department of Transportation (WSDOT)

Responsibilities: The Washington State Department of Transportation (WSDOT) is a state agency that constructs, maintains, and regulates the use of transportation infrastructure in Washington State. Additionally, WSDOT responds to traffic impediments or collision scenes on state highways to assist state law enforcement.

Authority: RCW 47.32.130(1), 47.48.020, 47.48.031, authorizes WSDOT to execute these responsibilities.

Duties: The duties of the WSDOT during a CGS incident include but are not limited to:

a. Assist with the establishment and manning temporary roadblocks at predetermined locations on state highways within Benton County.

b. If requested, support WSP or any other traffic mitigation agency in the execution of their duties. Additionally, WSDOT may provide resources, as available (e.g., personnel and equipment), to clear impediments on evacuation routes and assist emergency response in areas affected by incidents (J.11.c.iii, J.11.f)

c. WSDOT may also provide a representative to the Operations Section in the EOC during a CGS emergency (C.e.iv) to assist with traffic control or impediments during an evacuation.

Washington State Patrol (WSP)

Responsibilities: The protection of the Governor of Washington and the grounds of the Washington State Capitol; law enforcement on interstate and state highways in Washington; and providing specialized support to local law enforcement.

Washington State Patrol operates the Washington State Fire Training Academy, which provides high-risk fire training to fire departments and fire protection districts. The Fire Protection Bureau also provides coordination of Washington State fire service resources for mobilization during natural or human-caused disasters.

Authority: RCW 43.43.030, 43.43.960(5), 70.136.030 authorizes the WSP to assume and execute these responsibilities.

Duties: The duties of the WSP personnel during a CGS emergency include but are not limited to:

a. Response of a Sergeant rank or higher to the Benton County EOC to serve as the WSP Division Lead (C.3.iv).

b. Establishing and staffing access control points on state highways within the 10-mile EPZ in Benton County (J.11.c.iii).

c. If requested, coordinate with and support allied law enforcement agencies or fire service districts with operations within Benton County (J.11.c.iii).

d. Assume Incident Command for HAZMAT response on state highways and any for Benton County Fire Districts that have WSP designated as IC for HAZMAT emergencies per their agency's mission statement and standard operating procedures/protocols and agreements.

United States Coast Guard

Responsibility: The U. S. Coast Guard, 13th District, Sector Columbia River 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.

Authority: The Safety Zone provides authority for USCG and Sheriff's Office patrol craft to control river access within the EPZ. 33 CFR Part 165 Subpart C

Duties:

a. Direction and control of waterway traffic.

b. Evacuate navigable waterways as recommended.

c. Maintain access control to affected navigable waterways.

d. Assist in public notification on and along affected navigable waterways.

Supporting Agencies/Organizations

Agencies and organizations other than Benton County Emergency Services staff, with a major role in emergency planning, preparedness as well as direct operational and support include the following:

3 Rivers AuxComm (Auxiliary Radio Communications / HAM radio)

Responsibility: To provide alternative communication services to assist Benton County Emergency Management with the coordination of personnel and resource movement as needed.

Authority: 47 CFR §97, RCW 79.13.510

a. 47 CFR §97.111(a)(2) – Essential communication needs and to facilitate relief actions;

b. 47 CFR §97.111(a)(3) – With another FCC-regulated service;

c. 47 CFR §97.407(d)(1) – Public safety or national defense or security:

d. 47 CFR §97.407(d)(2) – Immediate life safety, protection of property, law and order, human suffering/need, combatting of armed attack or sabotage; and

e. 47 CFR §97.407(d)(3) – Public information or instructions in civil defense and relief

Duties:

a. Conduct voice message traffic from the EOC to the EWAC when passing message traffic via digital means is not available.

b. Data communications through Winlink® in the form of email and document attachments. Examples include but are not limited to: situation reports (SITREPs), staffing schedules, requests for resources (ICS-213RR), general message traffic (ICS-231 General Message), ICS forms/ documents and ISNAP reports. Templates of these forms can be found in the Winlink program.

c. Provide a licensed ham radio operator to the EOC to assist with redundant communications, giving Benton County Emergency Management an alternate and additional form of communication when systems are overtaxed or impaired (C.3.iv).

Ben Franklin Transit

Responsibilities: To provide transportation services in Benton and Franklin Counties in southeastern Washington state, serving the cities of Kennewick, Pasco, Richland, West Richland, Benton City, Prosser, and Finley.

Authority: RCW 38.52 and 38.52.091

Duties: During an emergency, Ben-Franklin Transit may provide emergency transportation service to persons needing evacuation assistance.

Benton-Franklin Posse (BF Posse)

Responsibilities:
The Benton-Franklin Posse may provide security and access control to Emergency Worker Assistance Center during an emergency activation.

Authority: RCW 36.28.020

Duties:

a. Provide a security post at the EWAC entrance.

b. Provide traffic control for facilities.

c. Periodically check all building access points are secure and signage is intact.

d. Ensure all authorized personnel sign in/out of the facilities.

Columbia Basin College (CBC)

Responsibilities: Provide facilities for use as an Emergency Worker Assistance Center (EWAC) in the event of an emergency at the Columbia Generating Station or another Hanford Site facility.

Authority: RCW Chapters 38.52 and 39.34.230

Duties: Columbia Basin College, located at 2600 N 20th Ave. in Pasco, duties include but are not limited to:

a. Provide on-campus building space and facilities to include showers, lavatories, and space for a Red Cross Shelter for the evacuees, service animals and emergency workers in the Columbia Basin College Gymnasium (J.11.d.i).

b. Provide facility management and a 24-hr. point of contact for CBC to interface with the EWAC Coordinator.

Kadlec Regional Medical Center and Trios Health Southridge Hospital

Responsibilities:

a. Kadlec Regional Medical Center is a Level III trauma designated hospital in Richland that provides comprehensive medical, surgical, and emergency medical services (J.11.d.v).

b. Trios Health Southridge Hospital is a Level III trauma designated hospital in Kennewick that that provides comprehensive medical, surgical, and emergency medical services (J.11.d.v).

Authority:

Duties: During a CGS emergency, Kadlec Regional Medical Center and Trios Health Southridge Hospital can provide emergency medical services for the contaminated injured from within the 10-mile Emergency Planning Zone (L.1.i) in Benton County. Both hospitals, and Lourdes Hospital in Franklin County, have the capability to accept radiologically contaminated patients from an Emergency Worker Assistance Center (EWAC).

Additionally, Kadlec Medical Center, Trios Health Southridge Hospital & Prosser Memorial Hospital in Benton County and Lourdes Hospital in Franklin County along with their service providers could coordinate efforts in accordance with the Benton-Franklin Counties Mass Casualty Incident Plan and the Disaster Medical Coordination Center Hospital Plan to ensure that casualty loads are distributed in a suitable manner.

Benton-Franklin Health District (BFHD) and Region 8 Health (Benton, Franklin, Walla Walla, Yakima, and Klickitat County) can advise and assist EOC personnel in managing medical resources as conditions require.

Kennewick School District

Responsibilities: Provide facilities for use as an Emergency Worker Assistance Center (EWAC) in the event of an emergency at the Columbia Generating Station or another Hanford Site facility.

Authority: RCW Chapters 38.52 and 39.34.230

Duties: Kennewick School District's Southridge High School, located at 3520 Southridge Blvd duties include but are not limited to:

a. Provide on-campus building space and facilities to include showers, lavatories, and space for a Red Cross Shelter for the evacuees, service animals and emergency workers (J.11.d.i).

b. Provide facility management and a 24-hr. point of contact for Southridge to interface with the EWAC Coordinator at Benton County EOC.

Richland School District

Responsibilities: Provide busses and drivers for emergency transportation in the event of an emergency at the Columbia Generating Station or another Hanford Site facility.

Authority: RCW Chapters 28A.160.080, 38.52 and 39.34.230

Duties: Richland School District will provide a point of contact to interface with the EWAC Coordinator at Benton County EOC to organize emergency transportation and personnel.

The Central and Southeastern Washington Chapter of the American Red Cross

Responsibilities: The Central and Southeastern Washington Chapter of the American Red Cross work to serve communities in nine counties including Benton and Franklin County. In both Benton and Franklin County, in the event of an emergency at Energy Northwest, the EWAC may serve as the Emergency Worker/Assistance Center and Red Cross Shelter.

Duties:

a. The ARC may provide a representative to the Operations Section in the EOC during a CGS emergency (C.3.iv) to assist with coordination of EWAC staffing.

b. ARC may also provide staffing to the EWAC to provide shelter services to members of the public who have been evacuated (J.11.d.vi).

Cooperating Agencies/Organizations

Other agencies provide support and assistance, but do not have roles or responsibilities as part of the Benton County emergency response within the Benton County portion of the Plume Emergency Planning Zone.

Washington State National Guard (WANG), Combat Support Team (CST), CRBRN Enhanced Response Force Package (CERFP), or Homeland Response Force (HRF)

Responsibilities: Assist during a radiological emergency by deploying Mission Ready Packages (MRP) with personnel and equipment to participate and/or provide subject matter expertise in the radiological decontamination process as part of the Emergency Worker Assistance Center (EWAC). If appropriate, WANG may also assist where needed with personnel. Decisions or recommended actions will be based on a variety of factors.

Authority: RCW 38.14 Washington State Guard, HRF Engagement, Planning and Assistance Team (HEPAT) Outreach Book, US Code Title 10

Duties:

a. Provide support by sending liaisons to the Franklin County EOC who will deploys in advance of additional National Guard Assets, and integrate with the existing response infrastructure to support communication with WA EMD area coordinators and local county managers; maintain communication between MRPs and the IC/AC; advise/assist OEM with integration of military resources at the local and area level; assist the IC/AC in determining damage and response needs within the area of operations

b. Deploys in advance of additional National Guard Assets and integrates with the existing response infrastructure.

c. The CST supports local civilian authorities in identifying potential hazards or threats of CBRNE agents and substances. They provide assessment of current and projected consequences and advise civilian responders on appropriate actions through on-site testing and expert consultation using communication "Reach Back" capabilities.

d. Coordinates with IC structure to pro-vide transportation of supplies and personnel to affected area, and to conduct decontamination of afflicted casualties and responders. Able to identify and analyze potential hazards; trained in decontamination procedures for ambulatory/non-ambulatory casualties, technicians, and equipment. Capable of processing casualties at an average rate of 40 (ambulatory) and 20 (non-ambulatory) per hour in permitting environmental conditions.

e. Integrate with IC and other Military forces as required, to provide hazardous materials response; coordinates CERFP tactical employment, accountability, and communication.

Federal Emergency Management Agency, Department of Homeland Security REP Region 10 RAC Chair

Responsibilities: The primary mission of the Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) is helping people before, during, and after disasters. In support of the primary mission of DHS/FEMA, the Technological Hazards Division (THD) Radiological Emergency Preparedness (REP) Program:

Ensures that state, local, and tribal governments can adequately protect the health and safety of the public living in the vicinity of the commercial Nuclear Power Plants (NPP)s, as defined by Public Law 96-295, in the event of an incident at an NPP;

Informs and educates the public about radiological emergency preparedness; and supports and provides guidance to state, local, and tribal governments' emergency planning and preparedness activities that take place offsite, or beyond the boundaries of the owner-controlled area around the NPP.

The Program assists state, local, and tribal governments in the development and conduct of offsite radiological emergency preparedness activities within the emergency planning zones (EPZs) of Nuclear Regulatory Commission (NRC)-licensed commercial nuclear power facilities.

The REP Program's historical success lies in its ability to integrate and enhance Federal, state, local, and tribal governments' preparedness planning and response and recovery capabilities for all types of radiological emergencies.

Authority: Federal regulations in 44 Code of Federal Regulations (CFR) Part 350 address FEMA's role in conducting assessments and issuing findings regarding offsite emergency plans/ procedures for responding to radiological emergencies at commercial NPPs.

Duties:

a. **Significant plan changes:** After FEMA's initial determination of reasonable assurance, it continues to monitor preparedness at each site. FEMA must receive any significant change to previously approved plans/procedures for review and approval.

b. **Periodic requirements:** In addition to approving significant changes, FEMA employs an assessment strategy to ensure maintenance of reasonable assurance. This strategy includes biennial evaluation of specified exercises and drills, Site Assisted Visits (SAV)s, the annual plan review, and the Annual Letter of Certification (ALC) from the state to FEMA certifying the completion of other elements necessitated by NUREG-0654/FEMA-REP-1, Rev. 2. These other elements include things such as training and the updating of public emergency information.

c. **Ongoing assessment:** FEMA supplements these "snapshot" assessments with the evaluation and observation of ongoing activities including full-scale, functional, and tabletop exercises (TTXs); other types of drills; seminars; training activities; interviews; and responses to real-world incidents. In addition, FEMA employs a dedicated Site Specialist for each NPP whose responsibilities include maintaining an ongoing assessment record that reflects the status of offsite preparedness and training. This approach allows FEMA to maintain a more up-to-the-minute assessment of reasonable assurance throughout the year and

provide increased integration with other Federal, state, local, and tribal government preparedness activities.

Chapter 3 – Response Organizations and Assignment of Responsibility

3.1 Agency Functional Responsibility Matrix

In the event of a CGS emergency, Energy Northwest, principal response agencies, a state EMD liaison, and support agencies/organizations should expect to coordinate and integrate according to plans and utilize the ICS structure (C.3.iii). Pre-identified principal response organizations will send representatives to the Benton County EOC 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. Benton County EOC can accommodate one representative from each of the agencies/organizations.

P – PRINCIPLE
S – SUPPORTING
C – COOPERATING

	INCIDENT COMMAND SYSTEM FUNCTIONAL AREA AND FUNCTION	BENTON COUNTY EMERGENCY MANAGEMENT	BENTON FRANKLIN HEATH DISTRICT	BEN FRANKLIN TRANSIT	AMATEUR RADIO (3RIVER AUXCOMM)	FRANKLIN CO. EMERGENCY MANAGEMENT	BENTON CO. BOARD OF COMMISIONERS / ELECTED OFFICIALS	BENTON COUNTY SHERIFFS' OFFICE	BENTON COUNTY FIRE DISTRICT 1	BENTON COUNTY FIRE DISTRICT 2	BENTON COUNTY FIRE DISTRICT 4	BENTON COUNTY GIS	CITY OF KENNEWICK FIRE DEPARTMENT	CITY OF RICHLAND / BENTON COUNTY ATTORNEY	CITY OF RICHLAND POLICE	CITY OF RICHLAND FIRE DEPARTMENT	CITY OF WEST RICHLAND POLICE	CENTRAL AND S.E. WA CHAPTER OF ARC	COLUMBIA BASIN COLLEGE	KADLEC REGIONAL MEDICAL CENTER / TRIOS HEALTH	MEDIA - CHERRY CREEK MEDIA (KONA)	MEDIA - TOWNSQUARE MEDIA (KORD)	SECOMM	SOUTHRIDGE HIGH SCHOOL (KENNEWICK S.D)	WA STATE PATROL, DISTRICT 3	WA STATE DEPT OF HEALTH, OFFICE OF RADIATON PROTECTION (ORP)	WA STATE DEPT. OF AGRICULTURE	WA STATE EMERGENCY MANAGEMENT DIVISION (WEMD)	WA STATE DEPT OF TRANSPORTATION (WSDOT)	US COAST GUARD – CLOVER ISLAND
COMMAND AND CONTROL	COMMAND AND CONTROL	P	P			P	P	P	S		S		S	P	C	P	S	S		S			S		S	S	S	P		
	ALERT & WARNING NOTIFICATION	P				P	S	S														P	S	P					S		C
	COMMUNICATIONS	P			S	P																C	C	P					P		
	PROTECTIVE RESPONSE	P	P			P	C	S						C													P	S	P		
	PUBLIC INFORMATION	P	P	C		P	C															S	S				S	S	S	C	
OPERATIONS	FIRE AND RESCUE	S	S			S		P	S		P		S			P	S														
	TRAFFIC CONTROL	S	S			S		P			S	S			S		P								P			S		C	S
	EMERGENCY MEDICAL SERVICE	S	S			S			P		P		S			P				P											
	RAD ACCIDENT ASSESSMENT	S	P			S	C		C		C		C								C						P	S	S		
	LAW ENFORCEMENT	S	S			S		P						C	S		S									S					S
	PUBLIC HEALTH	S	P			S			C							S		S		S						P	P	S		
SUPPORT	SANITATION	S				S																					P	S			
	SOCIAL SERVICES	S	S	S		S	C								S		S	P													
	TRANSPORTATION	S	S	P		S			C		S					S														S	
	MASS CARE FACILITY	S				S												P	P	S					P				C		
	EVACUATION	P	P	S		P	S	P				S			S		S	S	S		C	C			S	P			C	S	
	PREVENTION & PREPAREDNESS	P	P		S	P	S	S	S		S	S		S	S	S	S	S	C	S	S	S		C	S	S	S	S	S		
	PROTECTIVE RESPONSE TRAINING	P	C		S	P	S	S	S		S	S		S	S	S	S	S	C	S	S	S	S	C	S	S	S				

Table 2 - Agency Functional Responsibility Matrix (A.3.iii, C.2.d.i)

3.2 Written Agreements with Support Organizations

Radiological Emergency Preparedness Protective Action Strategy Plan (REP PASP)

The REP Protective Action Strategy Plan's central focus is to establish approval for predetermined actions to protect the health and safety of the public based on the initial notification of a Site Area or General Emergency at the Columbia Generating Station and to utilize the Protective Action Recommendations from Columbia Generating Station as the basis for the predetermined actions. The REP PASP is reviewed annually to verify the validity and updating signatories as necessary (A.4.v).

Concepts in this plan are applicable to the "initial" Protective Action Decision prior to Emergency Operations Center (EOC) activation, or in instances where the EOC is active, but no county commissioner or health officer is available, and a protective action decision must be implemented. The REP PASP does not apply to a Hostile Action Based event (A.1.c.i, A.1.c.ii, A.3.i, A.5.i,)

Benton County Master Mutual Aid Agreement

There is a Master Mutual Aid Agreement (MMAA) that encompasses many local response organizations that would be involved in a Benton County Columbia Generating Station emergency response (A.4.i, C.2.d.i). The MMAA, and any interlocal agreements pertinent to this plan are filed at Benton County Emergency Management office, reviewed annually to verify their validity, including developing new written agreements and updating signatories as necessary (A.4.iii).

Law Enforcement Mutual Aid

The Benton County Sheriff's Office has jurisdictional authority for law enforcement activities on the Hanford Site where the Columbia Generating Station is located. The Sheriff's Office maintains mutual aid agreements and other operational agreements with local and regional law enforcement agencies (A.4.i, C.2.d.i). The State of Washington created legal authority for a law enforcement mobilization plan, RCW 43.43.972.

Means for granting site access to personnel from organizations outside of the Columbia Generating Station site is under the control of Energy Northwest. Provisions for coordination between in-bound response resources and evacuation efforts will be communicated, as needed, with Benton County Emergency Management (C.2.c.ii). Energy Northwest is responsible for establishing site access policies and procedures for law enforcement and other first responders who are expected to access the nuclear power plant site in the event of a hostile action-based incident involving the Columbia Generating Station (A.4.ii, C.2.c.i, C.2.c.ii, C.2.c.iii).

Medical Services Agreement

Separate plans and procedures are prepared by Benton County Emergency Management and are reviewed by Energy Northwest, Washington Emergency Management, Washington Office of Radiation Protection, and each hospital. The hospitals are the final arbiter of approval of the hospital plans and procedures for the evaluation and treatment of radiologically contaminated injured patients. Those separate plans (A.4.v) and procedures are:

a. Procedure for the Care of Radiation Accident Patients at Kadlec Medical Center, Richland, Washington

b. Procedure for the Care of Radiation Accident Patients at Trios Hospital, Kennewick, Washington

Benton County Emergency Management has Memorandums of Understanding with the two hospitals for the evaluation and treatment of radiologically contaminated injured patients. The MOUs are reviewed annually to verify their validity and to update signatories as necessary (A.4.v).

Benton County Continuous Operations Capability – Early Phase

The Benton County Multi-Agency Coordination Group is responsible for ensuring continuity of resources in support of 24-hour operations.

The positions of Incident Commander, Public Information Officer, Operations Section Chief and Safety Officer are the only key staff positions required to be staffed in order to consider the Benton County Emergency Operations Center operational for a Columbia Generating Station emergency response. If the Safety Officer is also qualified to serve as an Operations Section Chief during a radiological emergency, then those two positions can be combined temporarily and be filled by the same individual. These same positions are the only positions on the Benton County Command Incident Management Team that are required to be staffed for 24-hour continuous operations, however, these positions are considered staffed if the personnel are readily available by phone or radio.

The Manager of Benton County Emergency Management is responsible for maintaining the 24-hour continuous operations roster at Benton County Emergency Services, 651 Truman Ave., Richland, Washington (A.5.i). The roster will identify at least two shifts of key staff, by title/position and will be determined at the time of response (A.5.ii, A.5.iii).

Shifts for law enforcement personnel performing non-hostile action-based Columbia Generating Station emergency response functions shall be determined by that agency's Standard of Operation Procedure. Shifts for law enforcement personnel performing hostile action-based response functions shall be determined by the agencies that comprise the Tri-City Regional Special Weapons and Tactics Team (SWAT) at the time of the incident based upon existing conditions (A.5.iv).

Shifts for all other response personnel shall be approximately 12 hours (A.5.iv).

Work/rest guidelines should be met during any Columbia Generating Station response. All personnel should be limited to a maximum 2:1 work to rest ratio (for every 2 hours of work or response related travel, provide 1 hour of sleep and/or rest).

Work shifts that exceed 16 hours and/or consecutive days that do not meet the 2:1 work/rest ratio should be the exception, and no work shift should exceed 24 hours. However, in situations where this does occur (for example, initial response) incident management personnel will resume a 2:1 work/rest ratio, with mitigation, as quickly as possible.

The Incident Commander or Agency Administrator must justify work shifts that exceed 16 hours and those that do not meet the 2:1 work to rest ratio. Justification will be documented in the daily incident records. Documentation shall include mitigation measures used to reduce fatigue.

The initial Incident Commander of any Benton County non-hostile action based, Columbia Generating Station incident management response organization shall establish the response shift schedule and shall designate the times and locations for the operational briefings for subsequent shifts. Section Chiefs or Branch Leads shall conduct the pre-shift briefing in cooperation with the Emergency Manager and other appropriate incident command staff.

Staffing for the Benton County Columbia Generating Station response organization is drawn from the Principal, Supporting and Cooperating agencies' personnel. Law enforcement, fire, and emergency medical services agencies and the county and municipalities of Benton County Emergency Services have sufficient personnel rostered to their individual entities to provide staffing on a continuous basis for an extended period.

Chapter 4 – Response Planning

4.1 Support to Licensee

In accordance with the principles of the National Incident Management System, Benton County may send a Field Observer to the Energy Northwest Emergency Operations Facility to act primarily in the capacity of a liaison to the facility emergency response organization (C.1.i). This assignment will be made if the emergency conditions justify that action and response resources are available and can respond to the Emergency Operations Facility safely. The Field Observer position does not require a public official of any specific title or level of authority since the position is intended to observe and report rather than commit county response resources. The Field Observer assigned to the Emergency Operations Facility is charged with gathering and sharing intelligence on behalf of the Benton County response organization (C.1.ii).

Benton County Emergency Management is a signatory to an MOU with Energy Northwest, which outlines if personnel are available and can safely travel to the facilities, BCEM will send a representative to the ENW Emergency Operations Facility onsite (A.4.ii).

4.2 Additional Emergency Response Support and Resources

The Benton County field staff and responders will communicate resource needs through pre-determined communication channels to the Benton County Multi-Agency Coordination (MAC) Group who will then forward the request to the State of Washington (C.2.b.i, C.2.b.iii). These requests to the state could be via the Washington State Emergency Management's WebEOC Resource Tracker or via a WA Resource Request Form (ICS 213 RR), or via WinLink© (auxiliary radio). The MAC Group may process a resource request through Washington State Emergency Management Division for additional state or federal resources to supplement local Non-Hostile Action Based response resources (C.2.a.i, C.2.b.iv). Once the requests are received and approved by the State, such resources will be identified, and response times agreed upon during the resource order fulfillment process (C.2.b.vi).

Some potential requests for additional support could be for Radiation Health Physicists, All Hazards Incident Management Teams, Disaster Behavioral Health Resources, Washington National Guard or other equipment or supplies that exceed the assistance capabilities already determined by interlocal or master mutual aid agreements (C.2.b.ii). Additionally, inclement

weather, time of day, or season (i.e., Wildfire season) the emergency occurred could create an environment in which additional resources may be needed and requested (C.2.b.iii).

Potential resource requests	Potential Provider or Coordinating Agency
Washington National Guard	Washington State Emergency Management Division
Radiation Health Physicists	Washington State Department of Health
Disaster Behavioral Health	Benton Franklin Health District
Livestock, Assistance Animals, or Pet Services	Washington Department of Agriculture or Benton Franklin Humane Society

Figure 6 - Potential Resource Needs & Potential Providers or Coordinating Agencies (C.2.b.v)

If such requests are made pursuant to identified needs and are approved by the Benton County MAC Group, such resources will be identified, and response times agreed upon during the resource order fulfillment process (C.2.b.vi).

Any federal assets that are requested by agencies other than those that are a part of the Benton County Columbia Generating Station response organization shall be the primary responsibility of the agency that ordered those assets. Benton County may assist locating logistical support for those assets but assumes no financial or legal obligation for providing logistical support (C.2.b.ii).

The Incident Commander for a Hostile Action-Based incident at CGS may initiate requests for state or federal assistance to supplement response resources through established law enforcement resource request procedures. Otherwise, the Incident Commander shall place supplemental resource requests through Benton County Emergency Services (C.2.b.v).

If, during an emergency response, the Command or General Staff of the Benton County EOC becomes aware of staffing shortfalls during the first operational period of the response, personnel representing those response organizations (BCEM, Benton County Sheriff, Benton-Franklin Public Health, etc.) will be tasked with determining how to best remedy the situation.

4.3 Integration of Resources into Response Efforts

Because SECOMM 9-1-1 dispatches for both Benton and Franklin County, integration of incoming emergency response support/organizations to both counties could require the establishment and designation of radio communication frequencies that would be in addition to those already used for routine city and county government operations. Federal response resources are encouraged to provide resources for their own communications requirements in ways that will not interfere with Benton or Franklin County emergency radio communications systems (C.2.b.vii, C.3.iii).

Additional field resources would be given Just-In-Time training, obtain any required safety equipment, and be placed into the ICS structure as appropriate (C.3.iii).

4.4 Laboratories

Radiological Laboratories

During a radiological event, the Public Health Laboratory's (PHL) Office of Environmental Laboratory Science, located in Shoreline, Washington performs radiological analysis of environmental media samples (C.4.i). The laboratory has the capability to analyze all types of sample media for contamination from emergency levels down to typical environmental levels (C.2.ii, C.4.iv). Benton County has no direct contracts or agreements with radiological laboratories, such agreements may be held between Washington State Department of Health and the PHL.

Laboratory Operations

Benton County does not participate in the collection, transportation, delivery, or analysis of field samples. These tasks are the responsibility of Washington State Department of Health, Office of Radiation. The availability of the laboratory to provide services; and the number of samples the laboratories would be able to process in a given period would be assessed by the Washington State Department of Health at the time of the event (C.4.iii, C.4.iv).

Chapter 5 – Emergency Classification System

5.1 Emergency Classification System

Benton County adopts the U.S. Nuclear Regulatory Commission's Emergency Classifications and their definitions as used by Energy Northwest for classifying emergencies at the Columbia Generating Station (D.1.b.i, J.7.ii). These classifications are set out in Table 3: Emergency Classification Levels and Emergency Actions. Use of this classification system as the basis for determining the level of local response to a Columbia Generating Station emergency assures the consistency of emergency response with Franklin County, the surrounding ingestion counties, and Energy Northwest (D.1.b.ii). The ECL-based response will be reviewed with input from Energy Northwest as needed (D.1.b.iii, E.1.ii)

5.2 Emergency Response Measures

The actions Benton County contemplates taking in response to a classified emergency at the Columbia Generation Station shall be consistent with those Table 3: Emergency Classification Levels and Emergency Actions (D.4.i).

The actions listed in the table are intended for Columbia Generating Station emergencies that are not complicated by adverse conditions arising from hazardous materials emergencies, weather or geologic events or potential, ongoing, or terminated criminal activity. These provisions may be altered after consideration of any known or suspected concurrent environmental conditions or criminal activities that may degrade or adversely impact the safety of the public or responders.

Not all variations or variables of potential situations that may arise during an emergency can be identified prior to its occurrence. If, in the professional judgment of the Incident Commander,

Multi-Agency Coordination Group, or response organization overhead personnel, actual situations arise during an exercise scenario or actual Columbia Generating Station emergency, that can best be ameliorated by deviating from established plans or procedures, deviation from these plans and procedures is hereby authorized. However, such deviations should be documented including the reasoning that led to those deviations.

Emergency Classification	Emergency Phase	Plant Conditions	Radiological Release	Potential Effects on Public Safety	Type of Action	Protective Action Decisions	Area Affected
Unusual Event	Plume Early Phase	Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated.	No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occurs.	There are no known threats to public safety, but the situation warrants increased awareness	*None*	No Protective Action Decisions need be considered by Benton County.	*None*
Alert	Plume Early Phase	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.	There is no known threat to the public, but the situation warrants increased awareness, notification of response organization personnel, activation of response organization facilities, and potential activation of the response organization	*Precautionary*	Protective Action Decisions may be considered by Benton County, but none are required. These may include Monitor and Prepare, Shelter in Place, or Evacuate.	Most likely no areas of Benton County are subject to a Protective Action Decision.
Site Area Emergency	Plume Early Phase	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.	Releases of radioactive materials are not expected exceed the EPA Protective Action Guidelines exposure levels beyond the site boundary.	There is no known immediate threat to the public, but the situation warrants increased awareness, notification of response organization personnel, activation of response organization facilities, and activation of the response organization	*Precautionary*	Benton County Protective Action Decisions are required by agreement even though they are precautionary in nature. These include Evacuation of recreation areas and the Columbia and Yakima Rivers near the Hanford Site, the Rattlesnake Mountain Shooting Facility, and the Horn Rapids Off-Road Vehicle Park. A Protective Action Decision that recommends no action must be justified by risk analysis based upon the situation.	Recreation areas and the Columbia and Yakima Rivers adjacent to the Hanford Site, including: the Rattlesnake Mountain Shooting Facility, and the Horn Rapids Off-Road Vehicle Park.
	Plume Early Phase	Indicates actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility	Releases of radioactive materials, if any, can be reasonably expected to exceed the EPA Protective Action Guidelines beyond the site boundary	The potential for radiological exposure to the public warrants notification and activation of the response organization activation of response organization facilities, and activation of the response organization	*Preventative*	Protective Action Decisions are required. These may include, in addition to those mentioned for a Site Area Emergency: Monitor and Prepare, Shelter in Place, or Evacuate portions of Benton County adjacent to the Hanford Site. A Protective Action Decision that recommends no action must be justified by risk analysis based upon the situation. An Agricultural Advisory may be issued by the Washington Department of Agriculture.	In addition to the recreation areas listed under Site Area Emergency, Sections 3B and 3C of the Plume Emergency Planning zone are affected.
General Emergency	Post Plume Intermediate Phase	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 PAG exposure levels offsite for more than the immediate site areas.	This phase is characterized by continuing efforts to identify areas of deposited contamination, the isotopic composition of the contamination, and the types and levels of actual and potential radiation exposure.	*Preventative*	Protective Action Decisions designating areas of Benton County that should Monitor and Prepare, Shelter in Place, or Evacuate. Have been made. Those decisions are being reviewed and modified as appropriate in consultation with the State of Washington.	In addition to those areas identified under Site Area and General Emergencies, other areas within Benton County may be included as appropriate.
	Post Plume Relocation Phase					Protective Action Decisions made by Benton County are being reviewed and modified by the State of Washington in consultation with Benton County. The modifications concern reopening transportation corridors, those areas that were previously evacuated, but can be reoccupied, areas that were evacuated that cannot be reoccupied, and areas that were not evacuated that must be evacuated permanently.	Areas previously evacuated or near those areas previously evacuated may be opened or permanently closed. Transportation routes crossing through evacuated areas may be reopened

Post Plume Ingestion Phase		Protective Action Decisions made by Benton County are being reviewed and modified by the State of Washington in consultation with Benton County. The modifications concern designating areas within Benton County that are subject to an interdiction of commercial quantities of agricultural products, establishing identifiable, enforceable boundaries for that area, identifying the resources needed to enforce the interdiction order, and implementing the interdiction.	All, or portions of, Benton County may be subject to agriculture interdiction.

Table 3 - Emergency Classification Levels and Emergency Actions (J.11.g.ii)

Chapter 6 – Notification Methods and Procedures

6.1 Notifications by Energy Northwest

Information included in the notification from the licensee to the Benton County 24-hour notification point is usually accompanied by a faxed notification form. Since Energy Northwest is responsible for the design and content of the notification form, a copy shall not be included in the Benton County response plan (E.1.i, J.9.i). However, Benton County has coordinated with Energy Northwest in the development of what information needs to be included in the Classification Notification Form (CNF). The CNF includes information such as the Emergency Classification Level, whether a release has taken place, any populations areas that may potentially be affected, and whether protective measures may be necessary. (E.3.i) Follow-on notifications may include additional information such as date/time of incident, location of incident, type of projected or actual release, meteorological conditions, any licensee emergency response actions underway, any recommended protective actions, or prognosis of the situation based on plant information. (E.3.ii)

Energy Northwest requests for law enforcement, fire suppression, or pre-hospital emergency medical services from agencies other than on-site services (Hanford Patrol or Hanford Fire) they shall be made by Energy Northwest to SECOMM (the Benton County notification point) using one of the following means:

a. Dedicated CRASH system
b. Dedicated Dial-up System
c. Energy Northwest Security Radio
d. 911 line
e. public switched network, or
f. NAWAS
g. Satellite phone

If a Columbia Generating Station Hostile-Action Based incident is resolved before any assistance is requested beyond local law enforcement agencies, then Benton County fully expects that Energy Northwest shall provide any required notifications of a classified emergency in the same manner as usual for initial notifications.

6.2 Subsequent Notifications by Energy Northwest or Benton County

The Benton County Emergency Operations Center is co-located with SECOMM. SECOMM shall remain the primary notification point for Benton County prior to the arrival of BCEM staff at the Benton County Emergency Operations Center (Annex D – Implementing Procedures).

Typically, during an ALERT level or higher classification level, the responsibility for receipt of subsequent notifications from Energy Northwest to Benton County, or transmittal of notifications from Benton County to Energy Northwest, shall be transferred to the Incident Commander's position in the EOC. Following that transfer, the receipt of fax notifications shall be in Message Control and receipt of CRASH calls shall be in the Emergency Operations Center.

Following the transfer, SECOMM does not retain the ability to answer the CRASH or Dial-up lines, however, SECOMM retains the ability to receive notifications via the public switched network, 911 lines, NAWAS, and Energy Northwest's Site Wide Security radio channel.

The Benton County Emergency Operations Center may not be party to any or all communications between the primary or alternate Energy Northwest Emergency Operations Facility and the Benton County Hostile-Action Based emergency response organization.

6.3 Notification Process Between Benton County and Energy Northwest

As noted previously, SECOMM is the Benton County 24-hour warning point for receipt of emergency notifications and response resource requests from the Columbia Generating Station. Any successor agency to SECOMM will inherit SECOMM's responsibilities.

Initial notification of a Columbia Generating Station Emergency from Energy Northwest to Benton County shall be made according to the following table, Notification Methods CGS to Benton County (E.1.a.i):

Method of Receipt	Priority	Verification
Dedicated CRASH System	Primary	Not Required
Dedicated Fax System	Secondary	Contact the Security Communications Center if CRASH call was not received
Dedicated Dial-up System	Secondary	
NAWAS dedicated emergency telephone	Secondary	Contact Energy Northwest's Security Communications Center to verify the notification.
911 line or public switched network	Secondary	
Iridium Satellite Phone	Last Resort	

Receipt by Benton County of an initial notification of a Columbia Generating Station Emergency from a source **other than Energy Northwest** shall be made according to the following table: Notification Verification Methods (E.1.iii):

Method of Receipt	Verification
Dedicated CRASH System	Contact Energy Northwest's Security Communications Center to verify the notification.
Dedicated Fax System	
Dedicated Dial-up System	
Energy Northwest Security Radio	
NAWAS dedicated emergency telephone	
Benton County Public Safety Radio System	

ACCESS Network

911 line or public switched network

Any other method of receipt

6.4 Notifications to the Columbia Generating Station

In the event of emergency conditions arising from hazardous materials emergencies, weather, or geologic events or potential, ongoing, or terminated criminal activity not originating from the Columbia Generating Station but having the potential to adversely affect the Columbia Generating Station, Benton County may notify Energy Northwest of the existence of those conditions.

The Columbia Generating Station Security Communications Center shall be the primary location for receiving notifications from SECOMM or the Benton County Emergency Operations Center until such time that SECOMM or Benton County have been notified that the Energy Northwest primary or alternate Emergency Operations Facility is operative.

6.5 Alerting/Activating Benton County Response Personnel

Benton County initial notifications are carried out by SECOMM to the Benton County response organizations as indicated in Table 4: Alerting/Activating Response Personnel. The SECOMM Shift Supervisor or Lead Dispatcher and the Benton Command Incident Commander are the individuals responsible for overseeing and verifying the notification and activation of staff. The SECOMM Shift Supervisor or Lead Dispatcher also oversees and verifies the alert and notification of resources for a hostile action (E.1.a.iii).

SECOMM utilizes emergency dispatch radio frequencies, CAD paging, and telephone as the primary means of notifying Benton County response agencies. A contingency method for notifying all appropriate response organizations, including specific notifications made at each ECL can be accomplished through CodeRED by SECOMM or BCEM Staff.

Benton County Emergency Management uses landline telephones and cell phones as the means of secondary notification (E.1.a.ii, E.1.a.iv).

Initial notifications are made to agencies or organizations that would send a representative to the Benton County EOC. (E.1.a.ii). Secondary notifications are made to agencies or organizations that could send a representative to the Benton County EOC if requested, may need to implement their own emergency response plan(s) or as a courtesy call for situational awareness (E.1.a.ii). These notifications may be completed by the Benton County Incident Commander or their designee for a non-hostile emergency. If the emergency is a hostile action-based event, any secondary notifications would be at the directive of the IC for the Tri-City Regional Special Weapons and Tactics Team (E.1.a.iv).

Procedures for accomplishing SECOMM's notifications and activations listed Table 4, contain sensitive and protected information. Per agreement with FEMA Region 10

SECOMM's Implementing Procedures for alert and notification will be withheld from the plan but are available for review in the BCEM EOC.

Initial Notifications	Secondary Notifications
SECOMM Notifies:	**Benton County Emergency Management Notifies:**
Benton County Emergency Management	Benton-Franklin District Health
Benton and Franklin County Commissioners	The Central and Southeastern Washington Chapter of the American Red Cross
Benton County Sheriff	Kadlec Medical Center / Trios Health
Richland Police	Richland School District
West Richland Police	KinderCare
Kennewick Police	WSU Tri-Cities
Benton County/Tri-Cities Regional Special Weapons and Tactics Team	PNNL Security
Richland Fire	Horn Rapids Golf Course
Kennewick Fire	Horn Rapids RV Resort
Benton County Fire District 1	Richland City Manager
Benton County Fire District 2	West Richland City Manger
Benton County Fire District 4	Kennewick City Manager
Emergency Resource Officer / Coordinator (EROC)	Benton County Emergency Services Executive Board

Table 4 - Primary and Secondary Notifications (f.1.b.ii)

6.6 Alert and Notification Systems for the Public

Energy Northwest provides an outdoor siren alert and notification system for activation by Benton or Franklin Counties or Energy Northwest to alert and notify people within the plume emergency planning zone, including people using recreation areas within the plume emergency planning zone or who are engaged in other outdoor activities. The primary public alert and notification system (ANS) for a Columbia event involves the use of these sirens within the publicly accessible portions of the 10-mile EPZ (E.2.ii).

Energy Northwest has established a contract for CodeRED, a vendor, that maintains this emergency notification telephone and software network system for providing notifications by wired phone, cell phone, text message, email, and TTY systems. Franklin County Emergency Management, Benton County Emergency Management and SECOMM have the ability to activate this notification system (E.2.ii).

Tone Alert Radios (TARs) are issued to and supplement the ANS for special needs populations only (e.g., residents who identify themselves to their respective county emergency management officials as having hearing impairment-related special communication needs). These tone alert radios are programmed to monitor KONA-FM (has backup power at the transmitter site) and KORD-FM (does not have backup power) for the digital tones that precede an emergency alert system message (E.2.ii). KONA and KORD Radio which are the primary (LPT1) and secondary (LPT2) EAS stations, respectively. Both radio stations participate in the "Columbia Basin Operational Area Plan" (E.2.v).

Benton and Franklin County's emergency management agencies and SECOMM personnel can initiate the process that results in the broadcast of emergency alert system messages that have been pre-recorded in English and Spanish for use in the event of a Columbia Generating Station emergency (E.2.iii.a). Neither KORD nor KONA are required to activate EAS (E.2.vi). Benton County's primary method for initiating an EAS message is by way of dedicated computer and Sage ENDEC (E.4.v). Franklin County Emergency Management and the Washington State warning point are also capable of initiating pre-recorded emergency alert system messages in the event of a Columbia Generating Station emergency (E.4.i, E.4.ii, E.2.iii, E.4.v).

In the event of a non-hostile action-based Columbia Generating emergency classified as a Site Area or General Emergency, Benton or Franklin County will activate the outdoor warning sirens, CodeRED, and the Emergency Alert System to notify the public. In the event of a hostile action-based emergency, activation of CodeRED, the outdoor sirens, and the Emergency Alert System would be subject to the approval of the Benton County Hostile Action Based emergency incident response organization. The agency that will activate the system and the message that will be broadcast are coordinated between the Benton and Franklin County response organizations if both are activated (E.4.ii).

The three systems are used to notify the public of the need to Monitor and Prepare, Shelter in Place, or Evacuate as a result of a Columbia Generating Station emergency. The information conveyed via the sirens and 2-minute EAS message is insufficient to provide all the information concerning the actions the public should take in response to the emergency situation.

The siren, CodeRED and EAS messages conclude by stating that the public should tune to KONA AM or FM or KORD FM to receive additional instructions. The follow-on information that will be provided over KONA AM and FM and KORD FM will provide the rest of the information that the public needs to act appropriately (E.4.iv). KORD-FM is a back-up station that is capable of broadcasting tones that will activate distributed tone alert radios.

Information concerning 24/7 contact information for KONA and KORD are set out in the procedures for the Incident Commander position in the Benton County Columbia Generating Station emergency response organization.

The rebroadcast period for broadcasting official information statements, Emergency Alert System messages, and the follow-on information shall occur every 30 minutes and no less than every 90 minutes (E.2.ix, E.4.iii). Franklin and Benton County EOCs will coordinate with the Energy Northwest Joint Information Center (JIC) to coordinate any special news/press releases or to disseminate appropriate supplemental information to the emergency alert system (EAS) message in a timely manner (E.2.viii).

6.7 Pre-Emergency Information Dissemination

Currently, Benton County chooses to forego providing:

I. Public information publications in languages other than English and Spanish.

II. Information concerning Potassium Iodide.

III. Information in telephone books, or utility bills.

6.8 Outdoor Informational Signage and Transient Pamphlets

Energy Northwest has installed, and Benton County Emergency Management staff conducts site-checks on a quarterly basis, informational signs and pamphlet boxes at the following locations:

a. Horn Rapids County Park
   - Overnight camping pay station
   - Boat launch

b. Snively Road Boat Launch
c. Horn Rapids Off-Road Vehicle Park
   - Twin Bridges Road entrance
   - Beardsley Road entrance

d. Richland Babe Ruth Baseball Complex
e. Leslie Groves Park boat launch

The pamphlet for transients, Emergency Information, is produced and provided in both English and Spanish. It includes information on:

How notification will occur

1. What instructions may be given
2. What the protective action instructions mean
3. Where to go for assistance
4. How to obtain additional information.

6.9 Annual Information for Plume Emergency Planning Zone Residents

Benton County Emergency Management participates with Franklin County Emergency Management, Energy Northwest and the Department of Energy-Richland Operations in the annual review, preparation, and distribution of the Hanford Site Neighbor Calendar. The calendar is distributed annually, in both English and Spanish, within the Plume Emergency Planning Zone. The calendar includes:

a. Descriptions and maps of protective action areas with evacuation routes and relocation/assistance centers
   i. Detailed information on how the public in the EPZ will be notified and where to turn for emergency information and instructions.

b. Information on protective actions, including:

   i. Specific instructions for actions to take when sheltering-in-place.

ii. Instructions on evacuation and suggested evacuation destination(s) with an easy-to-read EPZ map that highlights the evacuation routes and location of reception centers and other centers used for public services during an emergency.

c. Provisions and/or policies for persons with disabilities, Access and Functional Needs, and/or service animals.

d. Information consistent with the plans/procedures regarding

i. the care of children at public and private schools and

Residents are encouraged to use the calendar and keep it readily available for quick reference in the event of an emergency. The calendar information is also readily available via links on the *Benton County Emergency Services website.*

6.10 Fifteen Minute Design Objective

It is the responsibility of Energy Northwest to provide notification systems capable of meeting the scope of public notification fifteen-minute design objective. The ANS is capable of meeting the 15-minute design objective as described in Columbia Generating Station Alert and Notification System (ANS) Design Report, Revision 2 - November 14, 2016 (E.2.i).

Benton and Franklin Counties have entered into an agreement concerning the activation of the alert and notification systems provided by Energy Northwest. Pursuant to that agreement, procedures have been established that provide for the activation of the system within fifteen minutes of the making of a protective action decision (E.2.i.)

Chapter 7 – Emergency Communication

7.1 Communications Systems

During a classified emergency, Benton County communicates with local governments and response agencies within Benton County, contiguous counties' emergency operations centers within Washington State, and the Washington State Emergency Operations Center. Benton County could communicate with contiguous counties' emergency operations centers in Oregon State but would probably communicate with the State of Oregon through the Washington State Emergency Operations Center.

Benton County Communications with Federal Response Organizations

Benton County will not normally communicate with federal emergency response organizations except the Department of Energy-Richland.

In the event that other federal response organizations mobilize and respond to a classified emergency at the Columbia Generating Station, Benton County should have space available for a liaison from the federal response organization within the Benton County Emergency Operations Center. Benton County also has a limited supply of digital 800 MHz portable radios

that may be made available for interoperability purposes. Benton County would, most likely, create and program separate talk groups for communicating with federal responders.

Communications Links with Columbia Generating Station

The primary method of communicating between the Columbia Generating Station Emergency Operational Facility and the Benton County Emergency Operations Center is the dedicated (CRASH) phone system provided by Energy Northwest (ENW) in conjunction with the public switched network telecommunications providers.

The backup communications system between the Columbia Generating Station Emergency Operational Facility and the Benton County Emergency Operations Center is the Site Wide Security Radio system provided by Energy Northwest.

Communications Links P – Primary A – Alternate X – Additional		COMMUNICATIONS SYSTEMS	Energy Northwest CRASH phone	Energy Northwest Dial Up	Energy Northwest PIO Dial Up	Energy Northwest Fax	10 – Digital Fax	Amateur Radio – Digital VHF	Comprehensive Emergency Management Network (CEMNET)	Public Safety - VHF	Hospital Emergency Ambulance Radio	Ultra-High Frequency – UHF Radio	High Frequency – HF Radio	Email	National Warning System (NAWAS)	800 MHz Radio	Telephone / Cellphone
Washington	**Oregon**																
AGENCY / ORGANIZATION																	
3 Rivers AuxComm (Amateur Radio)								**P**						X			**A**
Adams County Emergency Operations Center							**A**	X	**A**					X			**P**
Ben-Franklin Transit														**A**			**P**
Benton County Fire Districts (BC1, BC4)							X			**A**	X			X		X	**P**
Benton County Prosecuting Attorney's Office														**A**			**P**
Benton County Sheriff's Office							X			**A**				**A**		X	**P**
Benton Franklin Health District							X							**A**		X	**P**
Benton Franklin Posse														X		**A**	**P**
Central and SE Chapter of American Red Cross							**A**	X						**A**			**P**
Cherry Creek Media (KONA) / Townsquare Media (KORD)										**A**				X			**P**
City of Richland Fire Department							X			**A**	X			X		X	**P**
City of Richland Police Department							X			**A**				**A**		X	**P**
City Of West Richland Police Department							X			**A**				**A**		X	**P**
Columbia Basin College EWAC							X	X						**A**			**P**
Emergency Northwest Emergency Operations Facility			**P**	X	X	**A**	X					X		X	X		X
Energy Northwest Joint Information Center			X	**P**	**P**	X	X								X		**A**
Franklin County Emergency Operations Center			X	X		X	**A**	X	**A**	X	X		X	X			**P**
Grant County Emergency Operations Center							**A**	X	**A**					X			**P**
KADLEC Regional Medical Center							**A**	X	**A**					X			**P**
Marrow County, EOC (Oregon)							**A**	X					X	**A**		X	**P**
Oregon State Emergency Operations Center							**A**	X						**X**			**P**
SECOMM							X			**A**	X	X	X	X		X	**P**
Southridge High School EWAC							X	X						**A**			**P**
Tri-City Regional Special Weapons and Tactics (SWAT)							X			**A**				**A**		X	**P**

TRIOS Health Southridge Hospital						**A**	X	**A**					X			**P**
U.S. Coast Guard (Portland) – Columbia River						X					X	X	**A**		X	**P**
Umatilla County, EOC (Oregon)						**A**	X					X	**A**		X	**P**
WA DOH – Office of Radiation Protection													**A**			**P**
Walla Walla County Emergency Operations Center						**A**	X	**A**					X			**P**
Washington State Department of Agriculture						X							**A**			**P**
Washington State Department of Transportation						X							**A**			**P**
Washington State Emergency Operations Center		X	X	X	X	**A**	X	**A**					X			**P**
Washington State Patrol						X			**A**				X		**A**	**P**
Yakima County Emergency Operations Center						**A**	X	**A**					X			**P**

Table 5 - Communications Links (F.1.a.i, F.1.a.ii, , F.1.b.i, F.2.i)

Additional means of communications are available and can be implemented if needed, such as:

a. Satellite telephones
b. Cell Phone
c. Email
d. Washington State EMD Duty Officer

If additional communications resources are needed, Benton County shall request state and/or federal communications cache resources and technical support personnel.

Pre-hospital Communications Systems

Pre-hospital emergency medical responders use cell phones as their primary means of communication with the medical control hospital. Hospital Emergency Ambulance Radio (HEAR) frequencies can also be used. Amateur Radio frequencies and resources can be mobilized to supplement communications between the Disaster Medical Coordination Center, the agency(ies) responsible for responding to a mass casualty incident, and the Benton County Emergency Operations Center.

The Tri-County Mass Casualty Incident Plan specifically directs that transport crews shall not have direct communications with the medical control hospital while in route.

Communications with Host/Support Counties

Benton County and its local governments have no associated host/support counties located outside the Columbia Generating Station plume emergency planning zone.

Communications Links Summary Table

A table showing communications links between the Benton County Emergency Services building, which houses the Benton County Emergency Operations Center and SECOMM, is included in this plan as Table 6: Communications Links.

Suggested Communications Plan for a Hostile Action-Based Emergency

A table of suggested communications links for initial use during a Columbia Generating Station hostile action-based emergency is included as Figure 7: Suggested Hostile Action Based Emergency Communications Plan.

INCIDENT RADIO COMMUNICATIONS PLAN			Incident Name	Date/Time Prepared	Operational Period
AREA WIDE COORDINATION					
Ch #	**Function**	**Channel Name / Trunked Radio System Talkgroup**	**Assignment**	**Frequency**	**Remarks**
1	Area Wide Coordination	COM T 10-800 MHz	ICP & County EOC		
2		Command 3	Fire Agencies		
3		Area Wide Security	ENW		
4	PAD Coordination	COM t 11-800 MHz	ICP & County EOC		
5	Other	Telephone / Cell Phone			
6					
LAW ENFORCEMENT RESPONSE TO HAB					
Ch #	**Function**	**Channel Name / Trunked Radio System Talkgroup**	**Assignment**	**Frequency**	**Remarks**
7	SWAT Tactical	SWAT 800MHz	SWAT Tactical		SWAT ONLY
8	Energy Northwest Tactical	Plant Security – CGS	CGS Tactical		CGS ONLY
9	Local Access Radio	COM T 12-800MHz	Road Security		Access Control Points in Richland, W Richland, Columbia River
10	Reserved ICP Talkgroup	Regional	RESERVED		RESERVED Channel for Law
11	Reserved ICP Talkgroup	LAW T 9	RESERVED		RESERVED Channel for Law
12	Reserved Simplex Law Freq	LERN		155.370 MHz	Spare Simplex Frequency for Law
13					
WASHINGTON STATE PATROL RESPONSE					
Ch #	**Function**	**Channel Name / Trunked Radio System Talkgroup**	**Assignment**	**Frequency**	**Remarks**
14	WSP Access Control	WSP Tactical	Road Security		All WSP Access Control Points
15	Reserved SIMPLEX Fire Freq	REDNET			Spare Simplex Frequency for Fire use
16					
BENTON COUNTY RESPONSE TO COLUMBIA GENERATING STATION					
Ch #	**Function**	**Channel Name / Trunked Radio System Talkgroup**	**Assignment**	**Frequency**	**Remarks**
17	Local Access Control	COM T 12-800MHz	Road Security		Access Control Points in Richland, W Richland, Columbia River
18	Local Access Control				
19	Evacuation	Badger- Ch 9 Zone 1	Evacuation Group		Evacuation Assistance Operations in Benton Count Plume Emergency Planning Zone
20	Evacuation				
21	Assistance Center	West IP – Ch 7 Zone 1	Southridge Branch		Assistance Center Operations Southridge High School
Prepared By (Communications Unit):			**Incident Location**	Columbia Generating Station	
			County	Benton	
			State	Washington	

Figure 7 - Suggested Hostile Action Based Emergency Communications Plan

Field Team Communications

Benton County does not deploy nor directly communicate with radiological field teams.

7.2 Testing Communications Systems

Drills shall be conducted by the emergency organizations in order to ensure that emergency response personnel maintain familiarity with their respective emergency responsibilities and to provide a means of performance evaluation. All communications drills include a message content check, see Table 6 - Communications Systems Schedule (F.3.i, N.4.f.i, N.4.f.ii) Such drills shall include the following:

a. Weekly communications links tests between Energy Northwest and the SECOMM Dispatch center, Washington State EOC, and the Benton County EOC. Communication testing with Federal resources is a WA State EMD responsibility.

b. Weekly dedicated telephone communications tests between Energy Northwest, Benton County EOC, and the Washington State EOC.

c. Annual communications links tests during exercises between Energy Northwest and the Facility field assessment teams, Washington State Department of Health

and its field assessment teams, the SECOMM Dispatch center, the Washington State EOC, and the Benton County EOC. FEMA will evaluate these links biennially (every other year).

d. Weekly Siren and EAS Test procedures and the River Siren Annual Test procedures are both outlined within the Benton County EOC Implementing Procedures.

Testing Communications Systems Table												
	SYSTEM	CRASH		DIAL-UP		CEMNET	VHF - HIGH		*When Scheduled Required Monthly Test (RMT)		
		CGS	DOE	CGS	DOE		AMATEUR RADIO	DOE	Sirens	EAS	IPAWS
INTERVAL											
Weekly		X	X			X	X		X	X (RMT)	X
Monthly				X	X			X		*X (RMT)	
Annually									X	X	

Table 6 - Communications Testing Schedule (N.4.f.i, N.4.f.ii)

Chapter 8 – Public Education and Information

8.1 Pre-Emergency Information Dissemination

Currently, Benton County chooses to forego the provision of: Information concerning Potassium Iodide, information in telephone books, or utility bills. Benton County does provide public information documents which are published in English and translated for Spanish (G.1.i) for populations within plume exposure pathway EPZ (G.1.v).

8.2 Outdoor Informational Signs and Transient Brochures

Energy Northwest installed outdoor informational signs and brochure boxes at the following locations:

a. Horn Rapids County Park
   - At the overnight camping pay station and at the boat launch

b. Snively Road Boat Launch

c. Horn Rapids Off-Road Vehicle Park
   - At the Twin Bridges Road entrance and the Beardsley Road entrance

d. Richland Babe Ruth Baseball Complex
e. Leslie Groves Park boat launch

The emergency information brochures, provided in both English and Spanish, are inventoried and replaced quarterly by Benton County Emergency Management staff. The brochures include information on:

- How notification will occur
- What instructions may be given
- What the protective action instructions mean
- Where to go for assistance
- How to obtain additional information.

It is important the following material be read very carefully! This information only applies to people in recreation areas or passing through the Emergency Planning Zones (see numbered areas on map.)

How will I be notified?

If you live or work within the ***Hanford site*** Emergency Planning Zones (EPZ):

- People on the Hanford site and Benton and Franklin County EPZ residents will be alerted by sirens or loudspeakers.
- Recreationists in the Horn Rapids area will be alerted by sirens followed by an audible message.
- Emergency messages will be broadcast over KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Listen to and follow instructions.
- All Benton & Franklin residents of the CGS EPZ are encouraged to register for **CodeRED** (at their county's website) to receive direct emergency notifications via phone, text, and/or e-mail.

If you are using the ***Horn Rapids Off-Road Vehicle (ORV) Park:***

- Listen for sirens sounding for about three minutes followed by an audible message.
- The sirens signal you to evacuate the area. You may also be contacted by a park manager or an assistant.
- Tune your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Other radio and TV stations may also broadcast emergency information.

If you are using the ***Columbia or Yakima rivers*** near the Hanford site:

- Listen for sirens sounding for about three minutes followed by an audible message.
- The sirens will signal boaters and persons using the river to evacuate.
- Tune your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language), or the Marine Band Channels 16 or 22.
- If there is NO radiological or hazardous materials risk, you will be told to return to your launch point and evacuate.
- If there IS a risk of radiological or hazardous materials exposure, you will be directed to an assistance center to be checked for contamination.

If you are using the ***Wahluke hunting or Ringold fishing areas:***

- Listen for sirens sounding for about three minutes followed by an audible message.
- The sirens signal you to evacuate the area and tune your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Listen to instructions. Other radio and TV stations may also broadcast emergency information.

What will I be asked to do?

If you are told to ***Evacuate:***

- Listen to instructions carefully. Be sure the section you are in is being evacuated before you follow the next steps.
- Take your pets with you. You must bring your own pet carrier, leash and proof of up-to-date vaccinations. Most shelters will not allow non-service animals so you may need to make other arrangements.
- Lock your doors and windows.
- Take your own car if possible. Take neighbors if they need a ride. If you don't have a car, ask your neighbor for a ride or call your county emergency management office.
- Children attending Edwin Markham Elementary School, Country Christian Center or Big River Country School will be taken to a safe location by school staff. Listen to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language) to learn what actions officials are taking.
- Schools and day care centers near an area affected by the emergency may choose to evacuate. **Do NOT go to the school.** You may actually hinder the safe evacuation of your child. Parents are strongly urged to contact their school or day care provider to discuss their emergency plan ***before*** an emergency happens.
- Drive away from the Hanford site. Once outside the Emergency Planning Zone, go to the nearest open assistance center announced over the radio.

If you are told to ***Shelter In Place:***

- Remain inside.
- Close all doors and windows.
- Use phone only for a personal emergency.
- Keep pets inside.
- If you must go outside, cover your nose and mouth with a wet cloth.
- Listen to a primary Emergency Alert System (EAS) radio station KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language) for further instructions.
- Start preparing for possible evacuation.
- Close anything that might bring air in from the outside, such as a fireplace damper, range fan, bathroom vent or clothes dryer.
- If you are in a car, keep the windows and vents closed. Continue to a destination away from the Hanford site.

If you are told to ***Monitor and Prepare:***

- Turn on your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Listen for further instructions and developments.
- Review your family or business emergency plan. Start making preparations to either evacuate or take shelter, if told to do so.

Where can I go?

Assistance centers are shown on the map. Register at the assistance center so friends and relatives can locate you easily.

Assistance center locations are:

- Southridge High School, 3520 Southridge Blvd., Kennewick
- Columbia Basin College (CBC), 2600 N. 20th, Pasco

Stay tuned to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language), drive carefully and remain calm.

Where can I get more information?

Benton County (509) 628-2600
http://www.bces.wa.gov
Franklin County (509) 545-3546
toll free (800) 258-5873
http://www.franklinem.org

160017-2021
February 2021

EMERGENCY INFORMATION

Public Emergency Instructions

Emergency plans have been developed to ensure the safety of the people near the facilities on the Hanford site. The Hanford site includes the Department of Energy's nuclear fuel storage facilities, radioactive and chemical waste treatment and storage facilities. The Columbia Generating Station nuclear energy facility operates on land leased on the Hanford site.

Plans to protect the public's health and safety have been prepared in the unlikely event of an emergency at one of these facilities. The purpose of this brochure is to describe the emergency actions for people who are using recreation areas or passing through the Hanford site Emergency Planning Zones. Check the numbered areas of the map on the other side to see if you are within one of these zones. If you have any questions, contact your emergency management office.

Publication design and editing services courtesy of Energy Northwest, operator of the Columbia Generating Station nuclear energy facility. Columbia provides enough electricity to power one million Washington homes.

Please keep this brochure and store it in a convenient place.

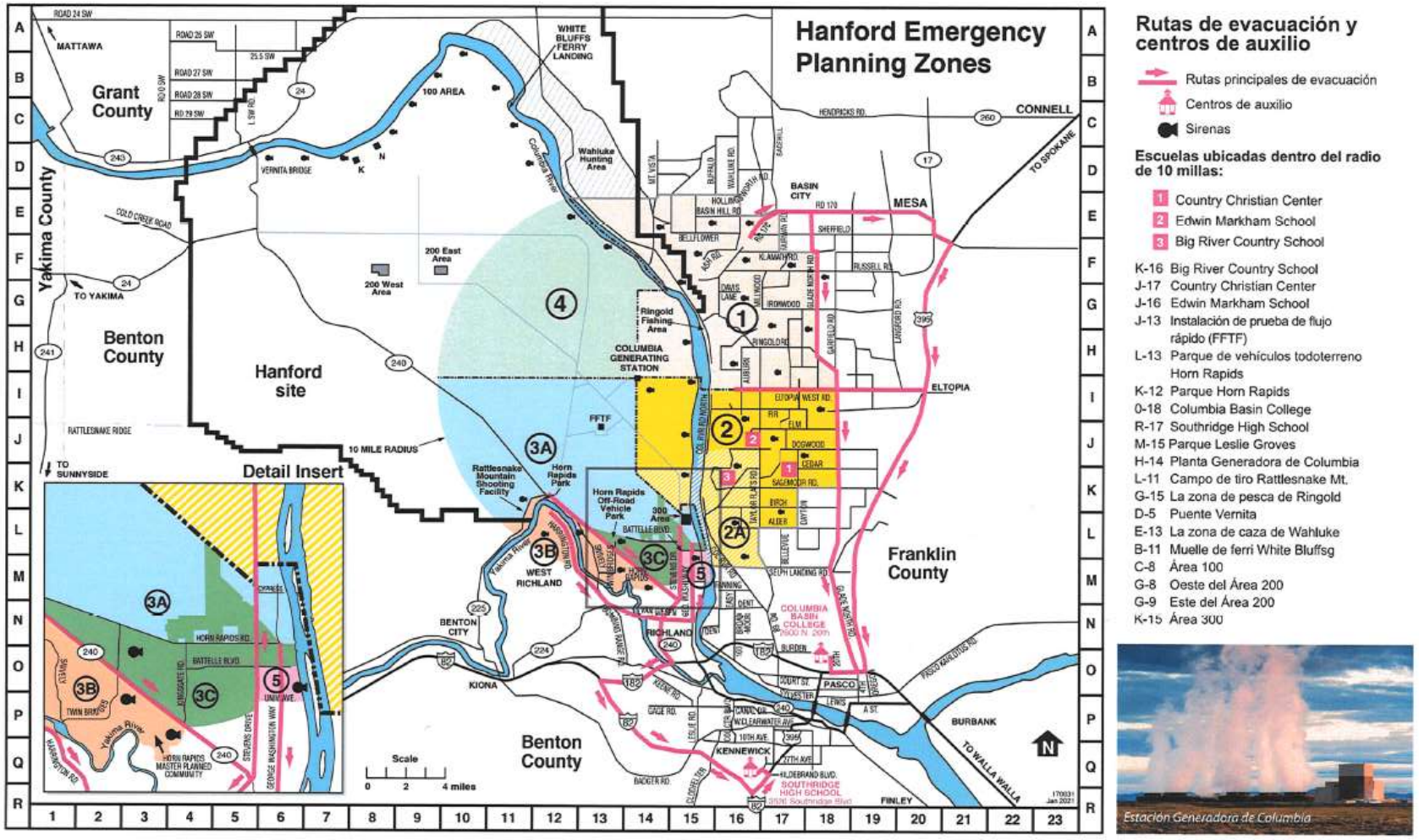


Figure 8 - Emergency Information Brochure (English Version)

8.3 Benton County Plume Emergency Planning Zone Resident Database

Benton County maintains a database of assessor tax lots within the Benton County portion of the plume emergency planning zone (G.1.i).

Benton County includes transportation dependent and physically or otherwise challenged occupants in the category of someone possibly needing evacuation assistance. When owner/occupants are contacted in person, by phone, by annual mailings, or by other means by Benton County Emergency Management; information is gathered and kept secure at Benton County Emergency Management (G.1.i, G.1.ii) and the database is updated.

If Benton County implements a protective action decision in response to a Columbia Generating Station emergency, the list of owner/occupants possibly in need of evacuation assistance can be used to place phone calls, to verify whether transportation assistance is required, and to schedule transportation assistance if needed. Owner/occupants who have access and functional needs will be individually considered on an ad hoc basis by the Public Health Safety Officer and a decision will be made as to whether the person will be transported or will be sheltered in place with dosimetry and possibly Potassium Iodide for a caregiver. During later phases of the response, the list may be used to check the residence to confirm the occupant has been properly assisted.

8.4 Plume and Ingestion Phase Agricultural Information

Benton County relies upon the Washington State Department of Agriculture and Washington State Department of Health to produce publications for distribution to the public meeting the ingestion exposure information requirements. Radiological Emergency Information for Farmers, Food Processors and Distributors has been produced in English and Spanish and is available via a link on the Benton County Emergency Services website (G.1.iii).

8.5 Annual Information for Plume Emergency Planning Zone Residents

Benton County Emergency Management participates with Franklin County Emergency Management, Energy Northwest and the Department of Energy-Richland Operations in the annual review, preparation, and distribution of the Site Neighbor Calendar. The calendar is distributed annually within the Plume Emergency Planning Zone (G.1.i, G.1.iv, G.1.v).

The calendar includes, in both English and Spanish:

a. Descriptions and maps of protective action areas;
b. Evacuation routes and relocation centers;
c. A clear statement of purpose.
d. Date (year) of issue and issuing agency(ies).
e. A statement instructing the recipients to keep the information.

f. Detailed information on
    - how the public in the EPZ will be notified and
    - where to turn for emergency information and instructions.

g. Information on protective actions, including:

- Specific instructions for actions to take when sheltering-in-place.
- Instructions on evacuation including
  - securing the home,
  - a list of evacuation supplies,
  - suggestions for notifying neighbors and friends,
  - transportation assistance information,

- suggested evacuation destination including
  - the need, if any, to report to reception or relocation centers,
  - and clearly defined evacuation routes and written directions.

h. An easy-to-read EPZ map that highlights the evacuation routes and location of reception centers and other centers used for public services during an emergency.

i. Provisions for persons with disabilities and access/functional needs, including
   - a method for individuals within the EPZ in need of assistance during an evacuation to contact authorities regarding planning for assistance in an emergency.
   - Policies and provisions for service animals.

j. Information consistent with the plans/procedures regarding
   - the care of children at public and private schools and
   - licensed daycare centers (child and adult),
   - mobility- and hearing-impaired persons, and
   - those needing transportation assistance.

k. Information on the evacuation routes leading to reception/relocation centers.

l. Educational information that includes basic information on radiation, how the nuclear power plant produces electricity, and the emergency classification levels.

m. Agricultural information, if appropriate to the area, including
   - information or instructions regarding protection of livestock and
   - commercial agricultural or home garden products and
   - references to additional sources of information.

Residents are encouraged to use the calendar and keep it readily available for quick reference in the event of an emergency. The calendar information is also readily available via links on the Benton County Emergency Services website.

Mailing labels are prepared from information obtained from the Benton County Plume Emergency Planning Zone Resident Database to address the calendars for the annual distribution.

8.6 Annual News Media Program

Benton County participates annually in licensee media information programs through the joint preparation of briefing materials (the Site Neighbors Calendar) which are presented to key media personnel by Energy Northwest (G.5.i, G.5.ii, G.5.iii).

8.7 Management of the Joint Information Center

Energy Northwest maintains and provisions a primary Joint Information Center (JIC) for use during a Columbia Generating Station classified emergency event at an Energy Northwest owned facility located at 3000 George Washington Way in Richland Washington (G.2.i). This location is outside the Plume Emergency Planning Zone.

The processes, capabilities, and basic organization for the operation of the joint information center during a Columbia Generating Station emergency are proprietary in nature and will not be outlined in this plan. Energy Northwest's Columbia Generating Station Emergency Plan Implementing Procedures, Section 13.12.19 includes (G.2.ii, G.2.iii, G.2.iv):

a. a physical description of the facility, including its location and size,
b. a description of the steps necessary to activate it for use,
c. a description of the organization's capability to answer telephone inquiries from the public and the media,
d. a description of mechanisms 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.

8.8 Benton County Participation at the Joint information Center

The Benton County Information Officer assigned to the Energy Northwest Joint Information Center serves as the main public information officer for the Benton County Columbia Generating Station emergency response organization. The Benton County Public Information Officer at the JIC (G.3.i) coordinates with the Benton Command Incident Commander (IC) and the Information Officer at the Benton County Emergency Operations Center. All public information is approved by the Benton County IC prior to coordination with other jurisdictions and release to the media/public. (G.3.iii) See Section 8.10 regarding approval and release of sensitive information. (G.3.iv)

In the event that Benton County has not yet staffed the Information Officer position at the Energy Northwest Joint Information Center, the Information Officer at the Benton County Emergency Operations Center is responsible for coordinating with and exchanging information with information officers from other organizations at the Energy Northwest Joint Information Center.

The communications systems available for the information officer at the Benton County Emergency Operations Center to use in order to coordinate with and exchange information with other information officers and with the Energy Northwest Joint Information Center are (G.3.ii):

a. Public Switched Telephone Network
b. Cell phone

c. Text Messaging
d. Virtual Private Network (VPN) connections to the BCES Computer Network
e. WebEOC

8.9 Coordination with Joint Information Center Public Inquiry and Rumor Control

Benton County will staff or share personnel with Franklin County to staff an information officer position at the Energy Northwest Joint Information Center if emergency and staffing realities at the time of the emergency permit (G.4.iv). This member of the Benton County incident response organization participates in all joint information center processes, as needed, to investigate, respond to, and brief joint information system center personnel and both the public inquiry and media inquiry phone teams on the current emergency response situation and the outcome of any information discovered during their participation in the rumor control process (E.5.i).

The ENW JIC has numerous phone lines to handle incoming public and media inquiries (G.4.i). Continual communication between county and JIC PIO will ensure timely and accurate release of information through multiple public release methods will be utilized to publicize media and public inquiry phone numbers (county websites, social media, press releases, and during media briefings) (E.5.i, G.4.ii). Peer review and coordination of media releases and information, prior to public release, is conducted within the JIC to determine if any inaccuracies or misleading information is noted (G.3.a.i). The media monitor position in the JIC monitors media outlets to identify incomplete, inaccurate, or ambiguous information related to the emergency within the public domain. If inaccurate, incomplete or ambiguous information is found, they will be addressed using the same processes within the JIC that is used to address rumors by providing accurate, clear, and complete information (G.4.iii).

8.10 Release of Sensitive Information

In order to prevent the release of sensitive information during a non-hostile action-based emergency, pre-release approvals of response information by the Benton County Information Officer beyond that of the Benton County Incident Commander are not required beyond the coordination that takes place within the Joint Information Center coordination process (G.3.iv).

In order to prevent the release of sensitive information during a hostile action-based emergency, the Benton County Sheriff's Office Incident Commander is responsible for assigning an Information Officer to the Joint Information Center who will have final authority to allow or block the release of sensitive information to the public or media. If a law enforcement Information Officer is not present or has not been appointed, information releases must be reviewed by a management level law enforcement representative at the Benton County Emergency Operations Center (G.3.iv).

Chapter 9 – Emergency Facilities and Equipment

9.1 Benton County Emergency Operations Center

The Benton County Emergency Operations Center is in the Benton County Emergency Services facility at 651 Truman Ave., Richland, Washington. It is the initial location for direction and control activities for non-hostile action related emergency response to a Columbia Generating Station emergency (H.6.i).

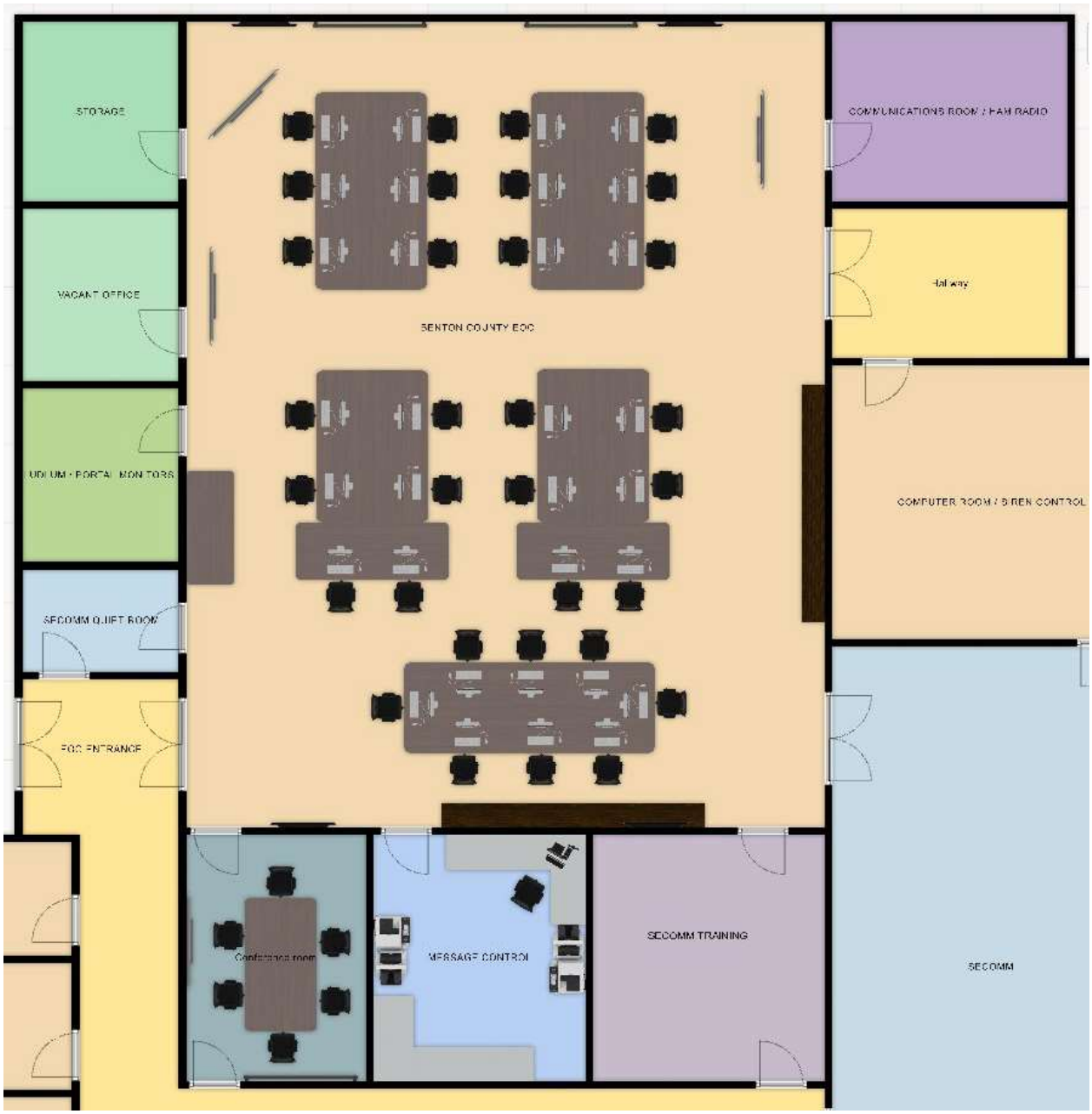


Figure 9 - Benton County EOC Layout (H.6.vi)

The Manager of Benton County Emergency Management is responsible for the EOC's operational readiness. The Benton County Operations Center will activate for an Alert, Site Area or General Emergency. The activation may or may not remain in place for an extended time, depending on the nature of the emergency (H.6.ii).

Access to the Benton County Emergency Operations Center is limited to Benton County Emergency Services personnel and personnel from coordinating and supporting agencies participating in command-and-control activities as part of the incident command organization or multi-agency coordination group. Others may be admitted on an ad hoc basis. Controlling access to the facility rarely requires armed law enforcement personnel, but armed access control for the facility will be established if needed (H.6.iv).

The emergency operations facility consists of five groups of 4 to 8 desks. Telephones and computers are located at most of the desks. Wi-Fi internet access is also available for personnel bringing Wi-Fi capable equipment. Several fax machines are available in the building, including one that is linked to the Energy Northwest dedicated fax line. Several television sets with cable access are set up in the emergency operation center. Information from designated computer monitors can be displayed on two large screens in the room. Several fixed and mobile white boards and several easels are available for use by personnel working in the emergency operations center. There is also a dedicated auxiliary communications room which can be staffed by volunteer ham radio operators.

Backup power is provided by an uninterruptable power supply capable of providing power for the continued operation of the Benton County Emergency Services facilities for up to 30 minutes. The uninterruptable power supply is powered by offsite power or a diesel-powered generator. All power used in the building, except for power from the red colored power outlets, is filtered through the uninterruptable power supply. (H.6.v)

9.2 Benton County Radiological Equipment

Benton County Emergency Management does not provide any off-site radiological monitoring equipment at or in the vicinity of the nuclear facility (e.g., at staging areas, ICPs, the EOF) (H.9.i).

The radiation monitoring equipment is housed at the Benton County EOC and inventoried and maintained by Benton County Emergency Management staff. This equipment includes (H.9.i):

a. 30 Ludlum Model 12 count rate meters with 44-9 beta gamma probes
b. 3 SAIC PPM-100B portable portal monitors
c. 55 Ludlum Model 26-1 Integrated Friskers
d. 700 Direct Reading Dosimeters (DRDs)
e. 700 OSL Permanent Record Dosimeters (PRDs)

Benton County does not own any Air Sampling or Laboratory equipment (H.11.i). The Ludlum equipment is calibrated annually. The SAIC portal monitors and Ludlum equipment is checked operationally each calendar quarter and before each use. The DRDs are operationally tested semi-annually, inspected before each use, and calibrated annually. The PRDs are inspected semi-annually and before each use. (H.11.b.i). Documentation methods for all testing and maintenance procedures performed are captured into RadResponder© (H.11.b.iii) and submitted as part of the quarterly reports that contribute to the Annual Letter of Certification (ALC).

There are sufficient reserves of instruments/equipment to replace those that are sent for calibration or repair. Calibration of equipment is provided at intervals recommended by the supplier of the equipment.

Benton County does not provide or maintain fixed radiological monitoring stations near the Columbia Generating Station (H.9.ii).

9.3 Dosimetry and Potassium-Iodide for Emergency Workers

Benton County prepares, distributes and maintains supplies in pouches referred to as Emergency Worker Kits for use by emergency workers who may be exposed to radiation or radiological materials during a Columbia Generating Station emergency. The Washington State Department of Health, Office of Radiation also performs quarterly checks on approximately 10% of the OSLs available (H.11.b.ii). The Emergency Worker Kits are rotated out with recalibrated cache and delivered on an annual basis by BCEM staff to supporting law enforcement and fire agencies (K.3.iii) who are expected to respond to the emergency or receive permission to reenter restricted areas for the protection of human or animal life or valuable property. These kits include (J.11.b.iv, H.12.ii, K.3.iii):

a. One 0 to 20 R pencil-type direct reading dosimeter
b. One oscillating luminescence dosimeter (OSL)
c. One blister pack of 20 65 mg Potassium-Iodide tablets
d. Emergency Worker Kit Instructions
e. Emergency Worker Personal Information Form
f. One Potassium-Iodide drug information sheet

The blister packs of Potassium Iodide maintained by Benton County are inspected annually. Upon the need for shelf-life extensions, and timely replacement of radioprotective drugs, Benton County will contact FEMA's Region 10 REP Regional Assistance Committee Chair, or their designee, to either:

a. Obtain direction for sending samples out to a lab and receiving permission for a shelf-life extension from the lab or;

b. Request new stock (J.11.b.v).

The emergency workers report to the EWAC at the end of assigned duty, or when their pocket dosimeters register a dose limit, or as directed by their supervisor.

The emergency workers are responsible for:

- Reporting to the radiation monitors for survey and decontamination.
- Carrying an OSL and direct reading dosimetry for the duration of the incident.
- Turning in a completed Emergency Worker Information Form on the first day of the incident.
- Recording pocket dosimeter readings daily on an Emergency Worker Dosimeter Issue Log, this is turned in at the CRC/EWAC.

When an emergency worker reports to a EWAC after their shift, they are surveyed and dosimetry is collected. The OSLs will be utilized as permanent record dosimeter (H.11.i). Levels of contamination are recorded by a Dose Tracker, assigned by the Washington State Department of Health Office of Radiation (K.3.vi). The Dose Tracker is responsible for obtaining and recording personal information for both public and emergency workers, individual exposure readings, and processing increased exposure requests.

9.4 Processing OSL Dosimeters

Benton County does not process any permanent record dosimeters. They are either delivered directly to a representative of the Office of Radiation Protection or turned in according to the instructions they receive from their supervisor (L.1.iv).

The Office of Radiation Protection is responsible for providing the means and process for arranging for 24-hour-per-day capability to determine the doses received by emergency personnel involved in any nuclear accident.

The Office of Radiation Protection is also responsible for periodic readings of the OSL dosimeters to establish control baselines.

Agency	Current	OSL	DRD	KI
Recalibration Cache	400	400	400	400
Emergency Worker Center Cache	100	100	100	100
Benton EOC Cache	29	29	29	29
BCFD4	25	25	25	25
BCFD2	N/A	N/A	N/A	N/A
BCFD1	N/A	N/A	N/A	N/A
Kennewick Fire Department	21	21	21	21
Richland Fire Department	35	35	35	35
Richland Police	25	25	25	25
Coast Guard Clover Island	10	10	10	10
West Richland Police	20	20	20	20
WSP-Kennewick Detachment	26	26	26	26
WSP-Grandview Detachment	9	9	9	9
Benton County Sheriff's Office	100	100	100	100
Totals	700	700	700	700

Table 7 - Emergency Worker Kits Locations and Quantity (J.11.b.iv, H.12.i, K.3.ii)

If additional Dosimetry or Potassium Iodide are needed, they can be ordered from the Benton County EOC.

The location of emergency worker kit caches and the number of kits in each cache are set out in Table 5: Emergency Worker Kits Locations and Numbers (K.3.ii). The direct reading dosimeters

are inspected for electrical leakage when performing maintenance on the stored Potassium Iodide or OSL dosimeters. The direct reading dosimeters are calibrated annually. Inventories of the direct reading dosimeters are sufficient to maintain minimum necessary quantities during removals for calibration.

9.5 Organizations Responsible for Radiological Assessment Data

Benton County does not conduct radiological assessments or dose projections, this is a Washington State Department of Health function (H.13.i, H.13.ii, H.13.iii). All field monitoring data collected by Field Monitoring Teams (FMTs) are reported to Washington State Department of Health, Office of Radiation personnel located at the Meteorological Unified Dose Assessment Center (MUDAC). The MUDAC is co-located with Columbia Generating Station's Emergency Operations Facility (EOF).

Washington State Department of Health, Office of Radiation is responsible for determining the process for developing and modifying sampling plans, determine the methodology used by FMTs to relay information to the MUDAC as well as coordinating the transportation and analysis of sample media to the Washington State Public Health Laboratories (PHL) located in Shoreline, Washington. The PHL maintains their analytical laboratory capability to analyze various samples and the procedure for reporting analytical results to the appropriate organization (C.4.ii, M.7.i, M.7.ii, M.7.iii).

Chapter 10 – Accident Assessment

10.1 Radiological Laboratories and Field Monitoring

Benton County does not participate in the collection, transportation, delivery, or analysis of airborne or waterborne field samples. This is a state function carried out by Washington State Department of Health (DOH), Office of Radiation. WA DOH is responsible for supporting laboratory procedures, Field Monitoring Teams (FMT) activity, and determining the capabilities and resources of FMTs. Benton County has no direct contracts or agreements with radiological laboratories. Processes and procedures regarding accident assessment, FMTs, and radiological laboratories can be found in the Washington State Department of Health's Radiological Emergency Response Plan (I.2.i, I.2.ii, I.5.i, I.5.ii, I.6.i through I.6.ix).

Benton County does not have the capability to collect air samples within the plume exposure pathway EPZ and perform analysis that will detect radioiodine concentrations as low as 10-7µCi/cc under field conditions. This is a state function carried out by Washington State Department of Health (DOH), Office of Radiation. DOH would also be responsible for determining the process used for collecting air samples, including location of sampling points, timing of sample collection, and techniques used to collect and count as well as the calculations that use factors consistent with the ORO specific procedures to calculate airborne radioiodine concentrations (I.7.i through I.7.iii).

Provisions for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with current Federal guidance are made by Washington State Department of Health (DOH), Office of Radiation, not Benton County (I.8.i through I.8.vii).

Benton County does not locate and track the airborne radioactive plume, characterize the plume including taking peak plume measurements, and determining a measurement that is high enough to be reasonably above background radiation readings and sufficient enough to indicate submersion within the plume (I.9.i). Rather, Benton County relies on Washington State Department of Health (DOH), Office of Radiation to determine methods of integrating monitoring and analytical augmentation and perform these functions using their procedures (I.10.ii).

Chapter 11 – Protective Response

11.1 Evacuation and Protection of Energy Northwest Personnel

Unless requested, Benton County will not assist in the evacuation of onsite personnel (J.2.i). There is no pre-determined offsite location where onsite individuals would be transported (J.2.ii). If any assistance is requested during an incident, that assistance would be ad hoc and coordinated and implemented using existing systems and processes (J.2.iii, J.2.iv).

Except for a hostile action-based emergency where evacuation routes are compromised or mass casualty incidents where pre-hospital emergency medical services transportation resources are required, it is assumed that no off-site response organization assistance will be required.

In the event of a hostile action-based emergency which compromises evacuation routes between the Columbia Generating Station owner-controlled area and the offsite accountability point (near Energy Northwest facilities in the vicinity of 3000 George Washington Way in Richland, Washington), Energy Northwest shall coordinate with the Benton County Sheriff's Department Incident Commander.

11.2 Basis and Methodology for Development of Protective Action Recommendations

For a CGS incident, no offsite organization makes Protective Action Recommendations (PARs) for the plume exposure pathway Emergency Planning Zone (EPZ) during the Early Phase. Benton County relies upon Energy Northwest to provide timely Protective Action Recommendations for consideration prior to making or implementing Protective Action Decisions. The basis and methodology used are based on the 2017 EPA PAG Manual and the Emergency Action Level scheme for CGS. The EAL scheme is reviewed and coordinated between CGS and the State and plume exposure pathway counties annually. The rationale for initial and subsequent PARs are based on plant status, factors that may affect or impede evacuation, weather, wind direction, and other non-environmental factors such as a hostile action-based scenario are considered. Other factors such as the protection factors for direct exposure and inhalation exposure are considered and discussed further in the Columbia Generating Station Emergency Plan. (J.6.i., J.6.ii.)

CGS develops a site-specific protective action strategy and decision-making process, develops site-specific PAR procedures, and provides guidance to ORO decision makers. This strategy considers a variety of factors that may impact the implementation of protective actions in advance of an incident such as results of the most current Evacuation Time Estimate (ETE),

which describes factors such as populations densities, fluctuations in transient populations, road capacities, access and functional needs facilities/populations within each subarea of the plume exposure pathway EPZ. The strategy/processes also incorporate current federal guidelines and methodologies. This strategy/process is coordinated with EMD, Benton County, and Franklin County annually as part of the EAL scheme review and the annual review to the ETE. The results are incorporated into the CGS Emergency Plan and implementing procedures. (NUREG J.7.i. through J.7.iii.)

The Protective Action Recommendation from Energy Northwest forms the primary basis for the Protective Action Decision made by Benton County. However, additional information concerning concurrent emergencies such as hazardous weather, technological, geological, or seismic related conditions, or hostile criminal activity will be considered when comparing relative risks and the advisability of potential protective action decisions (J.11.i).

The Washington Department of Health, as the radiation authority within the state, has developed the basis and methodology in developing the State's Criteria for the use of radioprotective drugs (J.6.ii). The Washington Department of Health's policy does not call for the distribution of radioprotective drugs to the public. Potassium Iodide is on the formulary for all pharmacies, but neither the state nor Benton County, stockpile KI for distribution to the public. This information and the applicable federal guidance it is based on is contained in the Washington Department of Health Radiation Emergency Plan. (J.6.iii)

The communication of Protective Action Recommendations from Energy Northwest to Benton County is dealt with elsewhere in this plan.

11.3 Radioprotective Drugs

Benton County Emergency Services along with Washington State Department of Health, Franklin Emergency Management, and Benton-Franklin County Health District, does not recommend stockpiling or pre distributing of Potassium Iodide as an effective means of protecting the general public during an emergency at Columbia Generating Station. The State of Washington has listed KI on the pharmacy formulary if a pharmacy wanted to stockpile and sell the drug (J.11.b.vi).

Within the State of Washington, the Benton County Public Health Officer or the State Health Officer can make the decision to recommend the use of radioprotective drugs within the plume exposure pathway for emergency workers during an emergency (J.11.b.i.). The criteria for recommending KI to emergency workers is determined by the Department of Health when there is an indication of a release to the environment above a specified level or if there is an unfiltered or unmonitored release from a fixed nuclear facility as detailed in the Department of Health Radiological Emergency Response Plan.

The Benton County Public Health Officer may make the decision based upon consultation with or upon recommendation of the Department of Health or as otherwise detailed within their plan/procedures (J.11.b.ii.). The Benton County Public Health Officer may consider recommending KI for certain individuals or groups of people if they cannot implement evacuation quickly to reduce risk from possible exposure to radioactive iodine (J.11.b.iii).

Benton County maintains adequate supplies of KI for emergency workers. Benton County also provides instructions to the emergency workers on the safe and proper use of KI within the Emergency Worker Kits (J.11.b.iv.). Benton County provides adequate maintenance of KI and, if upon inventory or inspection, are found to be expired or close to expiration the county will replace when new supplies are purchased by the Office of Radiation Protection. As a contingency Benton County may also obtain a shelf-life extension if approved by the Office of Radiation Protection (J.11.b.v.). Once the decision is made to recommend Emergency Workers take KI, it is communicated as detailed within the appropriate EOC position procedures (J.11.b.vi.).

11.4 Evacuation Time Estimate

Evacuation Time Estimate studies are considered when planning for evacuation (J.7.iii, J.7.iv). These studies calculate the time it takes to evacuate the public within the plume exposure pathway under emergency conditions. Energy Northwest (ENW) develops and maintains an Evacuation Time Estimate (ETE) Study in accordance with Nuclear Regulatory Commission (NRC) guidance. Each ETE is updated after the release of the decennial Census information with the most recent published study being 2012. The next decennial study will be published in 2022. ENW provides an annual review to the ETE as required by the NRC to determine if population growth requires an update to the ETE Study. The ETE considers population and roadway capacity. In accordance with federal requirements, the annual ETE reviews are based on estimated changes to the permanent resident population within the Emergency Planning Zone (EPZ) of the plant. The roadway assessment includes reviews of transportation improvements, constraints, traffic flow, and changes in transient flow through the Emergency Planning Zone.

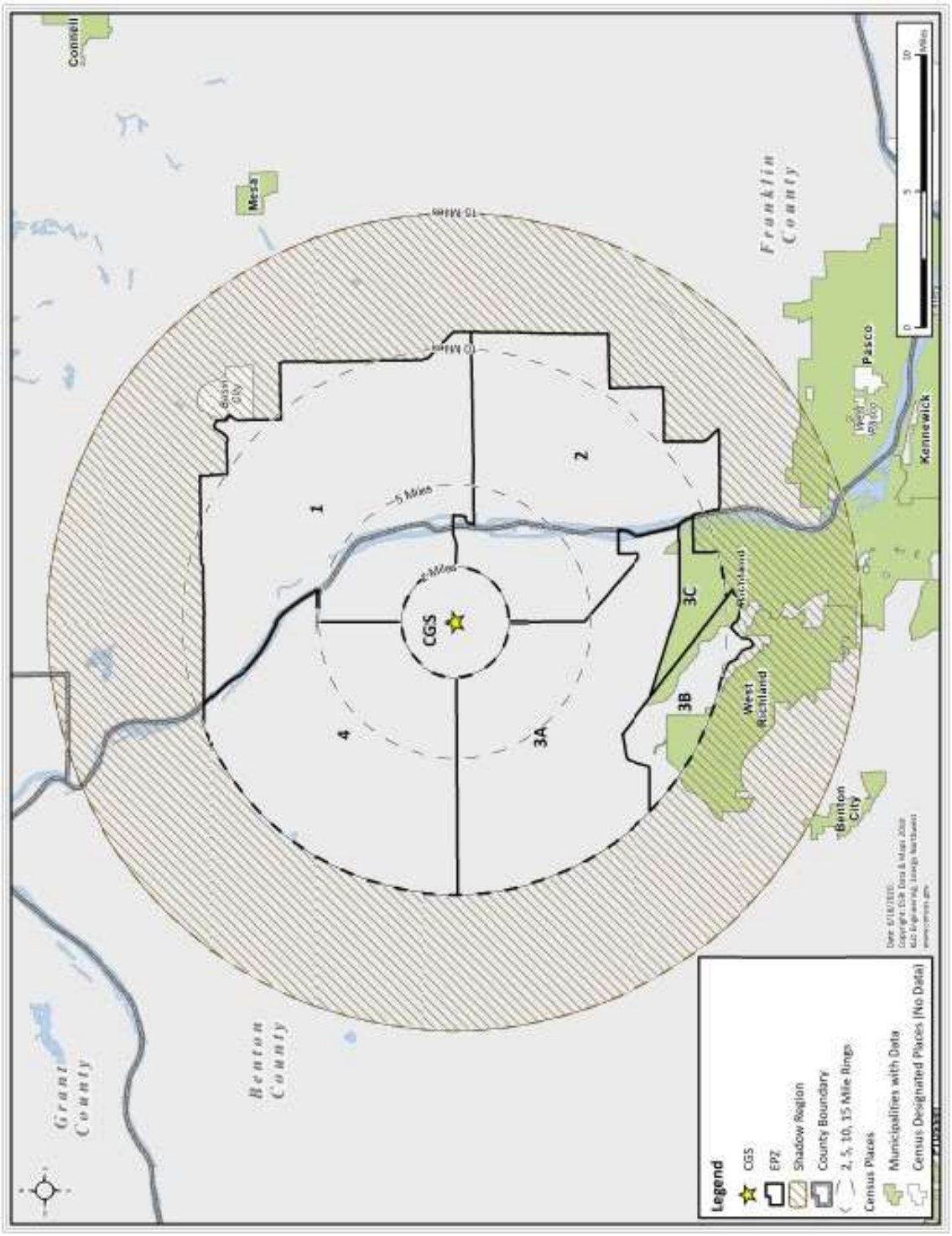


Figure 10 - Census Boundaries within the CGS Study Area, KLD Engineering P.C. (2020)

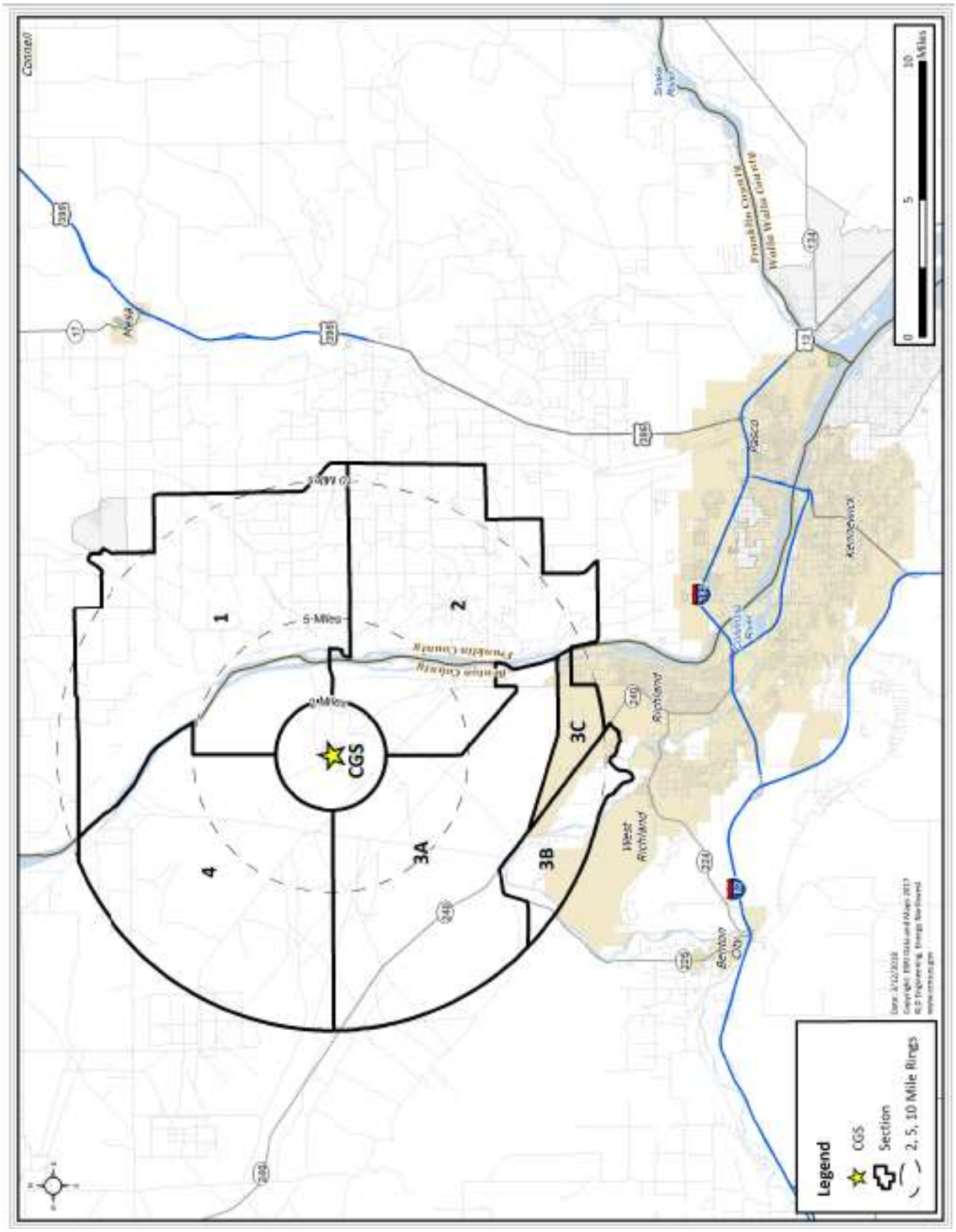


Figure 11 - Sections Comprising the CGS EPZ, KLD Engineering P.C. (2020)

Section	2010 Population	2020 Extrapolated Population
CGS	0	0
2-Mile Region Total:	0	0
1	1,077	1,339
2	1,649	2,052
3A	2	2
4	0	0
5-Mile Region Total:	2,728	3,393
3B	1,941	2,363
3C	19	23
EPZ Total:	4,688	5,779

Table 8 - EPZ Population, KLD Engineering P.C. (2020) – (J.10.b)

Annex B contains the information from the most recent full ETE Study from 2012 and documents the results of the annual reviews (J.7.iii, J.8.i). The most recent annual review (2020) confirmed that there was no need to update the ETE and that the population levels confirmed that there is still no need to do staged evacuations (J.8.b.ii, J.11.c.i).

Percent Population Change

$$\% \text{ Population Change} = \frac{\text{2020 Extrapolated Population - 2010 Population}}{\text{2010 Population}} \text{ x100\%}$$

Equation 1 - Columbia Generating Station Population Update Analysis (Equation 3), KLD Engineering, P. C. (2020)

Region	Percent Population Change (2010-2020)
2-Mile Region 0.0%	2-Mile Region 0.0%
5-Mile Region +24.4%	5-Mile Region +24.4%
EPZ +23.3%	EPZ +23.3%
Shadow Region +24.7%	Shadow Region +24.7%
EPZ + Shadow Region +24.6%	EPZ + Shadow Region +24.6%

Table 9 - Summary of Percent Population Changes, Columbia Generating Station Population Update Analysis (Table 10, pg.16), KLD Engineering, P. C. (2020)

As stated in the Evacuation Time Estimate Study (2012)[1] in Tables 8-13 and 8-14 estimated that the Special Needs Populations in one wave would take between 4:30 and 5:20 depending on weather conditions. That time increases if the transportation is done in two waves to between

[1] Ref KLD Engineering Columbia Generating Station Development of Evacuation Time Estimates, KLD TR-497, October 2012, Final report, rev 1.

5:40 and 6:35, also dependent on weather conditions (J.8.b.i, J.8.b.iii.).

Figure 10-2 on page 10-3 of the 2012 Evacuation Time Estimate Study shows the evacuation routes in the EPZ. Evacuees will select routes within the EPZ in such a way as to minimize their exposure to risk.

This expectation is met by the DYNEV II model routing traffic away from the location of the plant to the extent practicable. The DTRAD model satisfies this behavior by routing traffic so as to balance traffic demand relative to the available highway capacity to the extent possible. (J.8.b.iv.) While no specific alternate routes are mentioned in the ETE Study, the local jurisdictions allow law enforcement to adjust evacuation routes in the event of impediments to traffic. These are considered in the decision-making process and are communicated to the public as described in the local jurisdiction plans/procedures (J.8.b.v.).

11.5 Pre-Planned Precautionary Protective Action Decisions

The pre-planned, precautionary protective action decisions include evacuation of recreation areas and schools (schools are in Franklin County only) within the Plume Emergency Planning Zone upon declaration of a Site Area or General Emergency.

These pre-planned, precautionary protective action decisions may not be appropriate in the event the declared emergency is the result of a Hostile Action Based event. Therefore, when a Hostile Action Based event is identified as part of the basis for the declaration of a Site Area or General Emergency, officials directing the law enforcement response for the hostile action-based event shall be consulted prior to making or implementing any protective action decision, including those that are pre-planned or precautionary.

11.6 Plume Phase Protective Action Decisions

The Protective Action Recommendation (PAR) from Energy Northwest forms the primary basis for the Protective Action Decisions (PAD) for areas within the 10-mile EPZ(s) (J.11.i). These decisions can be made by the Benton County Incident Commander, their designee, or in concert with Franklin County's Incident Commander, local and state public health offices (J.11.iv). PADs consider concurrent emergencies such as hazardous weather, technological, geological, or seismic related conditions, or hostile criminal activity when comparing relative risks and the advisability of potential protective action decisions. PADs will be made in accordance with EPA PAGs regarding potential radiation dose to the public (J.11.ii, J.11.iii).

In the event of a Hostile Action Based emergency, the Incident Commander of the Tri-City Regional Special Weapons and Tactics Team (SWAT) shall be consulted prior to making protective action decisions.

11.7 Ingestion Exposure Pathway Protective Action Decisions

When Benton County enters the Intermediate Phase of a radiological incident, the Protective Action Decisions associated with the ingestion exposure pathway emergency planning zone shifts from strictly the local level to a coordinated, consensus decision making process with the state. The protective action decisions for Food Control are made at the State level with the

consensus of the impacted local jurisdictions. The Washington State Emergency Operations Center (SEOC) uses Protective Action Decision Packages to document the Protective Action Recommendation from the Department of Health, the Protective Action Decision signed by the Disaster Manager (or other authorized designee), and the rationale for the decision based upon the information known at the time and any coordination regrading implementation. (J.11.ii, J.11.iii, J.12.i., J.12.ii.) Each of the Protective Action Decision Packages can be revised or terminated using this same process.

The Washington Department of Agriculture cannot interdict or put an embargo (RCW 69.04.110) in place on commercial quantities of agricultural products over a large area without some means to determine probable cause. Thus, a range of precautionary measures may be applied for the ingestion exposure pathway. Prior to data being available to show where the contamination deposited, a precautionary agricultural advisory may be put into place by the Washington Department of Agriculture (WSDA) under their authorities under RCW 69.04 which establishes the Department of Agriculture as the agency responsible for safeguarding the public from injury due to adulterated or misbranded food; RCW 15.36 which establishes legislation to safeguard the public from milk products that are unsafe for consumption and the Food and Safety Act, RCW 15.130.

At a Site Area Emergency, WSDA recommends a preliminary Agricultural Advisory to the plume exposure pathway counties. The actions for the public are as follows:

- put dairy cows and other livestock inside barns or enclosed and covered sheds,
- restrict dairy cows and other livestock to feed that is in enclosed or covered storage, and
- restricting livestock to water sources that are covered or are from enclosed underground

They also caution that if an evacuation is recommended that they stop taking care of the livestock and leave the area.

At a General Emergency, or anytime the Washington Department of Health recommends, WSDA releases the comprehensive Agricultural Advisory. This advisory tells the public to:

- put dairy cows and other livestock inside barns or enclosed and covered sheds,
- restrict dairy cows and other livestock to feed that has been in enclosed or covered storage,
- restrict livestock to water sources that are covered or are from enclosed underground storage,
- do not drink fresh milk produced on or after a specified date/time,
- do not drink water from streams, lakes or ponds,
- do not let animals drink water from streams, lakes, ponds or puddles,
- do not harvest food from farms or gardens, including fruits and vegetables, grain, eggs, honey or livestock, and
- do not transport uncovered agricultural products out of the advisory area.

The largest difference between the preliminary agricultural advisory is that the comprehensive covers a much larger area. The area covered by the comprehensive agricultural advisory is the entire 10-mile EPZ plus pre-designated areas within a 180-degree arc out to 50-miles in the direction of the wind from the nuclear power plant. WSDA has coordinated previously with all counties in the 50-mile EPZ to predesignate areas within the jurisdiction that may be impacted. If WSDA finds that the 180-degree arc and the 10-mile EPZ touches any part of a pre-designated areas, then that entire area is included in the comprehensive agricultural advisory. WSDA makes the agricultural advisory through a news release, and it is communicated to the public and media through the Joint Information Center (JIC). It is important to note compliance with the Agricultural Advisory is voluntary. There is no law that requires the food producer, processor, or distributor to comply.

Part of the implementation precautionary and emergency protective measures includes WSDA contacting state licensed agricultural producers, food processors, and distributors (referred from here on out as 'agribusiness') to inform them of the precautionary measures put into place. This is also done once a food control area is developed and implemented.

The Department of Health (DOH) is responsible for determining the contaminated areas that exceed federal guidance contained in the PAG Manual and/or the FDA DIL's. Part of the process to determine the ingestion pathway begins with the Departments of Health (DOH) and Agriculture (WSDA) coordinating on the development of a sampling plan. DOH has the expertise on radiological matters but WSDA has the expertise when it comes to agricultural matters (J.12.iii.).

DOH collects all samples other than milk samples. The RCW 15.36.111, the Pasteurized Milk Ordinance, and WAC 16-101 requires that WSDA is the only entity that can collect milk samples. The samples are collected using the procedures and equipment detailed in the DOH REP Plan and are then transported to a certified laboratory for analysis. The WSDA REP Plan discusses the equipment and processes used to collect milk samples and transfer of the samples to DOH for analysis. WSDA assists DOH by coordinating with farmers and producers to gain their permission to collect samples for analysis (J.12.iii., J.12.iv.).

DOH primarily uses the State laboratory in Shoreline, WA for analysis of samples. The lab has the equipment and personnel to conduct analysis of various samples and reports the results to the DOH. The processes and procedures for conducting the analysis and reporting the results are discussed within the DOH REP Plan (J.12.v.).

WSDA licenses various agribusiness within the State and maintains contact information and business locations per agency regulatory authority. The WSDA plan does not discuss location of agribusiness – as this is an all-encompassing term. There are certain facilities that are required to be licensed by WSDA (commercial food processing operations as an example), but agribusiness could be misleading. For example, commercial meat processing plants are regulated by federal government. WSDA does not have a database for these operations. There are multiple entities involved in regulating all that would fall under agribusiness. This information is used to contact agribusiness in the impacted areas as well as agribusinesses in other locations of the State to inform them of the situation and any protective measures put in place to prevent adulterated food stuffs from reaching the market (J.12.vi.).

WSDA also coordinates with adjacent States to communicate what protective measures have been put in place to protect the food supply in the State. WSDA may also use other resources to obtain any additional information and contact info for food production facilities that are licensed by the federal government that the State may not have contact with (J.12.vii.).

WSDA maintains a database of crop data to help determine what products are in production to include having an understanding on when certain crops conduct harvesting operations. This information is shared with DOH as well as local jurisdictions, if requested, to help provide more of a common operating picture of the impacts to the agribusiness and the local farmers (J.12.viii.).

DOH plans discuss which standards are used to determine what levels of contamination are deemed unsafe for human consumption (J.12.ix.).

DOH utilizes a variety of tools to track and document where samples came from, what areas exceed the PAG and/or DILs. The States of Washington and Oregon both utilize RadResponder. The Civil Support Team and the Region Assistance Program for Region 8 use it as well. Additionally, a variety of mapping products are used to track where the contamination deposited and to track what areas exceed the PAGs and/or DILs. These are discussed in more detail on the DOH RERP Plan (J.12.x.).

The WSDA REP plan discusses how they track where agribusinesses are. This helps to influence the most effective methods to keep agribusiness informed of any protective action decision that would impact their ability to sell or movement of food stuffs or agricultural products. Some of the methods available to use are news releases, social media, direct contact via telephone or email, and through announcements at news conferences from the JIC (J.12.xi.).

The Washington State Emergency Management Division will coordinate the protective measures to be used for the Ingestion Exposure Pathway EPZ within the State of Washington, along with Washington Department of Health, Washington State Department of Agriculture, and local county (Benton, Franklin, Grant, Adams, Walla Walla, and Yakima) jurisdictions including methods for protecting the public from consumption of contaminated foodstuffs and water. They will utilize the Washington Information Sharing Environment (WISE) GIS tool as a collaborative mapping tool to designate the areas of concern where monitoring and sampling will be implemented.

Washington Department of Health (DOH), including DOH Office of Radiation Protection and WSDA response plans will determine the methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures, as well as determine the laboratory capability to analyze various samples and the procedure for reporting analytical results (J.12.iv-v).

Watersheds, community water systems, dairies, food producers, and processors within the Ingestion Exposure Pathway EPZ are listed in the: United States Department of Agriculture Farm Service Agency Database for Benton County. (J.12.vi)

WSDA with other local Conservation Districts will coordinate the location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting. (J.12.viii)

The means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products. The Washington Department of Agriculture will issue agricultural advisories. Methods and procedures for implementing protective actions are described in the Washington State Fixed Nuclear Facility Protection Plan and in the Washington State Department of Agriculture Radiological and Chemical Emergency Procedures. (J.12.xi)

The area subject to Food Control Protective Actions shall be determined jointly by the State and Local Governments. Washington DOH shall have the primary responsibility for identifying those areas subject to radiological deposition of a sufficient amount to justify the imposition of Food Control Protective Actions. Local Government representatives shall have the responsibility of identifying enforceable geo-political boundaries and Food Control Points for the area identified by Washington DOH. State officials at the Washington State EOC shall have the responsibility for declaring the Food Control Boundaries and Protective Actions, providing authority to enforce the Food Control Area Declaration and providing the additional personnel and other resources necessary to assist local officials in implementing the Food Control Area while also carrying out their normal duties and daily operations.

Benton County will assist the Washington Department of Agriculture in the distribution of the brochure titled: "Preparing for a Radiological Emergency in Washington State" (Both for English and Spanish).

11.8 Protection of Persons with Access and Functional Needs

There are no hospitals, nursing homes, correctional facilities, schools, or licensed day care centers within the Benton County Plume Emergency Planning Zone.

The county emergency organization is responsible for assisting AFN populations affected by major emergencies or disasters. In order to fulfill this obligation, Benton County Emergency Management shall attempt by reasonable means to identify the AFN population. Benton County Emergency Management staff will coordinate with the Southeast Washington Aging and Long Term Care local coordinator as and additional source of information concerning individuals with AFN within the Benton County portion of the Columbia Generating Station EPZ.

AFN populations shall not be provided notification by means other than those used to notify the general public unless prior arrangements have been made on an individual basis. Transportation dependent people are determined from the Special Populations Group Database. All compiled data shall be kept confidential in order not to compromise the privacy and security of AFN persons.

11.9 Implementation of Traffic and Access Control Points

Local law enforcement agencies, Washington State Patrol, and potentially Washington State Department of Transportation, shall staff access control points or place barriers (J.11.e.i), and determine alternate routes (J.11.f.iii) if needed, during the plume phase and early intermediate

phase of an emergency response to a Columbia Generating Station emergency classified more severe than an Alert Emergency (J.11.c.ii).

Pre-determined sites for these traffic and access control points have been established and are sufficient to control entry into evacuated areas. Agencies staffing Access Control Points will adhere to their own agencies' policy and procedures for controlling ingress and egress (J.11.e.v) and normal resources will be moved to clear an impediment (J.11.f.ii.). Any equipment and resources needed may be provided through that agencies' normal processes. If needs exceed an agencies' capabilities, requests for additional resources can be made to the Benton County EOC (J.11.e.iv).

Emergency response resources staffing traffic or access control points will be kept informed of the status of the emergency and the response situation by the Benton County EOC's Operations Section and the agency representatives within it. Status may be relayed from the EOC to the field via radio, CAD messaging, telephone, or during periodic visits to provide rest and rehabilitation to response staff (J.11.e.vi).

Benton County Sheriff Office Boat
Richland PD (RPD)
W Richland PD (WRPD)
Washington State Patrol (WSP)
Washington State Patrol (WSP) and / or Richland PD (RPD)

ACCESS CONTROL STAFFING BASED ON WIND DIRECTION									
Location	Block Traffic traveling in the indicated direction	Current Wind Direction							
		From SW to NE	From W to E	From NW to SE	From N to S	From NE to SW	From E to W	From SE to NW	From S to N
Columbia River Picket @ Leslie Groves Park	Upstream	BCSO Columbia Patrol	BCSO Columbia Patrol	BCSO Columbia Patrol	BCSO Columbia Patrol	BCSO Columbia Patrol	BCSO Columbia Patrol	BCSO Columbia Patrol	BCSO Columbia Patrol
Leslie Groves Park @ Boat Launch	Launch	RPD	RPD	RPD	RPD	RPD	RPD	RPD	RPD
GW Way @ Battelle	N			RPD	RPD	RPD			
Stevens Drive @ Battelle	N			RPD	RPD	RPD			
Stevens Drive/4 South @ GW Way	N	RPD	RPD				RPD	RPD	RPD
SR 240 @ Stevens (Optional Sign)	W				Road Closed Ahead	Road Closed Ahead	Road Closed Ahead	Road Closed Ahead	
SR 240 @ Kingsgate	W				RPD/WSP	RPD/WSP			
Kingsgate @ SR 240	S, N				RPD/WSP	RPD/WSP			
Harrington Road @ Twin Bridges	W				WRPD	WRPD			
Twin Bridges @ Yakima River Drive	N				WRPD	WRPD			
SR 225 @ River Road (Optional Sign)	N				Road Closed Ahead	Road Closed Ahead	Road Closed Ahead	Road Closed Ahead	
SR 225 @ Wildlife Area Parking Lot	N				WSP	WSP			
SR 240 @ SR 24	E				WSP	WSP	WSP	WSP	
10 South @ SR240	N	WSP	WSP	WSP			WSP	WSP	WSP
SR 240 @ 10 South	W						WSP	WSP	

LAW ENFORCEMENT ACCESS CONTROL POINT JOB AID – September, 2021

Figure 12 - Pre-Determined Access Control Points, Benton County (J.11.e.iii)

11.10 The Transportation Dependent Public

Benton County Emergency Management maintains a database of residents who have self-identified as being potentially without transportation or otherwise need assistance during an evacuation of the plume emergency planning zone (J.11.a.ii). Benton County may attempt to contact these residents by phone to determine whether they needed transportation assistance to evacuate. The number of people needing evacuation assistance would be determined by the census information in the database, phone calls made at the time of the evacuation, and calls for assistance received by the public phone team or by the Benton County Emergency Operations Center (J.11.a.iii).

Benton County would mobilize lift busses from the Richland School District or Ben-Franklin Transit to assist anyone needing transportation assistance (J.11.a.vi).

When transportation issues arise, Benton-Franklin District Health would make an ad hoc decision concerning the transportation of any ill, injured or mobility impaired residents. Medic Units from one or more local fire agencies may be mobilized to assist those residents unable to be transported safely by lift bus (J.11.a.i).

Benton County does not have any pre-designated pick-up points for residents requiring evacuation transportation assistance. In most cases, people needing transportation assistance during evacuation or relocation will be picked up at their homes.

11.11 Transportation Dependent Students

The Benton County EOC notifies the Richland School District of an emergency declared by Columbia Generating Station so that they may make the appropriate arrangements to prevent students from being released or dropped off in any area impacted by the emergency. (J.11.a.iii)

Students who attend Richland School District schools or who are transported by Richland School District shall not be transported by the school district into an area evacuated because of a Columbia Generating Station emergency. In the alternative, they will either remain at the school they attend or be transported to another school designated by the school district at the time of the emergency (J.11.a.i).

Students who attend Richland School District schools whose families provide for their transportation shall be requested to remain at the school they attend until they are picked up by their parents or guardian, or, if transporting themselves, requested to go to another school designated by the school district designated at the time of the emergency (J.11.a.i)..

Students who live within the Columbia Generating Station plume emergency planning zone that do not attend Richland School District schools and are not transported by Richland School District shall not be allowed to enter areas evacuated because of a Columbia Generating Station emergency (J.11.a.i).

The Kennewick School District or Columbia Basin College Administration has ultimate authority to cancel classes or announce an early dismissal time for students who attend school facilities that are pressed into service as an EWAC (J.11.d.iv).

Chapter 12 – Radiological Exposure Control

12.1 Emergency Worker Dose Limits

All county emergency workers operate under general Washington Division of Occupational Safety and Health radiological safety requirements and when responding to an emergency for a CGS incident, radiological dose will be controlled under federal guidance and procedures as set forth in this plan (K.2.i, K.2.ii, K.2.iii).

Benton County adopts EPA PAGS, 5 R general, 10 R valuable property, 25 R lifesaving, and uses an administrative turn-back exposure limit of 2.5 R for Benton County emergency workers (K.2.b.i). This turnback value has taken into account an inhalation factor and may change based on information from State DOH (K.3.iv) Permission to accumulate additional exposures can be

obtained from the Benton-Franklin District Health Officer, or their designee, in the EOC via predetermined communication channels (K.2.b.ii). If permission is granted, dose will continue to be recorded and documentation is the responsibility of the Benton-Franklin Health Officer (K.2.b.iii). In the event that an emergency worker may receive exposures in excess of 20 R, they shall be provided with a briefing related to risks associated with higher radiation exposures (K.2.b.iv, K.2.b.v) including information similar to that set out in Table 3 – Radiation Effects on page 15 of the 4th Edition of the REAC/TS publication The Medical Aspects of Radiation Incidents.

The Environmental Protection Agency establishes emergency worker radiation exposure and dose guidelines. They are set out in PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents (EPA-400/R-17/001 | January 2017).

The Benton-Franklin District Health Officer has preauthorized tactical components of the Tri-City Regional SWAT Team to exceed the 5 REM and 10 REM total effective dose equivalent limits for emergency workers up to 20 REM TEDE during a response to a hostile action-based Columbia Generating Station emergency (K.2.iii).

All other emergency workers' requests for permission to exceed the EPA limits shall be considered on an ad hoc basis by the Benton-Franklin District Health Officer, or their designee prior to the approval or denial of permission to exceed the emergency worker dose limits established by the EPA.

Due to perceived limitations of the 0-20 Roentgen direct reading dosimeters distributed in emergency worker kits, an administrative limit of 20 REM TEDE has been established for all emergency workers for non-voluntary lifesaving activities.

12.2 Emergency Worker Exposure Control

Benton County response organization personnel supervising emergency workers in the field shall:

a. confirm that emergency workers who are part of the response organization have emergency worker kits.
b. confirm the emergency workers they supervise periodically check and record direct reading dosimeter readings including the place, date, and time of the reading.

Emergency Workers are encouraged to read their direct reading dosimetry at least every 30 minutes to monitor for any change in the reading from the initial reading that was recorded at the time the emergency worker kit was obtained (K.3.a.i, Figure 10, Figure 13) All emergency workers record each reading and note any exposure (including no exposure) on a record card or form provided with their Emergency Worker Kit (K.3.a.ii). They are to report any change in the reading of their direct reading dosimeter to the person supervising them during the emergency response and to the Benton County Emergency Operations Center (K.3.a.ii). The process for readings DRDs and PRDs are described in the Radiation Emergency Worker Dosimetry Briefing procedure as shown in Figures 13 through 16. (K.3.v).

Radiation Emergency Worker Dosimetry Briefing

- Have Team Members take out procedure from the Emergency Worker Kit (encourage them to read the document or follow along)

Types of Radiation

- Neutron. A heavy atomic particle ejected from an atom's nucleus. Primarily present during ongoing nuclear fission. Neutron emitters are used in industrial and agriculture instruments. Deeply penetrating. Hard to shield. Can result in neutron activation of atoms that capture one or more neutrons. Most dangerous form of radiation inside or outside the body but rarely encountered.
- Gamma. A high energy electro-magnetic wave capable of causing atoms to shed electrons. Primary form of radiation we are concerned about during most radiation emergencies. Second most penetrating form of radiation. Gamma emitters pose danger inside or outside the body.
- Alpha. A high energy, high velocity helium nucleus (2 neutrons, 2 protons, no electrons). Difficult to detect. Stopped by paper or outer layer of skin. Alpha emitters pose almost no danger outside the body, but are the most dangerous inside the body.
- Beta. A high energy electron ejected from a nucleus. Stopped by tin foil or glass. Dangerous inside the body or on the surface of the skin. Damaging to eyes (corneas). Beta emitters can cause "beta burns" to skin.

Measuring Exposure to Gamma Radiation

- As a Radiation Emergency Worker you are receiving (1) Direct Read Dosimeter (DRD). You will use the DRD to self-monitor your radiation exposure.
- You should wear the DRD where you can easily get to it to read it periodically. Clipped on a shirt pocket, button hole, or elsewhere at chest level is preferred.
- DRDs lose a small portion of their electrical charge as Gamma radiation penetrates the DRD barrel. This causes the indicator to move up the scale.
- Changes in the DRD reading provide a good estimate of how much gamma radiation exposure you have received.
  - DRD readings are not used as legal evidence.
  - DRD readings allow you to make decisions about radiation exposure during your radiation emergency response.

- You read the DRD, by looking through the clip end of the instrument, while pointing the opposite end at a light source.
- YOU MUST WRITE DOWN THE INITIAL DRD READING AT THE BEGINNING OF ANY EMERGENCY RESPONSE THAT MAY INVOLVE EXPOSURE TO RADIATION.
- Your initial DRD reading does not have to be 'zero'. You are checking for any *INCREASES* in the DRD reading that occur during your response to a radiation emergency.

- If you have the time and a DRD charger, you may reset the DRD to zero before writing down the initial reading, but this is not necessary, especially if the initial reading is less than '3'.
- If the initial reading is '5' or greater, exchange your kit if another kit is available. If another kit is not available, you should recharge your DRD.
- About every 30 minutes during your radiation emergency response, read and record DRD readings on the exposure record included on pages 7 and 8 of the enclosed instructions.
- If your DRD readings increase during your radiation emergency response:
  - *YOU MUST INFORM* the person you are reporting to during the response and Benton County Emergency Management or the Washington State Department of Health, Radiation Protection about the amount of increase and where you are located.
  - You will be contacted in an attempt to determine whether you are/were in a radiation field or whether your DRD has failed.
- Your Supervisor may reduce your exposure limits and turn back value. Note any changes on the exposure form.
- SWAT EXCEPTION: The Health Officer of the Benton Franklin Health District has pre-authorized a 20R exposure limit for SWAT team members deployed in response to a hostile action against the Columbia Generating Station.

Determining Radiation Dose

- As a Radiation Emergency Worker you are receiving (1) Optically Stimulated Luminescent (OSL) dosimeter.
- You cannot read your OSL dosimeter, but your OSL dosimeter will be tested after the end of your radiation emergency response to determine your radiation dose.
- OSL dosimeters are very accurate and readings obtained from them can be used as legal evidence.
- You do not need access to the OSL dosimeter during your radiation emergency response, therefore, it should be worn at chest level (in between the neck and waist) in a location where it will not be snagged, tugged, pulled, damaged or lost during your radiation emergency response.

Figure 13 - Emergency Worker Kit Dosimetry Briefing page 1 (K.3.v, K.3.vi, K.3.a.i)

Protecting Yourself from Avoidable Radiation

- You cannot avoid all radiation exposure. You can avoid elevated radiation exposure.
- TIME, DISTANCE, SHIELDING are often mentioned as radiation protection measures.
  - Time. The less time you spend in an area with elevated radiation, the less exposure you will receive. You will only be assigned to work in an elevated radiation area for the amount of time required to complete the assignment.
  - Distance. The farther away you are from a source of elevated radiation, the less exposure you will receive. Stay as far away from the source of elevated radiation as your work assignment allows.
  - Shielding. The use of shielding such as lead, steel, concrete, or earth between you and a source of elevated radiation will also reduce your exposure. When possible, emergency workers entering elevated radiation areas should keep buildings, automobiles, or any other means of shielding between them and the radiation source to reduce their exposure.

Radioactive Iodine and Potassium Iodide (KI)

- The use of KI by emergency workers is VOLUNTARY.
- KI should not be used by anyone allergic to iodine or who has any of the medical conditions listed in the kit instructions.
- Radioactive Iodine is produced during nuclear fission. It may be released during a nuclear power plant accident.
- If radioactive Iodine in gaseous form is inhaled some of it will enter the bloodstream and be absorbed by the thyroid gland.
- When KI is taken before or early on during exposure to radioactive Iodine, the thyroid gland will become saturated with Iodine potentially reducing the amount of radioactive Iodine absorbed by the thyroid gland.

- Radiation emergency workers receive a 10 day supply of KI in their dosimetry packet. The standard dose is one 130 mg tablet per day or two 65 mg tablets per day.
- Radiation emergency workers should not take KI until instructed to do so.
- SWAT EXCEPTION: The Health Officer of the Benton Franklin Health District has pre-authorized SWAT team members being deployed in response to a hostile action against the Columbia Generating Station to take 130 mg of KI prior to leaving the staging area. Additional KI should not be taken unless there was an actual potential exposure to radioactive Iodine.
- Exceeding the recommended dose of 130 mg daily will NOT provide additional protection. It may increase the risk of side effects (increase in mucous production, coughing, etc.)
- Allergies to saltwater shellfish (shrimp, crab, etc.) do not constitute an Iodine allergy but may indicate a possible allergy. If you are concerned about possible allergic reactions, please refer to the IOSAT information sheet inside your dosimetry packet for further information.

End of Shift

- Radiation Emergency Workers must go to a monitoring and decontamination facility to be checked for radioactive materials contamination and turn in their DRD and OSL dosimeters before returning to normal duties or ending work for the day.
- Contact the person you report to during the radiation emergency response for directions to the location of the monitoring and decontamination facility.
- In the event of a Columbia Generating Station or DOE-RL emergency, you will probably be directed to go to an Emergency Worker Assistance Center (EWAC) set up at Columbia Basin College (2600 N. 20th in Pasco) or Southridge H.S. (3520 Southridge Blvd. in Kennewick).

Emergency Worker Radiation Dose Limits

- The Environmental Protection Agency has established the following radiation dose limits for radiation emergency workers. Those limits are set out in table form on page 2 of your emergency worker kit instructions.
- 5R Limit: Basic Radiation Emergency Response: representative activities include duties such as manning Access Control Points, providing evacuation assistance, performing routine law enforcement or medical response inside evacuated areas, working at a monitoring and decontamination center.
- 10R Limit: Protecting Valuable Property: representative activities include firefighting, shutting down industrial processes, extended non-routine law enforcement activities involving response to life threatening criminal behavior.
- 20R Limit: Performing Lifesaving Activities or protecting large populations: representative activities include extended non-routine law enforcement activities involving response to life threatening criminal behavior or hostile action against the nuclear power plant, extended medical response, activities that, if successful, will significantly reduce overall risk to the community as a whole.

YOU MUST PERIODICALLY READ THE DRD AND RECORD THE DRD READING.
YOU MUST REPORT ANY INCREASE IN EXPOSURE INDICATED BY DRD READINGS.
IF YOUR DRD RECORDS ANY RADIATION EXPOSURE, YOU WILL PROBABLY BE MOVED TO ANOTHER LOCATION.
DO NOT FAIL TO READ THE DRD AND REPORT ANY INCREASES IN THE READINGS.

Have the Team members initial and date the JIT training procedure in their Emergency Worker Kit

Figure 14 - Emergency Worker Kit Dosimetry Briefing page 2 (K.3.v, K.3.vi)

EMERGENCY WORKER EXPOSURE FORM

NAME: _____ DATE:_____

(Last) (First) (MI) TIME:_____

Date of Birth: _____

MAILING ADDRESS:

OSL Radwatch Number: _____	Initial Dosimeter Reading _____R
Dosimeter Serial No.: _____	Ending Dosimeter Reading _____R

Emergency Worker Kit Issued at:_____

KI Dose 1	KI Dose 2	KI Dose 3	KI Dose 4	KI Dose 5
Date and Time	Date and Time	Date and Time	Date and Time	Date and Time
KI Dose 6	KI Dose 7	KI Dose 8	KI Dose 9	KI Dose 10
Date and Time	Date and Time	Date and Time	Date and Time	Date and Time

FOR DEPARTMENT OF HEALTH USE ONLY

EXPOSURE RECEIVED: _____

SIGNATURE: _____

VERIFIED BY: _____

Figure 15 - Emergency Worker Exposure Form (K.3.v, K.3.vi)

PENCIL DOSIMETER READINGS

Note: Readings should be taken about every half-hour.

Name: _____ DRD Serial No._____

TIME	READING	LOCATION	TIME	READING	LOCATION

Record of Adjusted Turn Back Values

PERFORMING BASIC EMERGENCY RESPONSE ACTIVITIES.	
Time Received	Adjusted Turn Back Value
1	R
2	R
3	R

PROTECTING VALUABLE PROPERTY.	
Time Received	Adjusted Turn Back Value
1	R
2	R
3	R

LIFESAVING ACTIVITIES.	
Time Received	Adjusted Turn Back Value
1	R
2	R
3	R

Figure 16 - Emergency Worker Pencil DRD Readings form (K.3.v, K.3.vi)

If an emergency worker reports an increase of their direct reading dosimeter, Benton County will request that Washington State Department of Health Office of Radiation field team personnel or other health physics support go to the location of the emergency worker to determine whether the direct reading dosimeter is not functioning properly or whether the emergency worker needs to be moved to another location and whether additional evacuations of the public are required to meet Washington State or EPA requirements.

Emergency workers are instructed to contact the person supervising them during the emergency response to receive directions regarding where to go at the end of their shift to be checked for contamination, decontaminated if necessary, and to turn in their direct reading dosimeters for reuse and their permanent record dosimeters for processing by the Office of Radiation Protection Dose Tracker. Unless directed otherwise, this end of shift process will take place at the EWAC. (K.3.a.iii, K.3.a.iv) where all records will be maintained by Washington State Department of Health, Office of Radiation (K.3.a.v)

Chapter 13 – Medical and Public Health Support

13.1 Primary and Backup Hospitals

There are two medical services facilities in Benton County which are prepared to receive injured individuals who are contaminated with radioactive materials as set out in Table 6: Emergency Medical Facilities for the Contaminated Injured.

HOSPITAL	TYPE	LOCATION	OUTPATIENT CAPACITY / DAY		Beds	Special Capabilities
			Non-Contaminated	Contaminated		
Kadlec Regional Medical Center	Public	Richland	Variable	Variable	270	Level III Trauma Center
Trios Health Southridge Hospital	Public	Kennewick	200	200	14 ER 111 total	Level III Trauma Center

Table 10 - Emergency Medical Facilities for the Contaminated Injured (L.1.iii)

Kadlec Medical Center is about 13 miles and Trios Health is about 21 miles from the center of the Columbia Generating Station plume emergency planning zone. Benton County Emergency Management does not have agreements with any other medical facilities. Both Kadlec and Trios maintain an adequate number of radiologically trained medical personnel and support staff. (L.1.ii,). Separate radiological plans and procedures are prepared by each hospital. The hospitals are the final arbiter of approval of the hospital plans and procedures for the evaluation and treatment of radiologically contaminated injured patients.

13.2 Pre-Hospital Treatment and Choosing a Medical Facility

Pre-hospital treatment and transportation of radiologically contaminated patients is provided by the responding City or County Fire/EMS agency. That agency will maintain an adequate number

of radiologically trained medical personnel and determine the appropriate hospital/medical facility to receive the contaminated injured patient using the same processes used to make the same determination for non-contaminated injured patients (L.4.i). Local plans and procedures for implementing the process of distributing patients to medical facilities throughout the state (L.3.i) in the event of a major emergency or disaster are found in the Washington State Disaster Medical Coordination Center Agreement.

13.3. Pre-Hospital Radiological Monitoring, Dosimetry, and Contamination Control

The same vehicles that are used to transport other patients shall be used to transport contaminated injured patients (L.4.ii), however, those vehicles will be out of service after such transportation and until they are surveyed and decontaminated, if needed, prior to transporting non-contaminated patients. The vehicles will not be surveyed, decontaminated, or considered out of service if returning to the same or a similar scene, that is, or is suspected of being, radiologically contaminated. This provision shall not apply in mass casualty incidents where in the professional judgment of the pre-hospital care providers the potential for cross contamination is outweighed by the need to preserve life or prevent further harm.

Hospital staff use their own dosimetry and procedures, including record-keeping, per their own radiological plans (L.1.iv). Pre-hospital decontamination techniques and trigger action levels are the same as those that are used at Emergency Worker/Assistance Centers (Twice the background radiation level as determined prior to entering the scene, or 100 counts per minute), however, in order to protect the life and health of the patient, lifesaving and stabilizing medical services and transportation of the patient to the hospital have priority over radiological surveys and decontamination other than as necessary and ancillary to providing that treatment and transportation (L.4.v).

13.4 Communications Between the Transport Crew and Hospital/Medical Facility Staff

Communication used between the pre-hospital emergency medical services treatment and transport providers shall be the same as that used on a daily basis for non-contaminated patients or, if needed, additional emergency medical transport services can be requested, and communications established according to the Benton-Franklin Counties Mass Casualty Incident Plan (L.4.iii, L.4.iv). Cell phones are the primary communications link used by pre-hospital emergency medical service providers to communicate with emergency medical services facilities during routine operations.

13.5 Communications Between Emergency Medical Services Facilities

Telephone systems, cellular and public switched network, and the Hospital Emergency Administrative Radio (HEAR) frequencies are used for communications between emergency medical services facilities (L.4.iv).

13.6 Monitoring and Contamination Control Measures During Transport

The priority is protecting the patient by providing lifesaving emergency medical services and prompt transportation to the receiving hospital. Therefore, pre-hospital monitoring is limited to determining whether contamination is present and surveying patients' faces, potential intravenous sites, and other areas that the provider deems appropriate. Benton County Fire District 1, Benton County Fire District 4, Kennewick Fire and Richland Fire EMS vehicles carry hand surveying equipment (Ludlums) and dosimetry onboard (L.4.vii).

Contamination control is achieved by establishing artificial clean areas using layers of barriers, cocooning the patient, draping stretchers, and securing the barriers. Unless delaying transportation jeopardizes the life or health of the patient, the patient's outer clothing may be removed prior to transportation (L.4.vi).

Chapter 14 - General Recovery, Re-entry, And Post-Accident Operations

14.1 General Recovery

Recovery begins at the onset of any emergency or disaster (M.4.i). In Washington State, local and tribal governments are responsible for planning and managing community response and recovery, in partnership with non-governmental stakeholders and with the technical support of state agencies. Based on the incident type, scope and magnitude, sections or all of the Washington Restoration Framework (WRF) may activate. While the activation of the WRF is a state function, to the extent allowed, Benton County will designate a representative to contribute to the development of a common operating picture by providing the WRF information intended for sharing among state and federal agencies (M.4.i).

The recovery process considers the following (M.1.i):

- Continuing environmental radiation measurements and dose assessments
- Establishing restricted and buffer zones
- Relocation
- Controlled reentry into restricted areas
- Return of public to previously evacuated areas
- Recovery, including a list of actions that may be needed and organization responsible for carrying them out
- Communicating with stakeholders and partners.

If the assistance needs exceed the local capabilities or resources, Benton County Emergency Management may send requests for additional support to Washington State Emergency Management Division's (EMD), ESF 14 (M.1.iii) and the EMD's Public Assistance and Individual Assistance recovery section. Should the local and state level jurisdictions need additional resources, the State will send requests to FEMA for potential federal Public Assistance and Individual support. (J.14.f.i, J.14.f.ii). Benton County Emergency Management can also assist with submitting claims to American Nuclear Insurers (ANI) for potential liability claims that could arise (J.14.f.ii).

Process for Initiating Recovery Actions

Recovery actions shall be determined by the specific type of accident and radioactive release that has occurred. The response during this action transfers from the emergency/response phase to the recovery phase. Recovery actions can include: (M.4.i-ii)

a. Maintenance of access restrictions to the evacuated areas until re-entry criteria levels are achieved.

b. Imposition of food control measures until measured radioactivity is below the specified levels.

c. Surface decontamination such as road wash down, land plowing, surface removal, packaging, and transportation to a waste repository.

d. Extensive environmental monitoring and analyses to determine compliance with reentry criteria.

The Washington State Emergency Operations Center (SEOC), at the Governor's direction, shall coordinate all off-site recovery activities. The agencies with specific responsibilities and/or resources for undertaking recovery activities include the following (M.4.iii):

a. Department of Agriculture: Is responsible for food control measures with the assistance of the Washington State Army/Air National Guard and State or Local Law Enforcement Personnel.

b. Local Law Enforcement Agencies, Washington State Patrol, and the Military Department: Have the authority and/or resources for access control, traffic control, and security of evacuated.

c. Washington State Department of Health: Responsible for radiological monitoring, Re-entry Criteria, and Drinking Water Control Measures.

d. Benton-Franklin Health District: Coordination of local public health response actions.

As the response operations diminish and a Washington Recovery Group (WRG) is established, Recovery Support Functions (RSFs) may transition recovery operations from the SEOC and Benton County EOC to a Federal Joint Field Office (JFO), depending on the incident scope and magnitude. Further explanation can be found within the Washington State Fixed Nuclear Facility Protection Plan. (M.4.iii)

Washington State's ESF 14 and activated RSFs work with the impacted communities and with their state and federal partners to maintain situational awareness on all recovery matters. The state EMD is the coordinating agency for all RSFs and will provide recovery updates to the

appropriate authorities when necessary, including via the Unified Coordination Group, MAC Group, SEOC Supervisor, Disaster Manager, and State Coordinating Officer. Additionally, Recovery Branch meetings will take place regularly to coordinate recover activities, identify challenges or resource needs, and collect essential elements of information (EEI) that will inform the recovery "Common Operating Picture" (COP). (M.4.iv)

14.2 Re-entry within Benton County

Re-entry refers to the temporary entry of individuals into a restricted area, under controlled conditions, during the intermediate phase of a Columbia Generating Station emergency. There is potential for re-entry to occur during the Early Phase, however typically re-entry occurs during the Intermediate and Late phase.

This process is controlled by Benton County with State support as appropriate. Benton County's considerations for re-entry will include, but may not be limited to:

a. Suggested locations for access control points to facilitate the orderly re-entry to restricted areas identified as having risk associated with radiation exposure.

b. Provisions of personnel and other resources, as available, to secure restricted areas and facilitate orderly re-entry.

c. Providing local representative(s) to the Washington Recovery Group (WRG)

The processes for identifying those who will be authorized to re-enter restricted areas, including the authorization verification method by access control/check point officials (M.1.b.iii); prior to the relaxation or termination of a protective action will be coordinated between Benton County, Benton-Franklin District Health, and Washington State response agencies (M.1.ii, M.1.b.i). The Benton-Franklin District Health Officer has the ultimate decision authority (M.1.b.ii).

When temporary reentry is requested, the requestor goes to the Emergency Worker Assistance Center (EWAC) and fills out a request form. If the EWAC has been closed, report to Benton County EOC, 651 Truman Ave., Richland WA, for further instructions. The request form is then reviewed and, if the need is appropriate, access would be granted. The requestor must complete Emergency Worker Kit training, check out an Emergency Worker Kit, provide their own means of communications in the event of a need for assistance, provide their own transportation, and ingress/egress at the specified location(s). Upon departure, they either process through the egress point or the EWAC to be monitored for contamination, and if needed, be decontaminated. This re-entry determination a cooperative decision between Benton County and Washington State depending on available resources, any potentially contaminated equipment that can will remain in the restricted zone. The re-entry requestor will also have their dosimetry read and recorded by the Department of Health in order to track the persons cumulative exposure (M.1.b.iv).

Individuals, who are not emergency workers, who have authorization to enter the access-controlled area will be given a brief explanation of the hazards within the area and, if practical, escorted within the area by an emergency worker (J.14.d.ii, M.1.b.iv).

Benton County will coordinate with the Washington State Department of Health, Office of Radiation, Benton-Franklin District Health, and those agencies staffing access control points to determine the location(s) of monitoring and decontamination stations at egress points within the established buffer zone(s) (J.14.d.iv) and identify trigger levels that will prompt decontamination activities (M.1.b.vi). Contamination control practices within a restricted area could also include the potential for contaminated equipment to remain in the restricted area(s) until such time as decontamination or disposal is possible (M.1.b.v).

Benton County will coordinate with the Washington State Department of Health, Office of Radiation and Benton-Franklin District Health, regarding re-entry into areas of Benton County that are a restricted area due to a protective action decision. The Washington State CEMP ESF-5 Annex - Appendix 1, The Post-Disaster Re-Entry Framework, is not REP specific but could help provide the State with further guidance for Benton County regarding re-entry after a radiological incident (P.6.ii)

The Re-entry Matrix in Table 4-2 of the EPA-400/R-17/001 Protective Action Guides (PAG) and Planning Guidance for Radiological Incidents Manual (2017) provides a quick reference for public and worker dose guidelines and considerations for re-entry.

14.3 Return within Benton County

Return refers to permanent and unconditional resettlement in previously restricted areas, based on acceptable environmental and public health conditions. Benton County will cooperate with the State of Washington in the identification and implementation of return by participating in the consultation, concurrence, and completion of a Decision Package. (M.1.iii)

The State Emergency Operations Center (SEOC) uses Decision Packages that address Return, Relocation, Reoccupancy, Food Control, and Transportation Corridors (M.5.ii). Decision Packages are used to prioritize the implementation, revisions, relaxations or termination of protective actions for the public (M.5.i, M.5.iii). Decision Packages are maintained by the SEOC Planning Section.

As mentioned above, the process for relaxation of restrictions for areas will be managed and documented using the Decision Package(s). The primary criteria used to determine whether to relax or terminate restrictions are based on federal guidance and the environmental monitoring data collected by the Washington State Department of Health. Secondary criteria involve ensuring the resumption of critical infrastructure and vital services within Benton County are adequate for the returning public (M.5.iii). Tertiary criteria would include, but would not be limited to, determining, coordinating, and delivering public messaging (M.5.i)

14.4 Reoccupancy within Benton County.

Reoccupancy refers to the return of households and communities to relocation areas during the cleanup process, at radiation levels acceptable to the community. Since final cleanup goals may take years to achieve, reoccupancy of the affected area will be possible when interim cleanup can reduce short-term exposures to acceptable levels while work continues to achieve long-term goals. Benton County will cooperate with the State of Washington using the same decision

process as it would for Return, which would result in the completion of a Decision Package (M.1.iii, M.1.iv).

14.5 Relocation

As a public health matter, any area that has received radiation contamination that exceeds the 2 rem first year relocation Protective Action Guide (PAG) should not have the public residing in the area. It is the State of Washington's plan to relocate residents from any area exceeding the PAG for Relocation. (J.14.i.) Benton County will discuss and coordinate with State of Washington Department of Health Office of Radiation and Benton-Franklin District Health. The final decision will be made with the consensus of the State and impacted jurisdictions (NUREG J.14.a.i.).

Similarly, to return, Benton County will cooperate with the State of Washington Department of Health Office of Radiation and Benton-Franklin District Health in the identification and implementation of Relocation by participating in the consultation, concurrence, and completion of a Decision Package (J.14.i, J.14.ii). Rationale used to determine areas of relocation and buffer zones may include but are not limited to; Psycho-social impacts, properties with contamination yielding exposures over PAGs, and socio-economic impacts when determining relocation PADs (J.14.a.i, J.14.a.ii).

When circumstances exist that prevent an area from being returned to acceptable levels of radiation, it is necessary to relocate individuals – either temporarily or permanently – from that area to prevent chronic radiation exposure that may impact the health and safety of the public living in that area. Benton County will cooperate with the State of Washington in the identification and implementation of relocation plans by participating in the consultation, concurrence, and completion of a Decision Package. Chapter 14.1 of the Washington State Fixed Nuclear Facility Plan provides further information on the Decision Package processes. (J.14.i, J.14.ii, M.1.iii, M.1.iv)

Buffer zones are identified around relocation areas when there is a possibility that particles from high deposition areas could drift into the occupied areas. Buffer zones are typically established to restrict residential use until radiological measurements and assessment confirm that restrictions are no longer necessary. The need for any restricted or buffer zones are included within the isopleths provided by Washington State Department of Health, Office of Radiation Protection personnel for identification of geopolitical boundaries (M.1.iii).

14.6 Determining Boundaries of Relocation Areas

Washington State Department of Health, Office of Radiation Protection will determine the process used to identify the area(s) where the projected first-year dose may exceed the EPA's 2 REM relocation PAG, any need for buffer zones (J.14.b.ii), as well as designate the intervals used to continually assess projected doses (J.14.b.i, J.14.c.ii). The initial post plume priority will be to examine areas that have not been evacuated, determining whether contamination levels necessitate relocation. The next priority will be to survey contamination levels in evacuated areas, gauging the possibility and timeline for safe return or reoccupation can occur. (J.14.c.i)

The process for the establishment of access control/check points around the relocation area using roadways and geopolitical boundaries will be determined through coordination between the State of Washington and Benton County. Establishment of control points at boundaries to

facilitate relocation and prevent entry and maintain security checkpoints on all roadways will be determined and agreed upon by Benton County, local law enforcement, and Washington State Department of Health, Office of Radiation Protection. (J.14.d.i, J.14.d.iii)

The process for notifying individuals who are being relocated will be through a coordinated media release from the JIC using information and analyzed field environmental sampling data obtained from contaminated area(s). The notification message will be determined and agreed upon by Benton County, the State of Washington response agencies and Benton-Franklin District Health. Additional notification systems or processes could also be used as the situation warrants. (J14.a.iii)

14.7 Cleanup Operations

The only recent, real-life experience on how to conduct clean-up of radiologically contaminated areas comes from the 2011 Fukushima incident following the earthquake and tsunami in Japan and what has been learned through clean-up operations conducted on federal lands such as the Department of Energy's (DOE) Hanford Site north of Richland, Washington and a few other DOE projects around the country.

Plans/procedures specify the appropriate Federal, state, local, and tribal organization(s) with primary responsibility for determining the need for, and carrying out, cleanup operations of radioactive waste. Plans/procedures take into account resources that may be needed by the responsible organizations to conduct cleanup efforts. Applicable Federal guidance is considered during the cleanup process. (M.6.i, M.6.ii)

14.8 Assessing Long-Term Exposure

Washington State DOH has the lead responsibility for ensuring offsite dose assessments and the methodology for periodically conducting radiological assessments. Dose assessors use computer codes for various types of dose projections. Different facilities in the State of Washington pose different types of radiological hazards due to the nature of the radioactive materials involved thus different facilities may require different dose assessment tools. (M.8.i, M.8.ii)

14.9 Sampling Plans and Laboratory Analysis

Washington Department of Health (DOH), including DOH Office of Radiation Protection and WSDA response plans will determine the process for developing and modifying sampling plans, determine the methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures, as well as determine the laboratory capability to analyze various samples and the procedure for reporting analytical results.

Chapter 15 – Exercises and Drills

15.1 Radiological Emergency Response Planning

Example of an Eight Year Exercise Cycle							
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
HAB	MS-1	PPX	MS-1	IPX	MS-1	PPX	MS-1
MS-1		MS-1		MS-1		MS-1	
HAB = Hostile Action Exercise		*MS-1 = Medical Services Drill / Exercise*		*PPX = Plume Phase Exercise*		*IPX = Ingestion Phase Exercise*	

TYPE	Explanation of the Type of Exercise
HAB	**Hostile Action Based scenario exercises are conducted at least once every eight years**. These exercises include a hostile action scenario directed on-site at the Columbia Generating Station. This scenario element may be combined with either a radiological release scenario or a no/minimal radiological release scenario, but a no/minimal radiological release scenario should not be included in consecutive HAB exercises at the Columbia Generating Station.
PPX	**Plume exposure pathway exercises are conducted biennially**. These exercises include mobilization of Energy Northwest, Washington State, Benton and Franklin County government personnel and resources and implementation of emergency plans to demonstrate response capabilities within the plume exposure pathway EPZ. Exercise scenarios include a radioactive release of such a magnitude that it drives accomplishment of the exercise objectives (N.2.a.ii).
IPX	**Ingestion exposure pathway exercises are conducted at least once every eight years** (N.2.b.i). These exercises include mobilization of Energy Northwest, Washington State, Benton and Franklin County government personnel and resources and implementation of emergency plans to demonstrate response capabilities to a release of radioactive materials requiring post-plume phase protective actions within the ingestion exposure pathway EPZ. These exercises would also include surrounding ingestion counties, Adams, Grant, Yakima, and Walla Walla.
MS-1	**Emergency medical drills are conducted annually**. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility within the county. Benton and Franklin County alternate their exercise schedules exercises with the fire districts and hospitals. For example, in years 1, 3, 5 and 7 Franklin County EMS and hospitals will exercise the MS-1 and in years 2 ,4, 6 and 8 Benton County EMS and hospitals will exercise (N.4.b.i).

Table 11 - Eight Year Exercise Cycle Example (N.2.a.i, N.3.a.i, N.4.e.i)

Ingestion Pathway and Post-Plume Drills will be conducted biennially This will usually be conducted in odd numbered years so as not to conflict with the even numbered year evaluated plume pathway exercises. The one exception is when the evaluated ingestion pathway exercise is conducted. Participants include any OROs that have roles/responsibilities for the ingestion pathway and/or post-plume phase activities. These drills will be rotated between the plume counties (Benton and Franklin) and one or more of the ingestion counties (Adams, Grant, Walla Walla, or Yakima) every other year. During the 8-year exercise cycle, each ingestion county will participate in at least one of these drills. These drills will include the State EOC with supporting state agencies to assist in the development, approval, and implementation of the requisite Relocation Area and Food Control Area decision packages. (N.4.e.ii.)

Benton County Emergency Manager, or their designee, participates in the planning, preparation, and conducting of FEMA evaluated Columbia Generating Station radiological emergency preparedness exercises as coordinated by Washington State Emergency Management Division and Energy Northwest (N.1.b.i). All major elements of plans/procedures will be tested at the minimum frequency specified (N.4.i)

All major elements of the plan and implementing procedures will be tested at the minimum required frequencies during drills and exercises (N.2.i). Advance knowledge of the scenarios and the times of the exercises will be prohibited to ensure a realistic response and duty performance of the exercise participants. The numbers and types of personnel participating in an ingestion exposure pathway exercise will be sufficient for demonstrating capabilities required by the plans/procedures (N.2.b.ii); and may include any OROs that have roles/responsibilities for the ingestion pathway and/or post-plume phase activities (N.4.e.ii).

Benton County, along with neighboring counties within the 50-mile ingestion exposure pathway EPZ who are not part of the full participation ingestion exercise with the state, may participate in an ingestion TTX or other ingestion pathway (N.2.b.iii) training activity at least once during each eight-year exercise cycle.

Exercises are varied from exercise to exercise to provide opportunity for appropriate capabilities to be demonstrated and all scenario elements are utilized during each eight-year exercise cycle (N.3.i, N3.ii). Exercises will generally conform to the Homeland Security Exercise and Evaluation Program (HSEEP) principles. The exercise scenarios used shall include the following:

a. The basic objective(s) and evaluation criteria of the exercise.

b. The date(s), time period, places(s) and participating organizations.

c. The simulated events.

d. A time schedule of real and simulated initiating events.

e. A resource integration scenario element is utilized once during each eight-year exercise cycle and entails demonstrating the integration of offsite resources with the onsite response efforts. This scenario element may be combined with other scenario elements (N.3.d.i, N.3.d.ii).

f. Hostile Action-Based scenario directed at the plant site involving the integration of offsite resources with onsite response (N.3.d.i). HAB exercise will be utilized at least once in an eight-year cycle. (N.3.a.i) The HAB scenario element is not combined with the no/minimal radiological release scenario in consecutive exercises at a single site (N.3.a.ii).

g. An initial classification of a rapid escalation to a Site Area Emergency or General Emergency scenario will take place at least once in an eight-year cycle. (N.3.b.i)

Benton County will account for capabilities and activities (e.g. Extent of Play) that may not have the opportunity to be evaluated under the scenario elements by conducting out of sequence activities or other means as described by FEMA guidance (N.3.c.2.i). This is to ensure resource integration elements are utilized once during each eight-year exercise cycle; or combined with other scenario elements (N.3.c.2.ii, N.3.d.i, N.3.d.ii) as appropriate. A no/minimal radioactive material release or an unplanned minimal radiological release that requires CGS to declare a SAE but does not require the declaration of a GE is optional but should only be utilized once every eight-year cycle (N.3.c.i, N.3.c.1.i).

Benton County does not participate in biennial laboratory drills or annual environmental monitoring drills. Benton County Emergency Management recognizes that they are conducted by the Washington State Department of Health, Office of Radiation (WA DOH ORP). FEMA evaluates WA DOH ORP for these drills each eight-year exercise cycle. These drills are performed in accordance with WA DOH ORP's plans/procedures. All drills are documented and reported in the ALC, along with an equipment list, calibrations, and daily quality assurance/ quality control procedures (N.4.c.i, N.4.d.i).

15.2 Exercise Evaluation Methodology

Benton County participation in the drills and exercises for continuing operation of the Columbia Generating Station is coordinated, planned, conducted, and evaluated with the participation and input of FEMA Region 10. These drills and exercises are evaluated by FEMA Region 10. exercises and drills are conducted in accordance with NRC and FEMA regulations and guidance; they are evaluated and critiqued using FEMA REP's assessment methodology (N.1.i, N.1.i.a).

15.3 Tracking Identified Findings/Issues and Corresponding Corrective Action

Upon receipt of any findings and/or issues identified during drills/exercises or other corrective actions identified in After-Action Reports (AARs)/Improvement Plans (IPs), or through other means, will be considered for incorporation, providing the corrective action is reasonable, and documented. Benton County Emergency Manager, or their designee, shall be responsible for tracking identified findings and corrective actions, and ensuring that the required corrective actions are included within the plan. Verification of corrective actions that ae being implemented will be reported in the Annual Letter of Certification (ALC) (N.1.b.i, P.4.iv).

Chapter 16 – Radiological Emergency Response Training

16.1 Training Programs

Specialized training programs are provided to ensure that initial and annual refresher training is provided to Benton County Emergency Management personnel and other Offsite Response Organizations (ORO) and personnel who have a role in the implementation of Benton County's radiological emergency response.

Initial and continuation training will be conducted in cooperation with Washington Military Department Emergency Management Division (EMD), DOH, WSDA, and Energy Northwest.

Training Outlines and Courses have been established and approved for use by Washington State Department of Health for the following; EWAC Personnel, EOC Staff, Law Enforcement/Police Security (Benton County, City of Richland and West Richland), Fire Fighters (City of Richland and Kennewick, Benton County Districts), Elected Officials, State Agencies (WSDA, WA Fish and Wildlife, WSDOT and WSP), County and City Emergency Workers, SECOMM Dispatch, Transportation agencies, hospital medical and support staff and Volunteers (O.1.v, O.1.iv). See Table 10.

Each organization providing the training shall be responsible for documenting the following for training sessions:

a. Subject Matter (Lesson Plans, description of Training Aids, Reference Materials)

b. Lesson plans and training shall reference just-in-time training. *Note: Just-in-time training documents are also included in all Emergency Worker Kits (O.1.vii).*

c. Attendance Roster

Copies of training documentation conducted by other groups shall be sent to Benton County Emergency Management within 30 days of the conduct of the training. The Benton County Emergency Management Manager, or their designee, will maintain this documentation until 6 years after the closing of the applicable nuclear facilities (O.1.viii).

BENTON COUNTY EMERGENCY RESPONSE ORGANIZATIONS RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM (REP) TRAINING MATRIX							
Organization	**Emergency Response Procedures (SECOMM, EOC, EOF, JIC)**	**EWAC Procedures**	**Emergency Worker Kits**	**Ingestion, Re-Entry and Recovery**	**EOC Orientation**	**Fire/Rescue Radiation Detection**	**Hospital Radiation Training**
BCEM: Emergency Manager, EOC and JIC PIO, OPS Section Chief	X	X	X	X	X		
BC Commissioners	X			X	X		
BCEM Staff	X				X		
Benton Co. Sheriff's Office	X		X	X	X		
Benton Co. Prosecutors Office	X				X		
Benton Co. Fire District 1	X		X			X	
Benton Co. Fire District 4	X		X			X	
Richland Fire / EMS	X		X		X	X	
Kennewick Police Dept	X	X	X				
Richland Police Dept			X	X	X		
West Richland Police Dept	X	X	X	X	X	X	
WA Dept of Agriculture	X				X		
WA State Patrol (Kennewick / Grandview Detachments)	X		X	X	X		
WA State Dept. of Transportation	X			X	X		
Kadlec Regional Medical Center							X
Trios Health Southridge Hospital							X
Central WA SE Chapter Red Cross	X	X			X		
B/F Health District	X			X	X		
SECOMM (9-1-1 Dispatch)	X				X		
3Rivers AuxComm	X				X		
U.S. Coast Guard			X				
Individual Volunteers		X (just in time training)	X (just in time training)				

Table 12 - Benton County REP Training Matrix

16.2 Description of Training Programs

Table 11 lists Benton County Radiological Emergency Preparedness Program (REP) training courses and descriptions (O.1.i) and Table 10 shows the training matrix of organizations with their appropriate training (O.1.ii, O.1.iii).

Response agencies that have signed a Memorandum of Understanding (MOU) agree to respond to a radiological emergency in accordance with their operating procedures, training levels, certifications/capabilities, with the understanding that services and response capabilities will have to be assessed at the time of the emergency to consider response to everyday/normal operations. All MOUs will be reviewed annually to verify their validity. BCEM maintains records/copies of all MOUs.

Benton County Radiological Emergency Preparedness Program (REP) Training Courses					
Training Courses	Time Interval	Presented By	Presented To	Brief Description	Proponent Organization
EOC Duty Positions	Annually	Benton County Emergency Management (BCEM) Staff	County and Municipal Elected Official, employees, and volunteers who staff specific EOC positions during an emergency	Each EOC duty position has a procedure describing the duties of the individual during and activation of the EOC. This type of training is usually conducted using a One-on-One format	Benton County Emergency Management (BCEM) Staff
Emergency Worker Assistance Center (EWAC) Duty Positions	Annually	BCEM Staff and Washington State Department of Health, Office of Radiation Protection Staff	Kennewick Fire, Southridge High School Staff, Columbia Basin College staff, CBC Student volunteers, Washington State Department of Agriculture staff, and other volunteers	Instruction is taught using the procedures specific to each EWAC duty position staffed by volunteers and specific organizations supporting the EWAC. This training is taught to each EWAC Functional Area group (Monitoring, Decon, Admin)	BCEM Staff (The Washington State Dept. of Health (DOH) reviews those procedures specific to radiation monitoring and decontamination, once approved the procedure is taught by BCEM Staff.)
Emergency Worker Kits	Annually (will reach out quarterly if training not complete)	BCEM Staff and Washington State Department of Health, Office of Radiation Protection Staff	Benton County (BC) Sheriffs, Benton County Fire Districts 1 & 4, Kennewick Fire Dept., Richland Fire Dept., Richland Police Dept., West Richland Police Dept. Washington State Patrol, U.S. Coast Guard EWAC Volunteers in all EWAC Functional Areas	Course describes and demonstrates the proper use and wearing of dosimetry, turn back values, importance of emergency worker exposure form, zeroing and use of Pencil Dosimeters and need to record pencil dosimeter readings	BCEM Staff
Ingestion, Recovery, and Re-Entry	At least once every 8 years	BCEM Staff with assistance as requested from WA DOH, WSDA, WEMD and Energy NW	EOC Staff, EWAC Staff, Emergency Workers who staff Access Control Points	Set of procedures used to instruct response activities for Benton Co. personnel post-plume. Details specific activities for certain EOC staff and provides instruction on Access Control and accountability of persons entering Relocation Area	BCEM developed, based on FEMA and EPA Guidance, uses WA Emergency Management, WSDA, DOH info.
EOC Orientation	Annually	BCEM Staff	EOC Staff, Facility and State Liaisons, and other interested persons	EOC tour, explanation, and description of facility and its capabilities	BCEM Staff

Benton County Radiological Emergency Preparedness Program (REP) Training Courses					
Training Courses	Time Interval	Presented By	Presented To	Brief Description	Proponent Organization
Fire Department and EWAC Radiation Detector Training	Annually	BCEM Staff, with assistance from WA DOH and if available Energy NW support	Richland Fire Dept., Benton Co. Fire Dist. 1 & 4, EWAC Monitoring and Decontamination Staff	Procedure based training used to describe components, assembly, functions check and use of both types of detectors.	BCEM Staff, WA DOH and Energy NW if requested
Hospital Radiation Training	Annually	BCEM Facilitated, Washington State Department of Health, Office of Radiation Protection Staff	Refresher course for Kadlec Regional and Trios Health Southridge Emergency Room staff.	Training based on hospital policy and procedures.	Training based on hospital policy and procedures.

Table 13 - Benton County Radiological Emergency Preparedness Program (REP) Training Courses and Description (O.1.ii, O.1.iii)

Chapter 17 – Responsibility for the Planning Effort

17.1 Responsibility for the Planning Effort

Three positions at BCEM have responsibilities for the planning effort. These positions are the Benton County Emergency Manager and both Benton County Emergency Planners.

The BCEM Manager has the overall authority and responsibility for radiological emergency response planning as well as oversight of the REP plan/procedures. They are also responsible for REP Program management, coordinating activities with the executive stakeholders and government leaders in Benton County. The responsibility for the REP plan/procedures development and maintenance, review, updates and distribution of emergency plans/procedures with other response organizations may be shared between both BCEM Emergency Planners. (P.1.i, P.2.i, P.3.i)

The initial and recurrent trainings for individual(s) at BCEM, by title/position, that require training because of their planning or response responsibilities, is outlined in the table below. If the required courses are updated as a result of significant changes to the REP Program Manual, then BCEM staff will review to determine if it is necessary to take the new version of the required courses again (P.1.ii). The Benton County Emergency Management Account Specialist does not have planning responsibilities; however they do have a role in the EOC upon activation.

BCEM Position	Required	Optional
Benton County Emergency Management – Manager	IS-29, IS-100, 200, 700, 800, ICS-300, 400, 2200, AWR-352, AWR-317, MGT-445, MGT-453, E/L/K0146, E/L/K0105 CodeRED Trainings	E/L/G 0191, E/L/G 2300, AWR-928-W, AWR-929, AWR-314, AWR-318, AWR-327, AWR-351, PDS Courses, PER-332, PER-345
Benton County Emergency Management – Radiological Emergency Planner(s)	IS-29, IS-100, 200, 700, 800, 2200, ICS-300, 400, AWR-352, MGT-445, MGT-453, E/L/K0146, E/L/K0105, PER-332, PER-345 CodeRED Trainings	E/L/G 0191, E/L/G 2300, AWR-928-W, AWR-929, AWR-314, AWR-317, AWR-318, AWR-327, AWR-351, PDS Courses, CHDS REP Early Career Program
Benton County Emergency Management – Account Specialist	IS-29, 100, 200, 700, 2200	E/L/K0105, IS-800 CodeRED Trainings

Table 14 - Required Trainings for BCEM Staff (P.1.i, P.1.ii)

17.2 Periodic Review

The Benton County Radiological Emergency Preparedness Plan and implementing procedures require an annual review. 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. Updates are first reviewed by BCEM staff and are coordinated with stakeholders and other personnel from other response organizations to ensure continuity with other BCEM-produced plans (P.4.i.) A summary of changes is located at the beginning of this plan and highlighted portions indicate where additions or modifications occurred (P.4.ii.) The implementing procedures (IP) for the BCEM EOC are overseen by the BCEM Emergency Planners. The Planner ensures that reviews are done at least annually and updated, as needed, to ensure that programmatic changes are incorporated and maintained (P.4.i.). The Benton County Radiological Emergency Response Plan and the BCEM EOC IPs both incorporate a Record of Changes page to capture historical context and preserve the intent of changes (P.4.iii, P.4.v)

Any changes made to the plan will be documented in the Summary of Changes which proceeds this document. The Summary of Changes will include:

a. The Revision Number
b. The Location in the plan where the revision or change was made.
c. Summary of Revision/Change. Capturing the “why” of the revision/change in effort to provide context for historical changes and preserve intent of the changes.
d. Date of the Revision or Change
e. Initials of the person making the Revision or Change.

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 this plan in the year following their availability; Benton County Emergency Management obtains this information from the responsible agency or organization. Notification lists, authorities and references are reviewed are kept current as changes occur and updated not less than quarterly. Telephone contact lists (BCEM Staff Roster, Ingestion County Emergency Management contacts, and Supporting Organizations’ contacts) are in Annex C, which is kept separate from this plan and its procedures and are maintained by BCEM (P.10.i)

The Plan is available to the public and all plan holders on the BCES website https://www.bces.wa.gov/bces-public-records.

17.3 Distribution of Emergency Plan

The BCEM Emergency Planner annually reviews and as needed updates, coordinates, and publishes the plan. Hard copies of the plan are available and provided to those, upon request, on the distribution list. Alternatively, the plan can be obtained in PDF format, from the BCES website. (P.5.i, P.5.ii, P.5.iii). Documentation will be kept to ensure that updated plans and procedures have been provided to those on the distribution list.

Distribution -Washington State Agencies	
Organization	Mailing Address
Washington State Department of Agriculture	Rapid Response & Emergency Management, Program Manager PO Box 42560 Olympia, WA 98504-2560
Washington State Department of Health, Office of Radiation Protection	Plans and Procedures Lead PO Box 47827 Olympia, WA 98504-7827
Washington State Emergency Management Division	Radiological Preparedness Program Manager Operations Unit Emergency Management Division Washington Military Department
Washington State Patrol	Homeland Security Section Commander, Washington State Patrol Helen Sommers Building 106 11th Ave. SW Olympia, WA 98501
Washington State Department of Transportation	Safety and Emergency Operations Manager Washington State Department of Transportation Office of Emergency Management 310 Maple Park Ave SE P.O. Box 47300 Olympia, WA 98504

Distribution - County Emergency Management Organizations	
Organization	Address
Adams County Department of Emergency Management	Emergency Management Director 2069 W. Highway 26 Othello, WA 99344
Franklin County Emergency Management	Emergency Management Director 1011 E. Ainsworth St. Pasco, WA 99301
Grant County Sheriff's Office, Emergency Operations Division	Emergency Operations Division 3953 Airway Dr NE, Bldg 2 Moses Lake, WA 98837
Kittitas County Sheriff Department of Emergency Management	Operations Commander/EM Specialist 307 West Umptanum Road Ellensburg, WA 98926
Klickitat County Department of Emergency Management	Emergency Management Director 199 Industrial Way Goldendale, WA 98620
Walla Walla Department of Emergency Management	Emergency Management Director 27 North 2nd Avenue Walla Walla, WA 99362
Yakima Valley Office of Emergency Management	Emergency Management Director 2403 S. 18th Street, Suite 200 Union Gap, WA 98903

Distribution - Federal Agencies	
Organization	Address
United States Department of Homeland Security, Federal Emergency Management Agency	RAC Chair Federal Regional Center FEMA Region 10 130-228th Street SW Bothell, WA 98021-9796
United State Department of Energy – Richland Operations	Emergency Operations Manager U.S. DOE Hanford HMIS Emergency Management and Preparedness 825 Jadwin Avenue Richland, WA 99352
United States Coast Guard District 13, Columbia River Sector Clover Island	Chief, USCG ANT Kennewick , Officer-in-Charge United States Coast Guard 434 Clover Island Kennewick, WA 99336

Distribution - Other Organizations / Stakeholders	
Organization	Address
Ben Franklin Transit	Director of Transit Operations 1000 Columbia Park Trail Richland, WA 99352
Benton County Board of Commissioners	Benton Co. Board of Commissioners 620 Market St. Prosser, WA 99350
Benton County Fire District 1	Chief 101108 E Badger Rd. Kennewick, WA 99338
Benton County Fire District 2	Chief 1304 Dale Ave. Benton City, WA 99320
Benton County Fire District 4	Chief 2604 Bombing Range Rd. West Richland, WA 99353
Benton County Sheriff's Office & Tri-City Regional Special Weapons and Tactics Team	Tri City Regional SWAT c/o Benton County Sheriff's Office Benton County Justice Center, Building A 7122 W. Okanogan Place Kennewick, WA 99336 Email: Michael.Clark@co.benton.wa.us
Benton-Franklin District Health	Regional Emergency Response Coordinator 7102 W. Okanogan Place Kennewick, WA 99336
	Benton-Franklin Health Officer 7102 W. Okanogan Place Kennewick, WA 99336
Cherry Creek Radio (KONA)	Operations Manager 2823 W Lewis St. Pasco, WA 99301
City of Kennewick	City Manager (c/o City Clerk Office) City Hall 210 W 6th Ave. Kennewick, WA 99336
City of Richland	City Manager (c/o City Clerk Office) 625 Swift Blvd., MS-05 Richland, WA 99352
City of West Richland	Mayor (c/o City Clerk Office) 3100 Belmont Boulevard Suite 100 West Richland, WA 99353

Distribution - Other Organizations / Stakeholders	
Organization	Address
Columbia Basin College	Director for Campus Security & Emergency Management 2600 N. 20th Ave. Pasco, WA 99301
Energy Northwest, Columbia Generating Station	Emergency Preparedness PO Box 968 / MD PE30 Richland, WA 99352-0968
Framatome, Inc.	Emergency Preparedness Coordinator 2101 Horn Rapids Road Richland, WA 99352-5102
Kadlec Regional Medical Center	Emergency Department Clinical Educator 888 Swift Blvd. Richland, WA 99352
Kennewick School District	Director of Maintenance and Grounds Administration Center 1000 W. Fourth Avenue Kennewick, WA 99336
Oregon Department of Energy	Nuclear Safety & Energy Emergency Preparedness Division 550 Capital St NE Salem, OR 97301
Oregon Office of Emergency Management	Operations & Preparedness Manager PO Box 14370 Salem, OR 97309-5062
Richland School District	Executive Director, Operations 6972 Keene Road West Richland, WA 99353
SECOMM	Communications Director 625 Swift Blvd-MS 36, Richland, WA 99352
The Central and Southeast Chapter of the American Red Cross	Disaster Program Manager American Red Cross of Central and Southeastern Washington 7202 W Deschutes Ave. Kennewick WA, 99336
Townsquare Media (KORD)	Townsquare Media 2621 West A Street Pasco, WA 99301
Trios Health Southridge	Administration 3810 Plaza Way Kennewick, WA 99338

17.4 Supporting Plans and Procedures

Benton County Comprehensive Emergency Management Plan

The Benton County Comprehensive Emergency Management Plan (CEMP) is an all-hazard plan that is disseminated by the Benton County Emergency Management Executive Board. This plan is an all-hazards approach to emergency and disaster situations likely to occur in the county, as described in the Benton County Hazard Identification and Vulnerability Analysis (HIVA). The Comprehensive Emergency Management Plan is required by law and is the basis for an integrated system of Emergency Management in Benton County, in accordance with the requirements of RCW 38.52 and WAC 118. (A.4.iv, P.6.ii.)

Washington State Fixed Nuclear Facility Plan

The state implements this Plan in the event of any fixed facility radiological emergency. 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. Washington State's FNF Plan and its supporting Annexes and Appendices describe specific roles, responsibilities, functions and support relationships of state agencies (A.4.iv).

Washington State Comprehensive Emergency Management Plan and the ESF-5 Annex - Appendix 1, The Post-Disaster Re-Entry Framework

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. While not REP specific, *The Washington State CEMP ESF-5 Annex - Appendix 1, The Post-Disaster Re-Entry Framework* could help provide further guidance for Benton County regarding re-entry after a radiological incident. Washington EMD maintains this plan. (A.4.iv, P.6.ii.)

Washington Restoration Framework

The *Washington Restoration Framework* (WRF) outlines the partnerships and organizational structures necessary to successfully manage a flexible and scalable recovery. The WRF clarifies responsibilities and processes to ensure disaster recovery activities are coordinated to address community needs following an incident or disaster of any type and magnitude. The WRF and associated annexes describe specific roles, responsibilities, and programs of state agencies and other key stakeholders based on existing authorities, resources, and statutory requirements. The WRF also provides a framework for state, local, tribal and whole community coordination and cooperation supporting pre-disaster recovery planning guidance and post-disaster recovery efforts. Washington EMD maintains this plan. (A.4.iv, P.6.ii.)

Washington State Department of Health Radiological Response Plan

The *Washington State Department of Health, Office of Radiation Protection, Radiological Response Plan* provides 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 (A.4.iv).

Washington State Department of Agriculture Radiological Emergency Plan

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 (A.4.iv).

Neighboring Plume and Ingestion County Emergency Plans

Along with Benton, plans for each of other five participating Washington counties (Adams, Franklin, Grant, Walla Walla, and Yakima) potentially impacted by a radiological release from CGS, provide guidance and procedures for those counties' jurisdictions. (A.4.iv, P.6.i., P.6.ii.)

Columbia Generating Station Emergency Plans and Procedures

Energy Northwest's Columbia Generating Station (CGS) maintains its own set of plans and procedures to respond to onsite emergencies. The interface with offsite response organizations is a key part of those documents but none are included, for security reasons, as part of Benton County's Emergency Response Plan for CGS. (A.4.iv, P.6.i., P.6.ii)

Benton-Franklin Counties MCI Plan

The purpose of a coordinated bi-county plan, adopted for mass casualty incidents is to achieve overall understanding of personnel assisting neighboring departments. In addition, the use of common terminology and systematic delivery to a mass casualty incident (MCI) will integrate the immediate involvement of mutual aid; strike teams and task forces when requested by Incident Commanders (A.4.iv)

Central and Southeast Washington Chapter of the American Red Cross

The Central and Southeast Washington Chapter of the American Red Cross maintain their own policies, and procedures for emergency response. Coordination with these policies and procedures would occur during an offsite response to a CGS incident. (A.4.iv, P.6.i., P.6.ii)

State and Local Incident Response Teams, Law Enforcement and Fire/Medical Response

Washington State Patrol, Washington State Department of Transportation along with Benton County Sheriff, SECOMM and Richland, West Richland, Kennewick Police and Fire agencies maintain their own policies, and procedures for emergency response to CBRNE incidents. There would be a consideration and integration of those policies and procedures during an offsite response to a CGS incident (A.4.iv, P.6.i., P.6.ii)

Kadlec Regional Medical Center's Decontamination and Radiological Patient Procedure

Kadlec Regional Medical Center maintains their own policies, and procedures for Hazardous Material Decontamination and care of radiation accident patients. There would be a consideration and integration of those policies and procedures during an offsite response to a CGS incident. (A.4.iv, P.6.i., P.6.ii)

Trios Health Southridge Hospital's Radiation Disaster Plan

Trios Health Southridge Hospital maintains their own policies, and procedures for the care and treatment of radiologically contaminated patients. There would be a consideration and integration of those policies and procedures during an offsite response to a CGS incident. (A.4.iv, P.6.i., P.6.ii).

Chapter 18 - CGS Plan Crosswalk

The following is a detailed cross-reference meant to ease the reviewing and updating of the plans/procedures by ensuring that information similar in nature is updated together, helping to avoid updating information in one section of the plans/procedures but not in another (P.7.i).

Planning Standard A – Assignment of Responsibility (Organization Control)				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
A.1	The Federal, state, local, and tribal governments, licensee, and other private sector organizations that comprise the overall response for the EPZs are identified.	Licensee State Local		
	i. A description of all Federal, state, local, tribal, and private-sector organizations comprising the overall offsite response; and		Chapter 2.6 - Key Roles and Functional Areas	N/A
	ii. A list of all principal and supporting organizations.		Chapter 2.6 - Key Roles and Functional Areas	N/A
A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.	Licensee State Local		
	i. A description of each organization's operational role in an emergency and their relationship to the overall response effort		Chapter 2.6 - Key Roles and Functional Areas	N/A
A.1.b	Each organization's emergency plan illustrates these interrelationships in a block diagram.	Licensee State Local		
	i. An illustration of each organization and its relationship to the total emergency response effort.		Chapter 2.4 – Figure 4	N/A
A.1.c	Each organization identifies the individual, by title/position, who will be in charge of the emergency response.	Licensee State Local		
	i. The individual, by title/position, in charge of the emergency response; and		Chapter 2.6 – Benton County Emergency Manager	N/A
	ii. The individual, by title/position, coordinating response activities under the authority of the individual in charge		Chapter 2.6 – Benton County Sheriff's Office (HAB) Chapter 3.2 – REP PASP	

A.2	References to the applicable acts, codes, or statutes that provide the legal basis for emergency response-related authorities, including those that delegate responsibility and authority to state, local, and tribal governments are included. Each emergency plan indicates who may declare a “State of Emergency” and the powers that ensue.		Licensee State Local	
	i.	The legal authority to assign lead responsibility for emergency preparedness to a particular agency;	Chapter 2.5 – Authorities Chapter 2.6 – Benton County Emergency Manager	N/A
	ii.	The legal authority to delegate responsibility and authority for preparedness and response; and	Chapter 2.5 – Authorities Chapter 2.6 – Benton County Emergency Manager	N/A
	iii.	The legal authority to declare a “state of emergency” (or “state of disaster emergency”) and what special powers may ensue.	Chapter 2.5 – Authority to Claim State of Emergency	N/A
A.3	Each organization specifies the key individual(s), by title/position, responsible for the following functions, as applicable to that organization: command and control, alert and notification, communications, public information, accident assessment, public health and sanitation, social services, fire and rescue, traffic control, emergency medical services, law enforcement, transportation, protective response (including authority to request Federal assistance and to initiate other protective actions), and radiological exposure control.		Licensee State Local	
	i.	Identification of key individuals, by title/position, with emergency response roles;	Chapter 2.6 – Principal Agencies / Organizations Chapter 3.2 – REP PASP	N/A
	ii.	A description of the identified key individuals’ assigned functions by functional areas; and	Chapter 2.6 – Principal Agencies / Organizations	N/A
	iii.	A visual representation of individuals’ assigned functions by functional area.	Chapter 3.1 – Table 2	N/A
A.4	Written agreements with the support organizations having an emergency response role within the EPZs are referenced. The agreements describe the concept of operations, emergency		State Local	

	response measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.			
	i. A list of support organizations and the type of assistance, including capabilities and resources they will provide;		Chapter 3.2 – Law Enforcement Mutual Aid	N/A
	ii. (Or reference) Applicable written agreements between the licensee and ORO, including arrangements for NPP site access, if appropriate;		Chapter 4.1 – Support to Licensee	N/A
	iii. Written agreements annotate the services to be provided through the agreement and how those services will be activated.		Chapter 3.2 – Written Agreements with Support Organizations Chapter 4.1 – Support to Licensee Chapter 16.2 – Description of Training Programs	N/A
	iv. Written agreements by reference or in a suitable appendix; and		Chapter 3.2	N/A
	v. A statement that written agreements are reviewed annually to verify their validity, including developing new written agreements and updating signatories as necessary		Chapter 3.2 – Benton County Master Mutual Aid Agreement Chapter 17.4 – Supporting Plans and Procedures	N/A
A.5	Each principal response organization is capable of continuous operations for a protracted period. The principal response organization specifies the individual, by title/position, who is responsible for ensuring continuity of resources (technical, administrative, and material).	Licensee State Local		
	i. The individual(s), by title/position, responsible for ensuring continuity of resources in support of 24-hour operations;		Chapter 3.2 – Law Enforcement Mutual Aid	N/A
	ii. A reference to a roster that identifies at least two shifts of key staff, by title/position;		Chapter 3.2 - Benton County Continuous Operations Capability (Early Phase)	IP - MSG
	iii. The individual(s), by title/position, responsible for maintaining the roster, how it will be maintained, and where the roster is located; and		Chapter 3.2 - Benton County Continuous Operations Capability (Early Phase)	IP - MSG
	iv. The shift period and provisions for outgoing staff to brief the incoming staff on the status of the emergency and response activities occurring.		Chapter 3.2 - Benton County Continuous Operations Capability (Early Phase)	IP - IC NONHAB, IP - OSC

Planning Standard B – On-Site Emergency Organization (Licensee Only)				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
B.1	The Federal, state, local, and tribal governments, licensee, and other private sector organizations that comprise the overall response for the EPZs are identified.	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	The emergency plan specifies how the requirements of 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to 10 CFR Part 50 are met.	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 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.	Licensee		
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 Standard C – Emergency Response Support and Resources				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**

C.1	Emergency response support and resources provided to the licensee's EOF, as agreed upon, are described.	Licensee State Local		
	i. Whether an ORO liaison(s) will be provided to the licensee's emergency operations facility (EOF), and if so, the individual(s), by title/position, that would be dispatched;		Chapter 2.6 – Benton County Emergency Planner Chapter 4.1 – Support to the Licensee	N/A
	ii. The emergency response support role the liaison(s) will be fulfilling while at EOF; and		Chapter 2.6 – Benton County Emergency Planner Chapter 4.1 – Support to the Licensee	N/A
	iii. The resources, if any, the OROs will provide to the licensee's EOF.		Chapter 2.6 – Benton County Emergency Planner Chapter 4.1 – Support to the Licensee	N/A
C.2	Provisions made for additional emergency response support and resources are described and include the following:	Licensee State Local		
C.2.a	The individual(s), by title/position, authorized to request emergency response support and resources from responding organizations.		Chapter 4.2 – Additional Emergency Response Support/Resources	N/A
	i. The individual(s), by title/position, authorized to request emergency response support and resources.			
C.2.b	(1) Each organization from which emergency response support and/or resources may be requested, (2) the circumstance(s) in which the emergency response support and/or resources would be required, (3) the process for requesting needed emergency response support and/or resources, (4) categories of capabilities and/or resources expected to be provided, (5) when the expected emergency response support and/or resources would be available once requested, and (6) how integration would occur.	Licensee State Local		
	i. A process for identifying potential shortfalls in capabilities and resources;		Chapter 4.2 – Additional Emergency Response Support and Resources	IP-OSC
	i. The emergency response support role the liaison(s) will be fulfilling while at EOF; and		Chapter 2.6 – Benton County Emergency Planner Chapter 4.1 – Support to the Licensee	N/A
	ii. The resources, if any, the OROs will provide to the licensee's EOF.		Chapter 2.6 – Benton County Emergency Planner Chapter 4.1 – Support to the Licensee	N/A

	iii. Circumstances under which the emergency response support and/or resources would be needed		Chapter 4.2 – Additional Emergency Response Support and Resources	N/A
	iv. The process for requesting needed emergency response support and/or resources;		Chapter 2.5 – Local Political Subdivision Emergency Declaration Process Chapter 2.5 – Authority to Proclaim a State of Emergency Chapter 2.5 – State Emergency Proclamation Process,	IP - IC NONHAB, IP-IC EWAC, IP-OSC
	v. Categories of capabilities and/or resources expected to be provided;		Chapter 4.2 – Additional Emergency Response Support and Resources Chapter 4.2 – Figure 6	N/A
	vi. The amount of time expected for emergency response support and/or resources to be available once requested; and		Chapter 4.2 - Additional Emergency Response Support and Resources	N/A
	vii. How incoming emergency response support and/or resources will integrate with response efforts.		Chapter 4.3 – Integration of Resources into Response Efforts	N/A
C.2.c	Coordination of NPP site access and support for external organizations that have agreed to provide requested emergency response support and resources.	Licensee State Local		
	i. Provisions to allow ORO organizations, including mutual aid/supplemental support and resources, access to the NPP;		Chapter 3.2 – Law Enforcement Mutual Aid	N/A
	ii. Identification of means for granting access to personnel from each organization who are authorized site access resources; and		Chapter 3.2 – Law Enforcement Mutual Aid	N/A
	iii. Provisions for coordination between in-bound response resources and evacuation efforts		Chapter 3.2 – Law Enforcement Mutual Aid	N/A
C.2.d	Agreements between licensees and local agencies for law enforcement, medical and ambulance services, fire, hospital support, and other support.	Licensee State Local		
	i. A list of external organizations that have agreed to provide requested emergency response support to the NPP, as well as the type of support they will provide.		Chapter 3 – Table 3 Chapter 3.2 – Benton County Master Mutual Aid Agreement, Law Enforcement Mutual Aid	N/A
C.3	The capability of each principal organization to coordinate with other principal organizations leading the incident response	Licensee State Local		

	is described.			
	i. Identification of principal organizations;		Chapter 2.6 – Key Roles and Functional Areas, Principal Organizations	N/A
	ii. Roles and responsibilities of principal organizations based on their authorities;		Chapter 2.6 – Key Roles and Functional Areas, Principal Organizations	IP - IC NONHAB
	iii. A description of how coordination and integration between principal organizations will occur; and		Chapter 4.3 – Integration of Resources into Response Efforts	N/A
	iv. Whether a representative(s) from another organization will be provided to ORO operational centers (e.g., a county emergency operations center [EOC]) to act as a liaison(s), and if so, identification of the individual(s), by title/position, that would be dispatched.		Chapter 2.6 – Washington State Emergency Management Division, Duties	N/A
C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.	Licensee State Local		
	i. The laboratories qualified to analyze samples of potentially contaminated materials;		Chapter 4.4 (This is a State Function)	N/A
	ii. A description of the radiochemical and analytical capabilities of each laboratory;		Chapter 4.4 (This is a State Function)	N/A
	iii. The laboratories' locations and expected availability of each laboratory to provide services; and		Chapter 4.4 (This is a State Function)	N/A
	iv. The number of samples the laboratories would be able to process in a given period.		Chapter 4.4 (This is a State Function)	N/A
C.5	Agreements between licensees and local agencies for law enforcement, medical and ambulance services, fire, hospital support, and other support.	Licensee		
C.5.a	The activation process for the NRC's emergency response data system (ERDS) during an emergency is described.			
C.5.b	Provisions to continuously maintain open communications lines with the NRC, when requested, are described.			
Planning Standard D – Emergency Classification System				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
D.1	A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.	Licensee		

D.1.a	The EALs are developed using guidance provided or endorsed by the NRC that is applicable to the reactor design.			
D.1.b	The initial emergency classification and action level scheme is discussed and agreed to by the licensee and OROs and approved by the NRC. Thereafter, the scheme is reviewed with OROs on an annual basis.	Licensee State Local		
	i. Reference the standard ECLs		Chapter 1.2 Chapter 5.1 - Emergency Classification System	IP - IC NONHAB, IP-OSC, IP – PHS, IP - FSO
	ii. Acknowledgment that the ECL system will form the basis for determining the level of response to an incident that will be coordinated with the licensee; and		Chapter 5.1 - Emergency Classification System	N/A
	iii. Agreement on the initial ECL scheme and an annual review of the scheme.		Chapter 5.1 - Emergency Classification System	
D.2	The capability to assess, classify, and declare the emergency condition within 15 minutes after the availability of indications to NPP operators that an EAL has been met or exceeded is described.	Licensee		
D.3	A summary of emergency response measures to be taken for each ECL is provided. The detailed emergency response measures are described in implementing procedures.			
D.4	Emergency response measures based on the ECL declared by the licensee and applicable offsite conditions are described.	Licensee State Local		
	i. The minimum emergency response measures to be taken to protect the public at each ECL, given the offsite conditions at the time of the emergency.		Chapter 5.2 (Table 3**)**	IP - IC NONHAB, IP-OSC, IP – PHS, IP - FSO
Planning Standard E – Notification Methods and Procedures				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
E.1	The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.	Licensee State Local		
	i. The agreed upon process for direct and prompt notification to both response organizations and the designated offsite 24-hour warning point		Chapter 2.1 – Incident Initialization and Mobilization	IP - IC NONHAB, IP-SECOMM
	ii. A statement that the agreed upon notification process is aligned with the emergency		Chapter 2.1 – Incident Initialization and Mobilization	N/A

	classification and action level scheme as described in D.1.b;		Chapter 5.1 – Emergency Classification System	
	iii. The process for when the initial notification originates from an entity other than the licensee; and		Chapter 6.3 – Notification Process Between Benton County and Energy Northwest	IP - SECOMM
	iv. The agreed upon process for disseminating subsequent notifications from the licensee and/or ORO to other offsite organizations.		Chapter 6.2 – Subsequent Notifications by ENW or Benton County	IP - IC NONHAB, IP-SECOMM
E.1.a	Provisions for notification of response organizations are established, including the means for verification of messages.	Licensee State Local		
	i. Method for verifying the initial notification from the licensee to the 24-hour warning point, if applicable;		Chapter 2.1 – Incident Initialization and Mobilization	IP - SECOMM
	ii. Provisions for notifying all appropriate response organizations, including specific notifications made at each ECL;		Chapter 2.1 – Incident Initialization and Mobilization Chapter 5.1 – Emergency Classification System	IP - IC NONHAB, IP-SECOMM
	iii. The individual(s), by title/position, responsible for notifying emergency response personnel within their organization; and		Chapter 6.3 – Notification Process Between Benton County and Energy Northwest	IP - IC NONHAB, IP-SECOMM
	iv. Individual(s), by title/position, responsible for disseminating subsequent notifications.		Chapter 6.2 – Subsequent Notifications by ENW or Benton County	IP - IC NONHAB, IP-SECOMM
E.1.b	The capability to notify responsible OROs within 15 minutes and the NRC within 60 minutes is described.	Licensee		
E.2	The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.	Licensee State Local		
	i. A statement that the ANS is capable of meeting the 15-minute design objective;		Chapter 6.10 – Fifteen Minute Time Objective	N/A
	ii. A description of the physical means of alert and notification, including the system(s) used to alert and notify the general public, persons with disabilities and access/functional needs, and exception areas (if		Chapter 6.6 – Alert and Notification Systems for the Public	N/A

		applicable), and their respective point(s) of activation;			
	iii.	A description of the administrative means of alert and notification, including: a. Title of the organizations or individuals responsible for (1) making the decision to activate the ANS and (2) activating the system; and b. ANS activation procedures and associated time needed to implement these procedures.		Chapter 2.6 – Key Roles and Functional Areas, Principal Agencies - Benton County Emergency Manager Chapter 6.6 – Alert and Notification Systems for the Public	IP - IC NONHAB, IP-SECOMM
	iv.	List of broadcast stations and/or other systems (e.g., Integrated Public Alert and Warning System [IPAWS], National Weather Service (NWS), tone alert radios, route alerting) used to provide emergency instructions to the public;		Chapter 2.6 – Key Roles and Functional Areas, Principal Agencies, Townsquare Media & Cherry Creek Radio Chapter 6.6 – Alert and Notification Systems for the Public.	N/A
	v.	Describe the broadcast stations' or systems' capability to participate in the public notification process;		Chapter 6.6 – Alert and Notification Systems for the Public.	N/A
	vi.	If broadcast stations are used to activate the system, a description of individual responsibilities from each broadcast station and system, and documentation agreed upon commitments (e.g., MOUs and/or LOAs) to honor their responsibilities in a radiological incident;			N/A
	vii.	Identification of the broadcast station and system points of contact, by title/position, who are accessible 24 hours a day, 7 days a week and identification of an alternate station if the selected station does not have backup power supply;			N/A
	viii.	Provisions for special news broadcasts to disseminate supplemental information to the emergency alert system (EAS) message; and			N/A
	ix.	The interval for broadcasting official information statements.			N/A
E.3	The licensee and state, local, and tribal government organizations establish the contents of the initial and follow-up emergency notifications to be sent from the NPP.		Licensee State Local		

	i. Initial notification templates to capture the ECL, whether a release is taking place, any populations and areas that may potentially be affected, and whether protective measures may be necessary; and		Chapter 2.1 – Incident Mobilization Chapter 2.6 – Key Roles and Functional Areas, Principal Agencies, Energy Northwest Chapter 6.1 Notifications by Energy Northwest	IP-SECOMM
	ii. Provisions as to what information is to be included in follow-up notifications from the NPP to offsite authorities.		Chapter 2.1 – Incident Mobilization Chapter 6.1 Notifications by Energy Northwest	N/A
E.4	Each organization establishes the contents of the initial and follow-up messages to the public including, as applicable, instructions for protective actions.	Licensee State Local		
	i. EAS message templates that would be modified as necessary and sent to the EAS station(s) for broadcast;		Chapter 2.1 – Incident Mobilization Chapter 6.6 – Alert and Notification Systems for the Public	N/A
	ii. The process for selecting, modifying, approving, and releasing EAS messages;		Chapter 2.1 – Incident Mobilization	IP - IC NONHAB, IP-SECOMM
	iii. The methodology for EAS message rebroadcast, along with the frequency (how many times and at what interval, such as every 15 minutes);		Chapter 6.6 – Alert and Notification Systems for the Public	N/A
	iv. Provisions for follow-up messages; and			N/A
	v. Provisions for foreign language translations of EAS messages and special news broadcasts, if required			N/A
E.5	Provisions are made to provide timely supplemental information periodically throughout the radiological incident to inform the public.	Licensee State Local		
	i. A description of how supplemental information is provided periodically to inform the public throughout an incident;		Chapter 8.9 – Coordination with Joint Information Center Public Inquiry and Rumor Control	N/A
	ii. A description of supplemental topics/messages that may be disseminated; and		Chapter 2.1 – Incident Mobilization	N/A

	iii. A description of the method for disseminating supplemental information.		Chapter 2.6 Key Roles and Functional Areas, Benton County Emergency Management Accounting Specialist	N/A
Planning Standard F – Emergency Communications				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
F.1	Each principal response organization establishes redundant means of communication and addresses the following provisions:			
F.1.a	i. A description of the system used to ensure continuous availability to receive and transmit notifications; and	Licensee State Local	Chapter 7.1 – Communications Systems	N/A
	ii. A description of the equipment used for notifying and communicating with the organization's personnel and other response organizations. The equipment described must include at least two independent communication links.		Chapter 7.1 – Communications Systems	N/A
F.1.b	Each principal response organization establishes redundant means of communication and addresses the following provisions:			
	i. Provisions for a minimum of two independent communication methods between all applicable organizations requiring communications within the plume and ingestion exposure pathway EPZs; and	Licensee State Local	Chapter 7.1 – Communications Systems	N/A
	ii. Organizational titles and alternates for both ends of the communication links.		Chapter 7.1 – Communications Systems	N/A
F.1.c	Systems for alerting or activating emergency personnel in each response organization.			
	i. A general description of how emergency personnel are alerted and activated; and	Licensee State Local	Chapter 2.1 – Incident Initialization and Mobilization	N/A
	ii. Lists of names and contact information of emergency personnel to alert or activate based on the ECL.		Annex C: Telephone Contact Lists	IP-SECOMM
F.2	Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.			
	i. A description of at least two independent communication methods among the fixed and mobile medical support facilities, applicable EOCs, and the licensee.	Licensee State Local	Chapter 7.1 (Table 6)	N/A

F.3	The testing method and periodicity for each communication system used for the functions identified in evaluation criteria E.2, F.1, and F.2 are described.			
	i. A description of the test method and periodicity (e.g., monthly, quarterly or annually) for each communication system used for the functions identified in evaluation criteria E.2, F.1, and F.2	Licensee State Local	Chapter 7.2 (Table 7)	N/A
Planning Standard G – Public Education and Information				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
G.1	Provisions are made for a coordinated annual dissemination of information to the public within the plume exposure pathway EPZ, including transient populations and those with access and functional needs, regarding how they will be notified and what actions should be taken. The information is disseminated using multiple methods, to include non-English translations per current Federal guidance.			
	i. A description of public information material(s) (e.g., brochure, utility bill insert, current technology used for disseminating public information) distributed annually to the general public within the plume exposure pathway EPZ, including the dissemination method(s) used to reach all residences;	Licensee State Local	Chapter 8.1 – Pre-Emergency Information Dissemination Chapter 8.2 - Outdoor Informational Signs and Transient Brochures Chapter 8.5 - Annual Information of Plume EPZ Residents	N/A
	ii. Provisions for identifying individuals who need evacuation assistance and how personally identifiable information (PII) will be protected;		Chapter 8.3 – Benton County Plume EPZ Resident Database Chapter 8.5 – Annual Information of Plume EPZ Residents	N/A
	iii. A description of public information material(s) (e.g., visitor brochure) targeted to transient populations, including dissemination method(s);		Chapter 8.2 – Outdoor Informational Signs and Transient Brochures (Figure 7) Chapter 8.5 – Annual Information of Plume EPZ Residents	N/A
	iv. Provisions for providing accessible public information for those with access and functional needs within the plume exposure pathway EPZ; and		Chapter 8.5 – Annual Information of Plume EPZ Residents	N/A
	v. Mechanisms for translating public information for non-English speaking		Chapter 8.1 – Pre-Emergency Information Dissemination	N/A

	populations within plume exposure pathway EPZ		Chapter 8.5 – Annual Information of Plume EPZ Residents	
G.2	Methods, consistent with JIS concepts, are established for coordinating and disseminating information to the public and media. Plans include the physical location(s) for interacting with the media.			
	i. The physical location(s) for briefing and interacting with the media;	Licensee State Local	Chapter 8.7 – Management of the Joint Information Center	N/A
	ii. A physical description of the media briefing facility(ies);			N/A
	iii. A description of the organization's capability to answer media telephone inquiries; and			N/A
	iv. The mechanism for coordination between the team of personnel designated to answer media calls and the organization's spokesperson(s)/Public Information Officer(s) (PIO(s)), as well as POCs located at other facilities supporting the joint information center (JIC).			N/A
G.3	Organizations designate news media points of contact and a spokesperson(s) with access to necessary information.			
	i. Identification of the individual(s), by title/position, to serve as news media point(s) of contact and spokesperson(s)/ PIO(s) at designated media briefing location(s);	Licensee State Local	Chapter 8.8 – Benton County Participation at the JIC	IP – JIC PIO
	ii. If operating remotely from the EOC, a description of how the exchange of information between the EOC and other media briefing location(s) will be coordinated;			N/A
	iii. The process for identified individual(s) to obtain, verify, and coordinate approval in advance of disseminating information to the public and/or media; and			IP - EOC PIO, IP - JIC PIO
	iv. Procedures for control and authorization of releasing sensitive information.		Chapter 8.10 – Release of Sensitive Information	IP - EOC PIO, IP - JIC PIO
G.3.a	Arrangements are made for the timely exchange of information among the designated spokespersons representing the entities involved in incident response.			

	i. Provisions for the timely exchange, discussion, and coordination of information among all designated spokespersons/PIOs, including those at different locations.	Licensee State Local	Chapter 8.9 – Coordination with JIC Public Inquiry and Rumor Control	N/A
G.4	Organizations establish coordinated arrangements for identifying and addressing public inquiries and inaccurate information.			
	i. A description of the capability to effectively receive and manage numerous, simultaneous responses to public inquiries, and address inaccurate information	Licensee State Local	Chapter 8.9 – Coordination with JIC Public Inquiry and Rumor Control	N/A
	ii. The method(s) for publicizing all the available communication channels, including dedicated telephone number(s) and other platforms, for public inquiries;			N/A
	iii. Provisions for monitoring public inquiries and media messaging to identify incomplete, inaccurate, or ambiguous information related to the emergency in the public domain; and			N/A
	iv. If an ORO sends a delegate or relies on another organization to answer public inquiries, identify which organization provides or coordinates the public inquiries and the method for contacting that organization.		Chapter 2.6 – Key Roles and Functional Areas (Benton County Emergency Planner) Chapter 8.9 – Coordination with JIC Public Inquiry and Rumor Control	N/A
G.5	Organizations conduct programs to acquaint news media with the emergency plans at least annually.			
	i. Provisions for an annual media briefing or other information exchange means to acquaint news media with emergency plans, the media's role during an incident response, and other radiological incident response topics;	Licensee State Local	Chapter 8.6 – Annual News Media Program	N/A
	ii. A description of each informational item provided in the media kits; and			N/A
	iii. Means of distributing media kits.			N/A
Planning Standard H – Emergency Facilities and Equipment				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**

H.1	A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.	Licensee		N/A
H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.			
H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.			
H.3.a	For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.			
H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.			
H.5	A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.			
H.6	Each organization establishes an emergency operations center (EOC) for use in directing and controlling response functions and provides for timely EOC activation. For an EOC located within the plume exposure pathway EPZ, an alternate EOC, or location outside the plume exposure pathway EPZ, is identified to continue response functions in the event of an evacuation.			
	i. A description of, or reference to, the location and layout of the EOC;	State Local	Chapter 9.1 – Benton County Emergency Operations Center	IP – MSG, IP – IC NONHAB
	ii. The organization and official, by title/position, responsible for maintaining the operational readiness of the EOC;			IP – IC NONHAB
	iii. A list of facility equipment necessary to support EOC operations;			N/A
	iv. Access control details into the facility;			IP-SEC
	v. Backup power capability to the facility, if available; and			N/A
	vi. A description of, or reference to, the location and layout of the alternate EOC, if applicable.		Chapter 2.4 – EOC Mobilization and Operation	N/A

			Chapter 9.1 – Benton County Emergency Operations Center	
H.7	Onsite monitoring systems used to initiate emergency response measures in accordance with the emergency classification scheme, as well as those to be used for conducting assessment, are identified. Monitoring systems consist of geophysical phenomena monitors, including meteorological, hydrologic, and seismic instrumentation; radiation monitors and sampling equipment; plant process monitors; and fire, toxic gas, and combustion products detectors.	Licensee		
H.8	Provisions are made to acquire data from offsite monitoring and analysis equipment, including data on geophysical phenomena (e.g., meteorological, hydrologic, and seismic monitors) and radiological data (e.g., from FMTs, environmental dosimeters, and laboratory analyses).			
H.9	Organizations directly responsible for offsite radiological monitoring provide for radiological monitoring equipment. This includes equipment that is located or stored near the NPP site, as well as additional equipment that may be brought to the site.			
	i. A description of radiological monitoring equipment, by type and amount, that is located at or stored near the NPP, or will be brought in by the ORO; and	Licensee State Local	Chapter 9.2 – Benton County Radiological Equipment Chapter 9.3 – Dosimetry and KI for Emergency Workers	IP-EWAC IC
	ii. A list of fixed radiological monitoring stations near the NPP.		Chapter 9.2 – Benton County Radiological Equipment	N/A
H.10	Instrumentation is provided to obtain current meteorological information. Additional provisions are made to obtain representative meteorological information from other sources as needed by the NPP's radiological assessment models for site-specific characterization of plume dispersion and transport. Meteorological information is provided to the control room, TSC, EOF (or backup EOF), and NRC (via ERDS).	Licensee		
H.11	Provisions are made to ensure that emergency equipment and supplies are tested, maintained, and available in sufficient quantities, to include reserves and replacements, when needed. This includes:			
	i. Quantities of instruments, equipment, and supplies necessary to ensure that procedures in the plan can be performed; and	Licensee State Local	Chapter 9.2 – Benton County Radiological Equipment	N/A

	ii. Backup emergency equipment and supply reserves/replacements		Chapter 9.3 – Dosimetry and KI for Emergency Workers	N/A
H.11.a	Identification of the organization(s) responsible for the testing and maintenance of emergency equipment.			
	i. The organization(s) responsible for testing and maintenance of all emergency equipment.	Licensee State Local	Chapter 9.2 – Benton County Radiological Equipment Chapter 9.3 – Dosimetry and KI for Emergency Workers	N/A
H.11.b	Calibration and operational checks of emergency equipment per national standards or the manufacturer's instructions, whichever is more frequent.			
	i. Specifics for maintaining and conducting calibration and operational checks of emergency equipment;	State Local	Chapter 9.2 – Benton County Radiological Equipment	N/A
	ii. Tests to be performed on each type of equipment and who will complete those tests; and			
	iii. Documentation methods for all testing and maintenance procedures performed.			
H.12	Emergency kits are identified by general category. Contents and quantity of each emergency kit are specified in the emergency plan or other document(s) referenced in the emergency plan			
	i. The number and contents of emergency kits by location and general category; and	Licensee State Local	Chapter 9.4 – Processing OSL Dosimeters (Table 6)	N/A
	ii. The quantity of each item per kit		Chapter 9.3 - Dosimetry and KI for Emergency Workers	N/A
H.13	Each organization identifies the location(s) for the receipt and analysis of field monitoring data and coordination of sample media, and identifies the organization(s) responsible for assessing radiological data			
	i. Organization(s) responsible for assessing radiological data	Licensee State Local	Chapter 9.5 – Organizations Responsible for Radiological Assessment Data - STATE FUNCTION	N/A
	ii. The location(s) for the receipt and analysis for compiling and analyzing all field monitoring data, including the means used by FMTs to relay information to the identified location(s); and			
	iii. The coordination and analysis of sample media, including procedures for transporting samples and transferring the data from the laboratory to the identified location(s).			

Planning Standard I – Accident Assessment				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
I.1 I.1.a I.1.b I.1.c	Capabilities for performing radiological assessment for all reactor core and spent fuel pool sources, individually and collectively, including response to events occurring simultaneously at all units on the NPP site, are described. These capabilities include…	Licensee		N/A
I.2	Methods for assessing contamination of drinking water through liquid release pathways or deposition of airborne materials for NPP sites located on or near bodies of water from which public drinking water is drawn.			
	i. Methods and locations for sampling drinking water; and;	State Local	STATE FUNCTION - Washington State Department of Health's Radiological Emergency Response Plan.	N/A
	ii. Supporting laboratory procedures that demonstrate the capability to detect radioisotopes at derived response levels (DRLs) for the most sensitive population.			N/A
I.3	The capability and responsibility for monitoring the following parameters, which provide input to radiological assessments during an emergency, are described…	Licensee		N/A
I.4	The methods and responsibility for determining the source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are described.			N/A
I.4.a	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 . . .			N/A
I.5	The organizations responsible for FMT activities, and necessary resources, are identified.			
	i. The organizations responsible for FMT activities; and	Licensee State Local	STATE FUNCTION - Washington State Department of Health's Radiological Emergency Response Plan.	N/A
	ii. The capabilities and resources of FMTs..			N/A
I.6	Each organization, where appropriate, provides methods, equipment, and expertise to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including development of post-plume PARs for comparison to current Federal guidance.			
	i. The process for activating and notifying FMTs;	Licensee State Local	Chapter 10.1 – Radiological Laboratories and Field Monitoring	N/A
	ii. The composition of FMTs (e.g., organizations involved, number of teams [two or more], number of members on each team);			N/A

	iii. Means of transportation available for FMTs (e.g., four-wheel drive vehicles);		STATE FUNCTION - Washington State Department of Health's Radiological Emergency Response Plan.	N/A
	iv. Estimated deployment times to reach monitoring or sampling locations, if applicable			N/A
	v. Staging area location(s) that may be used as initial deployment points for FMTs;			N/A
	vi. The individual, by title/position, responsible for directing FMTs to proper locations for monitoring and air sampling;			N/A
	vii. The process for obtaining centerline and plume-edge measurements;			N/A
	viii. Monitoring, sampling, and communications equipment used by FMTs;			N/A
	ix. Procedures for field monitoring, sample collection, and field sample analysis and the calculations to be used to characterize the plume, specifically those used to determine radioiodine concentrations			N/A
	x. The laboratories designated to analyze specific samples (specific radioisotopes), including associated estimated delivery and analysis times, transportation and temporary storage arrangements, and procedures for chain-of-custody records; and			N/A
	xi. Requirements for FMT members' radiological exposure control.			N/A
I.7	The capability to detect and measure radioiodine concentrations in air in the plume exposure pathway EPZ as low as 10-7 µCi/cc (microcuries per cubic centimeter) under field conditions is described. The sample collection process takes into account the sample flow rate, collection efficiency of the sample media used to collect the sample, duration of the sample, counter efficiency, and background radiation, including interference from the presence of noble gases.			
	i. The capability to collect air samples within the plume exposure pathway EPZ and perform analysis that will detect radioiodine concentrations as low as 10-7µCi/cc under field conditions;	Licensee State Local	Chapter 10.1 – Radiological Laboratories and Field Monitoring STATE FUNCTION - Washington State Department of Health's Radiological Emergency Response Plan.	N/A
	ii. The process used for collecting air samples, including location of sampling points, timing of sample collection, and techniques used to collect and count; and			N/A
	iii. Calculations that use factors consistent with the ORO specific			N/A

	procedures to calculate airborne radioiodine concentrations			
I.8	A means is established for relating the various measured parameters (e.g., exposure rates, contamination levels, and air activity levels) to dose or dose rates. Provisions are made for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with current Federal guidance. In addition, provisions are established to validate dose projections with field data and compare projections with other organizations also calculating dose projections. The detailed provisions are described in implementing procedures.			
	i. A description of personnel and equipment that will be involved in dose assessment;	Licensee State Local	Chapter 10.1 – Radiological Laboratories and Field Monitoring STATE FUNCTION - Washington State Department of Health's Radiological Emergency Response Plan.	N/A
	ii. A description of dose assessment computer software, including documentation and data input procedures, that will be used;			N/A
	iii. Alternate calculation methods that may be used (e.g., hand calculations);			N/A
	iv. Information/variables to run the model, including proper units of measure;			N/A
	v. Means for obtaining initial information (e.g., from licensee monitors or inventory estimates);			N/A
	vi. A description of how field data will verify and modify model results; and			N/A
	vii. Procedures for comparing dose results with those of other organizations that perform dose assessments			
I.9	Arrangements to locate and track the airborne radioactive plume are made using available resources, which includes Federal, state, local, and tribal governments, and/or licensee resources. Provisions are made to characterize the plume including taking peak plume measurements. Identification of the plume, includes determining a measurement that is high enough to be reasonably above background radiation readings and sufficient enough to indicate submersion within the plume.			
	i. Planned use of outside resources, to locate and track the plume, including taking measurements and collecting air samples from or near the plume's peak concentration, if applicable.	Licensee State Local	Chapter 10.1 – Radiological Laboratories and Field Monitoring STATE FUNCTION - Washington State Department of Health's	N/A

			Radiological Emergency Response Plan.	
I.10	Organizations directly responsible for radiological monitoring, analysis, and dose projections describe the capability for coordinating monitoring efforts, tracking and trending data, and sharing analytical results with other organizations performing radiological assessment functions.			
	i. Methods of integrating monitoring and analytical augmentation and support from other state, licensee, educational and research facilities, and government and private organizations; and	Licensee State Local	Chapter 10.1 – Radiological Laboratories and Field Monitoring STATE FUNCTION - Washington State Department of Health's Radiological Emergency Response Plan.	N/A
	ii. Procedures and responsibilities for integrating Federal agency monitoring, analysis, and data management support.			N/A
Planning Standard J – Protective Response				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
J.1 J.1.a	The means and time required to alert, notify, and provide a range of protective actions for onsite individuals and individuals who may be in areas controlled by the licensee (including members of the public) during a radiological incident are described. Provisions are made for evacuation of onsite non-essential personnel at an SAE or General Emergency (GE).	Licensee		N/A
J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.			
	i. A description of assistance provided to licensees during an onsite evacuation or a statement that no assistance is required;	Licensee State Local	Chapter 11.1 - Evacuation and Protection of ENW Personnel	N/A
	ii. The offsite location where onsite individuals will be transported;			IP-FC, IP-EWAC IC
	iii. Alternative offsite location(s) and evacuation route(s) for use during inclement weather, when there is high traffic density, and/or during potential radiological conditions; and			N/A
	iv. Provisions for coordinating arrangements with other OROs to expedite evacuation of onsite personnel.			N/A

J.3	Provisions for radiological monitoring and decontamination, if necessary, of personnel evacuated from the NPP site are described	Licensee		N/A
J.4	The capability to account for all individuals inside the NPP Protected Area following declaration of an SAE or GE is described. The names of missing individuals are ascertained within 30 minutes following the emergency declaration and accountability is maintained for the duration of the incident. This capability includes provisions for prompt accountability following events that may preclude completion within 30 minutes (e.g., hostile action).	Licensee		N/A
J.5	Provisions are made for personal radiological protection for individuals arriving or remaining onsite during the incident	Licensee		N/A
J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.			
	i. The rationales used to make initial and subsequent PARs;	Licensee State Local	Chapter 11.2 – Basis and Methodology for Development of Protective Action Recommendations (PARS)	IP-IC NONHAB, IP-PHS, IP-FSO
	ii. The basis and methodology used in developing PARs, including references to applicable Federal guidance; and			N/A
	iii. The basis and methodology used in developing PARs involving radioprotective drugs, including references to applicable Federal guidance.			N/A
J.7	A site-specific protective action strategy or decision-making process, informed by the ETE study, is coordinated between the licensee and OROs. Current Federal guidance is used.			
	i. A site-specific protective action strategy or decision-making process that is coordinated between the licensee and OROs;	Licensee State Local	Chapter 11.2 – Basis and Methodology for Development of Protective Action Recommendations (PARS)	N/A
	ii. References to current Federal guidance and methodologies used in developing the protective action strategy or decision-making process; and		Chapter 1 Introduction Chapter 1.1 – Mission, Purpose, and Scope Chapter 5.1 – Emergency Classification System Chapter 11.2 – Basis and Methodology for Development of Protective Action	N/A

			Recommendations (PARS)	
	iii. Specific information from the evacuation time estimate (ETE) study used to develop protective action strategies.		Chapter 11.4 – Evacuation Time Estimate	N/A
J.8	The latest ETEs are:			
	i. The latest ETE information to plan for an evacuation.	Licensee State Local	Chapter 11.4 – Evacuation Time Estimate	N/A
J.8.a	Incorporated either by reference or in their entirety into the emergency plan.	Licensee		N/A
J.8.b	Incorporated either by reference or as a summary of the latest ETE analysis into the emergency plan.			
	i. A reference or summary of the latest ETE analysis used for evacuation planning;	State Local	Chapter 11.4 – Evacuation Time Estimate	N/A
	ii. Time estimates for evacuation of various sectors or evacuation areas;			N/A
	iii. Time estimates for movement of populations in specific areas, particularly for individuals with access and functional needs;			N/A
	iv. Evacuation routes and traffic capacities of evacuation routes; and			IP-OSC
	v. Potential use of alternate evacuation routes.			N/A
J.9	PARs are provided, in a timely manner, directly to the designated ORO(s) responsible for making protective action decisions (PADs) within the plume exposure pathway EPZ			
	i. Process for communicating PARs to designated OROs responsible for making PADs	Licensee State Local	Chapter 2.1 – Incident Initialization and Mobilization	IP-IC NONHAB
J.10	Plans include maps, charts, or other information that demonstrate the following for the plume exposure pathway EPZ:			
	i. Clear and legible maps, charts, and other pertinent plume exposure pathway EPZ information necessary to support emergency response.	Licensee State Local	Chapter 1.6 – 10mi EPZ Map, 50mi EPZ Map	N/A
J.10.a	Evacuation routes, evacuation areas, reception centers in host areas, and shelter areas.			
	i. Clear, legible maps of all evacuation routes, evacuation areas, reception/relocation centers in host jurisdictions, and shelter areas/congregate care centers.	Licensee State Local	Chapter 1.6 – 10mi EPZ Map, 50mi EPZ Map Annex A – Layout of EWAC	N/A
J.10.b	Population distribution around the NPP site by evacuation areas.			
	i. Clear, legible maps, charts, or other information showing population	Licensee State Local	Chapter 11.4 – Table 8	N/A

	distribution around the NPP site by evacuation areas.			
J.11	A capability for implementing protective actions based on current Federal guidance is established. The process ensures coordinated implementation of PADs with all appropriate jurisdictions. The process for implementing protective actions for the plume exposure pathway EPZ is described and includes the following:			
	i. The process for considering PARs provided;	Licensee State Local	Chapter 11.2 – Basis and Methodology for Development of Protective Action Recommendations (PARS) Chapter 11.6 – Plume Phase Protective Action Decisions	N/A
	ii. Procedures for making PADs and the rationale for initial and subsequent PADs;		Chapter 11.6 – Plume Phase Protective Action Decisions	IP-IC NONHAB, IP-PHSO
	iii. Procedures for implementing protective actions based upon PAGs that are consistent with EPA recommendations; and		Chapter 11.7 – Ingestion Exposure Pathway Protective Action Decisions	IP-IC NONHAB, IP-PHSO
	iv. The process to ensure coordination of PADs with all appropriate jurisdictions.		Chapter 11.6 – Plume Phase Protective Action Decisions Chapter 11.9 – Implementation of Traffic Control and Access Control Points	IP-IC NONHAB, IP-PHSO, IP-FSO, IP-OSC,
J.11.a	Means for identifying and protecting residents who would have difficulty in implementing protective actions without assistance. This includes those with access and functional needs, transportation-dependent residents, those in special facilities, and those in correctional facilities. These means include notification, support, and assistance in implementing protective actions where appropriate.			
	i. The means to protect those with impaired mobility because of institutionalization or other confinement (e.g., children in schools or licensed day cares and persons in nursing homes, hospitals, and correctional facilities);	State Local	Chapter 11.11 – Transportation Dependent Students	IP-OSC, IP-EVAC, IP-PHS
	ii. Methods for determining the number and location, by evacuation area, of residents, in the plume exposure pathway EPZ who may need assistance, including the type of assistance required;		Chapter 11.10 – Transportation Dependent Public	N/A

	iii. The means for notifying residents needing assistance;			IP-EOC PIO, IP-JIC PIO
	iv. Reference lists of documented individuals requiring assistance in an evacuation of the plume exposure pathway EPZ and process for keeping the list(s) up-to-date;			IP-EVAC,
	v. Process for evacuating identified residents and for sheltering those who cannot be moved; and			IP-PHSO, IP-EVAC
	vi. Transportation needs or resources for these groups, including types and quantities of vehicles.			N/A
J.11.b	The decision-making methodologies for use of radioprotective drugs and the provisions for administration to the general public, emergency workers, and institutionalized persons within the plume exposure pathway EPZ. This includes the means of determining quantities, maintaining and managing supplies, communicating recommendations, and distributing.			
	i. The individual(s), by title/position, with the authority to make decisions regarding the use of radioprotective drugs during an emergency;	State Local	Chapter 2.6 – Benton-Franklin Health District Chapter 11.3 – Radioprotective Drugs	IP-PHSO
	ii. The criteria and decision-making processes for recommending the use of radioprotective drugs;		Chapter 11.3 – Radioprotective Drugs (refers the reader to the WA DOH ORP Plan)	IP-PHSO
	iii. Groups who may be advised to take radioprotective drugs;		Chapter 11.3 – Radioprotective Drugs	N/A
	iv. A description of the adequate supply of radioprotective drugs for each individual in the plume exposure pathway EPZ, including quantities, storage locations, and means of distribution;		Chapter 9.3 – Dosimetry and KI for Emergency Workers Chapter 9.4 – (Table 6) Chapter 11.3 – Radioprotective Drugs	N/A
	v. A description of the adequate maintenance, shelf life extensions, and timely replacement of radioprotective drugs; and		Chapter 9.3 – Dosimetry and KI for Emergency Workers Chapter 11.3 – Radioprotective Drugs	N/A
	vi. Means for communicating a recommendation to take radioprotective drugs to emergency workers, institutionalized persons, and (if included as an option in the plans/procedures) the general public.		Chapter 11.3 – Radioprotective Drugs	IP-PHSO, IP-FSO, IP-OSC
J.11.c	Means of evacuation informed by the updated ETEs. The evacuation routes and			

	transportation resources to be utilized are described and include projected traffic capacities of evacuation routes and implementation of traffic control schemes during evacuation.			
	i. A statement identifying which version of the ETE study the evacuation plan and procedures are based on;	State Local	Chapter 11.4 – Evacuation Time Estimate	N/A
	ii. Means for controlling traffic to assure a safe and efficient evacuation; and		Chapter 11.9 – Implementation of Traffic and Access Control Points	IP-OSC
	iii. The resources and equipment necessary to control traffic control.		Chapter 2.6 - Listed under each of law enforcement and WSDOT duties	IP-OSC
J.11.d	The locations of pre-identified reception centers beyond the boundaries of the plume exposure pathway EPZ, organizations responsible for managing reception centers, arrangements for handling service animals and pets, and provisions for radiological monitoring/decontamination.			
	i. Locations of all reception centers and host schools for evacuees and students by name and address;	State Local	Chapter 2.6 – Supporting Agencies/Organizations (Columbia Basin College & Kennewick School District) Annex A – Situation Overview (Location)	N/A
	ii. Organizations responsible for managing reception centers and staffing requirements for each center;		Annex A – Concept of Operations, Organization	N/A
	iii. Provisions and arrangements for the radiological monitoring of evacuees, service animals, pets, and evacuee vehicles;		Annex A – Monitoring, Decontamination, Registration	N/A
	iv. Arrangements for managing students at reception centers and/or host schools;		Chapter 11.11 – Transportation Dependent Students	N/A
	v. Identified hospitals, correctional facilities, and nursing homes that will receive evacuees; and		Chapter 2.6 - Supporting Agencies (Kadlec and Trios) Annex A – Contamination Control, Part ii – First Aid	N/A
	vi. Arrangements for congregate care based on historical need.		Chapter 2.6 Supporting Agencies (The Central and SE Chapter of American Red Cross) Annex A – Contamination Control, Part iv – Congregate Care	N/A

J.11.e	Means for the initial and ongoing control of access to evacuated areas and organizational responsibilities for such control, including identifying pre-selected control points.			
	i. Means for initial and ongoing control of access to evacuated areas;	State Local	Chapter 11.9 – Implementation of Traffic and Access Control Points	N/A
	ii. Organization(s) responsible for providing access control and staffing TCPs and ACPs;		Chapter 2.6 Supporting Agencies: Benton County Sheriff, City of Richland, City of West Richland, Washington State Patrol, Washington State Department of Transportation, United States Coast Guard	IP-OSC, IP-RPD, IP-WRPD, IP-BCSO, IP-WSP, IP-WSDOT
	iii. Maps identifying pre-selected TCPs/ACPs (may be incorporated by reference);		Chapter 11.9 – Implementation of Traffic and Access Control Points, (Figure 10)	
	iv. Equipment and resources needed (e.g., cones or barricades);		Chapter 11.9 – Implementation of Traffic and Access Control Points,	N/A
	v. Procedures and responsibilities for controlling ingress and egress to other areas affected by an incident; and			IP-OSC, IP-RPD, IP-WRPD, IP-BCSO, IP-WSP, IP-WSDOT
	vi. Procedures for providing TCP/ACP staff with the status of emergency response activities.			
J.11.f	Identification of and means for dealing with potential impediments to the use of evacuation routes (e.g., seasonal impassibility of roads) and contingency measures. The resources available to clear impediments and responsibility for re-routing traffic, as necessary, are described.			
	i. Resources available (e.g., personnel and equipment) to clear impediments to use of evacuation routes and emergency response in areas affected by incidents;	State Local	Chapter 2.6 Supporting Agencies: City of Richland, City of Kennewick, Washington State Department of Transportation	N/A
	ii. The potential need to use alternate routes because of traffic impediments, including procedures for implementing alternate evacuation routes; and		Chapter 11.9 – Implementation of Traffic and Access Control Points	N/A
	iii. The individual(s), by title/position, responsible for directing resources and rerouting traffic.			IP-OSC, IP-RPD, IP-WRPD, IP-BCSO, IP-WSP, IP-WSDOT

J.11.g	Identification of and means to implement precautionary protective actions (e.g., actions taken at an SAE).			
	i. Precautionary protective actions that may be taken;	State Local	Chapter 1.2 – Radiological Emergency Classifications (Site Area) Chapter 5.2 – Table 3	IP-IC NONHAB
	ii. The ECLs at which a precautionary protective action may be taken; and			IP-IC NONHAB
	iii. Methods used to implement precautionary protective actions.			IP-IC NONHAB
J.12	Protective actions to be used for the ingestion exposure pathway EPZ are specified, including the methods for protecting the public from consumption of contaminated foodstuffs, and are based on current Federal guidance			
	i. The organization and individual(s), by title/position, with the authority to make decisions in the ingestion exposure pathway EPZ;	State Local	Chapter 11.7 – Ingestion Exposure Pathway Protective Action Decisions – STATE FUNCTION	N/A
	ii. Planned ingestion protective actions and the rationale for the selection of actions;			N/A
	iii. The methodology used to designate the areas of concern where monitoring and sampling will be implemented			N/A
	iv. The methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures;			N/A
	v. The analytical laboratory capability to analyze various samples and the procedure for reporting analytical results to the appropriate organization;			N/A
	vi. The location and means of obtaining up-to-date information on licensed agribusiness facilities within the ingestion exposure pathway EPZ;			N/A
	vii. The ability to obtain information on facilities outside the ingestion exposure pathway EPZ at risk for receiving potentially contaminated products, including names and telephone numbers for points of contact;			N/A
	viii. The location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting;			N/A
	ix. The DILs that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs			N/A

	x. The availability of suitable maps, including GIS maps, for recording various data; and			N/A
	xi. The means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products.			N/A
J.13	The means for registering, monitoring, and decontaminating evacuees, service animals, pets, vehicles, and possessions at reception centers in host areas are described. The personnel and equipment available are capable of monitoring 20 percent of the plume exposure pathway EPZ population, including transients, assigned to each facility within a 12-hour period.			
	i. The radiological capabilities to monitor evacuees, service animals, pets, vehicles, and possessions;	State Local	Annex A – *Monitoring, Decontamination, Registration*	N/A
	ii. Decontamination procedures, including the triggers/action levels that indicate the need for decontamination activities and procedures for medical attention referral;			IP-IC EWAC, IP-FDECON, IP-MDECON, IP-ANIMAL
	iii. Contamination control measures, such as safety requirements, decontamination site layout, and decontamination protocol;			N/A
	iv. The physical layout of the area, with diagrams that show the flow and layout of operations, including a description of the means for separating contaminated, uncontaminated, and unscreened individuals, vehicles, service animals, and pets; and		Annex A – *Monitoring, Decontamination, Registration* *CBC - Figure 17* *Southridge High School – Figure 19*	IP-IC EWAC
	v. The processes for registering evacuees, service animals, and pets in host/support jurisdictions, including documentation of monitoring for referral to temporary care facilities.		Annex A – *Monitoring, Decontamination, Registration – AMERICAN RED CROSS FUNCTION*	N/A
J.14	General plans for the removal or continued exclusion of individuals from restricted areas are developed. Relocation plans include:			
	i. General plans for the removal or continued exclusion of individuals from restricted areas; and	State Local	Chapter 14.5 – Relocation	N/A
	ii. Relocation plans are developed when the decision for removal or continued exclusion of individuals from restricted areas.			N/A
J.14.a	Process for implementing current Federal guidance for relocation.			
	i. Organization(s) with the responsibility for making decisions on relocation	State Local	Chapter 14.5 – Relocation	N/A

	ii. The rationale used to determine areas for relocation; and			N/A
	iii. The process for notifying individuals who are being relocated.			N/A
J.14.b	Means to identify and determine the boundaries of relocation areas, including a buffer zone			
	i. The process used to identify areas where the projected first-year dose will exceed the 2 rem relocation PAG; and	State Local	Chapter 14.6 – Determining Boundaries of Relocation Areas	N/A
	ii. The process for identifying the need for buffer zones, as well as their establishment when warranted.			N/A
J.14.c	Prioritization of relocation based on projected dose to an individual and the timeframe for relocation.			
	i. Priorities for relocation; and	State Local	Chapter 14.6 – Determining Boundaries of Relocation Areas	N/A
	ii. Designation of intervals to continually assess projected doses from the relocation areas			N/A
J.14.d	Control of access to and egress from relocation areas and security provisions for evacuated areas			
	i. Establishment of access control/check points around the relocation area;	State Local	Chapter 14.6 – Determining Boundaries of Relocation Areas	N/A
	ii. Processes for identifying those who are authorized to enter relocation area		Chapter 14.2 – Re-entry within Benton County	N/A
	iii. Methods to provide exposure and contamination control to those authorized to enter relocation areas; and		Chapter 14.6 – Determining Boundaries of Relocation Areas	N/A
	iv. Establishment of monitoring and decontamination stations at points of egress in the buffer zone around relocation areas		Chapter 14.2 – Re-entry within Benton County	N/A
J.14.e	Contamination control during relocation.			
	i. Methods for monitoring and decontamination of individuals who are being relocated from areas not previously evacuated.	State Local	Annex A – Monitoring, Decontamination, Registration	N/A
J.14.f	Means for coordinating and providing assistance during relocation			
	i. Physical and economic assistance for those who are relocated; and	State Local	Chapter 14.1 – General Recovery	N/A
	ii. Provisions for physical, economic, and financial assistance of individuals being relocated.			N/A
Planning Standard K – Radiological Exposure				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**

K.1	The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects:	Licensee	N/A	N/A
K.1.a	Onsite emergency exposure guidelines for emergency workers consistent with their assigned duties and current Federal guidance and the conditions under which the guidelines apply		N/A	N/A
K.1.b	The capability to evaluate emergency worker dose (i.e., the sum of the effective dose equivalent and the committed effective dose equivalent) at the time of exposure when direct measurement is not feasible.		N/A	N/A
K.1.c	The capability to monitor and assess the radiation doses received by emergency workers for the duration of the incident.		N/A	N/A
K.1.d	The capability to implement onsite contamination control measures.		N/A	N/A
K.1.e	The capability to decontaminate emergency workers, equipment, and vehicles.		N/A	N/A
K.1.f	Appropriate radiation protection briefings for repair teams that are being dispatched into the plant and FMTs being sent onsite and offsite, the scope of which is consistent with the expected risk to the team.		N/A	N/A
K.1.g	The process for NPP site access and dosimetry issuance to personnel from OROs arriving to assist with the onsite response.		N/A	N/A
K.2	Individual(s) that can authorize personnel to receive radiation doses in excess of the occupational dose limits in accordance with the minimum standards set forth in 10 CFR Part 20 or 29 CFR 1910.1096, as applicable to the organization, are identified by title/position. Such authorizations are documented.			
	i. (Or reference) The occupational dose limits in accordance with the regulation applicable to their organization;	Licensee State Local	Chapter 12.1 – Emergency Worker Dose Limits	N/A
	ii. The individual(s), by title/position, who can authorize radiation doses in excess of occupational limits; and			IP-PHSO
	iii. Processes for authorizing and documenting personnel to exceed occupational dose limits			IP-PHSO
K.2.a	The process for allowing onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities is described.	Licensee		N/A
K.2.b	The process for authorizing emergency workers to incur exposures that may result in doses in excess of the current Federal guidance is described			
	i. Emergency worker dose limits;	Licensee State Local	Chapter 12.1 – Emergency Worker Dose Limits	IP -
	ii. Process for when emergency worker dose limits are reached and subsequently exceeded;			IP- PHSO, IP-FSO

	iii. Authorization and documentation processes for authorizing emergency workers to exceed dose limits, including exceeding limits identified in current Federal guidance;			IP- PHSO, IP-FSO
	iv. Briefing and documentation processes for communicating risks involved for incurring excessive dose; and			IP- PHSO, IP-FSO, IP-OSC
	v. Any special conditions requiring additional limitations.			N/A
K.3	The capability to determine the doses received by emergency workers involved in any commercial NPP radiological incident is described. Each organization makes provisions for distribution of direct-reading dosimeters (DRDs) and permanent record dosimeters (PRDs).			
	i. Types and quantities of dosimeters (and dosimeter chargers, when applicable) available per location and the number of emergency workers requiring dosimetry devices;	Licensee State Local	Chapter 9.2 – Benton County Radiological Equipment Chapter 9.3 – Dosimetry and KI for Emergency Workers	N/A
	ii. Dosimetry storage locations;		Chapter 9.4 – Processing OSL Dosimeters (Table 6)	N/A
	iii. Process for distributing dosimeters to all emergency workers;		Chapter 9.3 – Dosimetry and KI for Emergency Workers	N/A
	iv. Exposure control methods for emergency workers, including exposure from inhalation;		Chapter 12.1 – Emergency Worker Dose Limits	N/A
	v. Process for reading DRDs and any early reading of PRDs; and		Chapter 12.2 – Emergency Worker Exposure Control, Figure 10 and 12	N/A
	vi. Specific dosimetry instructions, including record keeping of dosimeter readings and return of dosimeters.		Chapter 9.3 – Dosimetry and KI for Emergency Workers Chapter 12.2 – Emergency Worker Exposure Control, Figures 10,11, 12, 13	N/A
K.3.a	Provisions to ensure that DRDs are read at designated intervals and dose records are maintained for emergency workers are described.			
	i. Designated time intervals for reading DRDs;	Licensee State Local	Chapter 12.2 – Emergency Worker Exposure Control, Figure 10	IP- PHSO, IP-FSO
	ii. The method for emergency workers to record and report DRD readings;			IP-OSC, IP-RPD,

	iii. The methods for obtaining and recording dose readings from emergency workers;		Chapter 12.2 – Emergency Worker Exposure Control	IP-WRPD, IP-BCSO, IP-WSP, IP-WSDOT, IP-IC EWAC
	iv. The method for maintaining dose records for emergency workers; and			N/A
	v. Appropriate reporting if administrative limits have been reached or exceeded.			IP - IP-OSC, IP-RPD, IP-WRPD, IP-BCSO, IP-WSP, IP-WSDOT, IP-IC
K.4	Action levels for determining the need for decontamination are specified and the means for radiological decontamination are established for emergency workers and the general public, as well as equipment, vehicles, and personal possessions. The means for disposal of contaminated waste created by decontamination efforts are also established.			
	i. A description of facilities for monitoring and decontaminating emergency workers, equipment, and vehicles;	Licensee State Local	Annex A – Layout of EWAC (figure 15 and figure 17)	N/A
	ii. A description of facilities for monitoring and decontaminating general public, personal possessions, and vehicles;			N/A
	iii. Locations of monitoring and decontamination facilities (facilities for the public should be located outside the plume EPZ);;		Annex A – Situation Overview, Location	N/A
	iv. Number of people needed to perform monitoring and decontamination operations;		Annex A – Planning Assumptions	IP -
	v. Survey instruments (i.e., specific appropriate equipment and sensitivity, including radiation type) used to monitor emergency workers, equipment, and vehicles;.		Annex A – Monitoring, Decontamination, Registration	N/A
	vi. Other supplies and equipment needed for monitoring and decontamination;			IP-
	vii. Methods for controlling the spread of contamination at the emergency worker and general public monitoring facilities;		Annex A – Contamination Control	IP -
	viii. The process for handling contaminated waste collection, handling, and storage;		Annex A – Planning Assumptions	IP -
	ix. Radioactive contamination levels that will trigger decontamination		Annex A – Monitoring, Decontamination, Registration	N/A

	procedures, expressed in applicable units;			
	x. The process for re-monitoring individuals, equipment, vehicles, and personal possessions, and recording the results; and		Annex A – Monitoring, Decontamination, Registration	IP -
	xi. Criteria for sending individuals with fixed contamination for medical attention.			IP -
Planning Standard L – Medical and Public Health Support				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
L.1	Arrangements are established with primary and backup hospitals (one hospital is located outside the plume exposure pathway EPZ) and medical services. These facilities have the capability for evaluation of radiation exposure and uptake. The persons providing these services are adequately trained and prepared to handle contaminated, injured emergency workers and members of the general public.			
	i. A list of primary and backup hospitals/medical facilities to treat potentially contaminated, injured, and/or exposed individuals;	State Local	Chapter 2.6, *Supporting Agencies – Kadlec and Trios,* Chapter 13.1 – Primary and Backup Hospitals	N/A
	ii. Individual facility capabilities to evaluate radiation exposure and uptake, including the number of radiologically trained medical personnel and support staff;		Chapter 13.1 – Primary and Backup Hospitals	N/A
	iii. A description of hospital/medical facility and support service capabilities to treat potentially contaminated, injured, and/or exposed individuals; and		Chapter 13.1 – Table 10	N/A
	iv. A description of dosimetry procedures, including record-keeping and final receipt for processing.		Chapter 13.3 – Pre-Hospital Radiological Monitoring, Dosimetry and Contamination Control.	N/A
L.2	Arrangements for the medical treatment of contaminated, injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:	Licensee	N/A	N/A
L.2.a	An onsite first aid capability with adequate medical equipment and supplies.		N/A	N/A
L.2.b.	Primary and backup offsite medical facilities.		N/A	N/A
L.2.c	Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection		N/A	N/A

	of contaminated waste, and decontamination of treatment areas			
L.2.d	Provisions to evaluate for radiological contamination either prior to transport to a medical facility or after arrival.		N/A	N/A
L.2.e	Contact information for facilities capable of treating overexposure to radioactive material.		N/A	N/A
L.3	Supplemental lists are developed that indicate the location of the closest public, private, and military hospitals and other emergency medical facilities within the state or contiguous states considered capable of providing medical support for any contaminated, injured individual.			
	i. Supplemental lists of additional hospitals/medical facilities capable of providing medical support for contaminated, injured individuals. The list includes any special radiological capabilities.	State Local	Chapter 13.2 – Pre-Hospital Treatment and Choosing a Medical Facility	N/A
L.4	Each organization arranges for the transportation of contaminated, injured individuals and the means to control contamination while transporting victims of radiological incidents to medical support facilities and the decontamination of transport vehicle following use			
	i. The individual(s), by title/position, responsible for determining an appropriate hospital/medical facility and the determination process;	State Local	Chapter 13.2 – Pre-Hospital Treatment and Choosing a Medical Facility	N/A
	ii. Means of transporting individuals;		Chapter 13.3 – Pre-Hospital Radiological Monitoring, Dosimetry and Contamination Control	N/A
	iii. How to request additional emergency medical transport services;		Chapter 13.4 – Communications Between the Transport Crew and Hospital/Medical Staff	N/A
	iv. Process for maintaining communications between the transport crew and hospital/medical facility staff		Chapter 13.4 – Communications Between the Transport Crew and Hospital/Medical Staff Chapter 13.5 – Communications Between Emergency Medical Services Facilities	N/A
	v. Specifics of radiological monitoring and contamination control measures during transport;		Chapter 13.3 – Pre-Hospital Radiological Monitoring, Dosimetry and Contamination Control	N/A

	vi. Decontamination techniques, including trigger/action levels; and		Chapter 13.6 – Monitoring and Contamination Control Measures During Transport	N/A
	vii. Dosimetry for the transport crew.			N/A
Planning Standard M – Recovery and Reentry Planning and Post-Accident Operations				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
M.1	General recovery, reentry, and return plans for radiological incidents are developed, as appropriate. These plans address reoccupancy, as appropriate. The plans should include:			
	i. Planned recovery efforts, including a list of recovery-specific actions and organizations responsible for carrying them out;	Licensee State Local	Chapter 14.1 – General Recovery	N/A
	ii. The process for public reentry into restricted areas;		Chapter 14.1 – General Recovery Chapter 14.3 – Return within Benton County Chapter 14.4 – Reoccupancy within Benton County Chapter 14.5 – Relocation	N/A
	iii. The process for establishing restricted areas; and		Chapter 13.1 – Table 10	N/A
	iv. The process for establishing reoccupancy decisions.		Chapter 14.4 – Reoccupancy within Benton County	N/A
M.1.a	Provisions for allowing reentry into areas controlled by the licensee. Reentry planning includes evaluation of the controls necessary for reentry under post-incident conditions.	Licensee	N/A	N/A
M.1.b	Provisions for reentry into restricted areas, including exposure and contamination control, as appropriate. A method for coordinating and implementing decisions regarding temporary reentry into restricted areas is addressed.			
	i. The process for authorizing reentry, including the individual(s), by title/position, authorized to grant access into a restricted area	Licensee State Local	Chapter 14.2 – Re-entry within Benton County	N/A
	ii. The evaluation criteria/method for approving reentry requests;			N/A
	iii. The access control process for reentry, including the authorization verification method by access control/check point officials;			N/A
	iv. Provisions for exposure control of those authorized reentry;			N/A

	v. Contamination control practices within a restricted area; and			N/A
	vi. Methods and resources for monitoring and decontamination of individuals exiting a restricted area.			N/A
M.2	Individuals that will comprise the licensee's recovery organization are identified by title/position.	Licensee	N/A	N/A
M.3	The recovery organization includes technical personnel with responsibilities to develop, evaluate, and direct recovery and reentry operations. The process for initiating recovery actions is described and includes the criteria for terminating the emergency.	Licensee	N/A	N/A
M.4	The process for initiating recovery actions is described and includes provisions to ensure continuity during transfer of responsibility between phases. The chain of command is established.			
	i. The process for initiating recovery actions;	State Local	Chapter 14.1 – General Recovery, Process for Initiating Recovery Actions	N/A
	ii. Provisions for continuity during transfer of responsibility from the emergency phase to the recovery phase;			N/A
	iii. Changes that may take place in the organizational structure, to include the chain of command; and			N/A
	iv. The means to keep all involved response organizations informed of the recovery efforts.			N/A
M.5	The framework for relaxing protective actions and allowing for return are described. Prioritization is given to restoring access to vital services and facilities.			
	i. Criteria for relaxing protective actions and allowing for public return;	State Local	Chapter 14.3 – Return withing Benton County	N/A
	ii. The process for allowing public return into a previously restricted area; and			N/A
	iii. A process for establishing priorities in restoring vital services and facilities to areas where return is permitted.			N/A
M.6	The organization(s) responsible for developing and implementing cleanup operations offsite is identified.			
	i. The appropriate local, state, tribal or Federal organization(s) responsible for cleanup operations; and	State Local	Chapter 14.6 – Cleanup Operations	N/A
	ii. Resources that may be needed to conduct cleanup efforts.			N/A
M.7	Provisions for developing and modifying sampling plans are established. Provisions for laboratory analysis of samples are included in the plan.			
	i. The process for developing and modifying sampling plans;	Licensee State	Chapter 9.5 – Organizations	N/A

	ii. Identification of laboratories to process samples; and	Local	Responsible for Radiological Assessment Data	N/A
	iii. A description of each identified laboratory's sampling capability and capacity.			N/A
M.8	A method for periodically conducting radiological assessments of public exposure is established.			
	i. The agencies responsible for, and involved in, long-term dose assessment activities post-incident; and	State Local	Chapter 14.8 – Assessing Long-Term Exposure	N/A
	ii. The method for periodically conducting radiological assessments of public exposure, including estimation of the health impacts.			N/A
Planning Standard N – Exercise and Drills				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
N.1	Exercises and drills are conducted, observed, and critiqued/evaluated as set forth in NRC and FEMA regulations and guidance.			
	i. Exercises are conducted in accordance with NRC and FEMA regulations and guidance	Licensee State Local	Chapter 15.2 – Exercise Evaluation Methodology	N/A
N.1.a	The process to critique/evaluate exercises and drills is described			
	i. The process to critique and evaluate exercises and drills utilizes FEMA REP's assessment methodology.	Licensee State Local	Chapter 15.2 – Exercise Evaluation Methodology	N/A
N.1.b	The process used to track findings and associated corrective actions identified by drill and exercise critiques/evaluations, including their assignment and completion, is described.			
	i. A description of the process for tracking identified findings and any associated corrective actions from identification through resolution.	Licensee State Local	Chapter 15.3 – Tracking Identified Findings/Issues and Corresponding Corrective Action	N/A
N.1.c	A drill or exercise starts between 6:00 p.m. and 4:00 a.m. at least once every eight-year exercise cycle.	Licensee	N/A	N/A
N.1.d	A drill or exercise is unannounced at least once every eight-year exercise cycle	Licensee	N/A	N/A
N.2	Exercises are designed to enable the response organizations' demonstration of the key skills and capabilities necessary to implement the emergency plan. The following two types of exercises are conducted at the frequency noted:			
	i. All major elements of plans/procedures are tested at the minimum frequency specified.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.2.a	Plume Exposure Pathway Exercises. Plume exposure pathway exercises are conducted			

	biennially. These exercises include mobilization of licensee, and state, local, and tribal government personnel and resources and implementation of emergency plans to demonstrate response capabilities within the plume exposure pathway EPZ.			
	i. Capabilities are exercised at least biennially in response to a plume exposure pathway scenario; and	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning, Table 11	N/A
	ii. Exercise scenarios include a radioactive release of such a magnitude that it drives accomplishment of the exercise objectives.			N/A
N.2.b	Ingestion Exposure Pathway Exercises. Ingestion exposure pathway exercises are conducted at least once every eight years. These exercises include mobilization of state, local, and tribal government personnel and resources and implementation of emergency plans to demonstrate response capabilities to a release of radioactive materials requiring post-plume phase protective actions within the ingestion exposure pathway EPZ.			
	i. Capabilities are exercised at least once every eight years in response to an ingestion exposure pathway scenario;	State Local	Chapter 15.1 – Radiological Emergency Response Planning, Table 11	N/A
	ii. The numbers and types of personnel participating in an ingestion exposure pathway exercise will be sufficient for demonstrating capabilities required by the plans/procedures; and		Chapter 15.1 – Radiological Emergency Response Planning	N/A
	iii. OROs within the 50-mile ingestion exposure pathway EPZ that are not part of the full participation ingestion exercise with the state, participate in an ingestion TTX or other ingestion pathway training activity at least once during each eight-year exercise cycle.		Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.3	Exercise Scenario Elements. During each eight-year exercise cycle, biennial, evaluated exercise scenario content is varied to provide the opportunity to demonstrate the key skills and capabilities necessary to respond to the following scenario elements:			
	i. Scenarios for exercises are varied from exercise to exercise to provide opportunity for appropriate capabilities to be demonstrated; and	State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
	ii. All exercise scenario elements are utilized during each eight-year exercise cycle.			N/A
N.3.a	Hostile Action-Based (HAB). Hostile action directed at the NPP site. This scenario element may be combined with either a radiological release scenario or a no/minimal radiological release scenario, but a no/minimal			

	radiological release scenario should not be included in consecutive HAB exercises at an NPP site.			
	i. The HAB scenario element is utilized at least once during each eight-year exercise cycle; and	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning, Table 11	N/A
	ii. The HAB scenario element is not combined with the no/minimal radiological release scenario in consecutive exercises at a single site.		Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.3.b	Rapid Escalation. An initial classification of, or rapid escalation to, an SAE or GE			
	i. A rapid escalation scenario element is utilized at least once during each eight-year exercise cycle.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.3.c	No/Minimal Release of Radioactive Materials. No release or an unplanned minimal release of radioactive material which does not require public protective actions. This scenario element is used only once during each eight-year exercise cycle			
	i. A no/minimal radioactive material release scenario element is utilized only once each eight-year exercise cycle and is optional for state, local, and tribal governments.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.3.c.1	The licensee is required to demonstrate the ability to respond to a no/minimal radiological release scenario. State, local, and tribal government response organizations have the option, and are encouraged, to participate jointly in this demonstration. If the offsite organizations elect not to participate in the licensee's required minimal or no release exercise, the OROs will still be obligated to meet the exercise requirements as specified in 44 CFR 350.9.			
	i. ORO participation is optional for a no/minimal release scenario.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.3.c.1	The licensee is required to demonstrate the ability to respond to a no/minimal radiological release scenario. State, local, and tribal government response organizations have the option, and are encouraged, to participate jointly in this demonstration. If the offsite organizations elect not to participate in the licensee's required minimal or no release exercise, the OROs will still be obligated to meet the exercise requirements as specified in 44 CFR 350.9.			
	i. ORO participation is optional for a no/minimal release scenario.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A

N.3.c.2	When planning for a joint no/minimal radiological release exercise, affected state, local, and tribal government jurisdictions, the licensee, and FEMA will identify offsite capabilities that may still need to be evaluated and agree upon appropriate alternative evaluation methods to satisfy FEMA's biennial criteria requirements. Alternative evaluation methods that could be considered during the extent of play negotiations include expansion of the exercise scenario, out of sequence activities, plan reviews, staff assistance visits, or other means as described in FEMA guidance.			
	i. The planning process will account for capabilities and activities that may not have the opportunity to be evaluated under the no/minimal radiological release scenario elements; and	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
	ii. Consideration is given to alternative demonstration and evaluation venues.			N/A
N.3.d	Resource Integration. Integration of offsite resources with onsite response.			
	i. A resource integration element is utilized once during each eight-year exercise cycle and;	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
	ii. This scenario element may be combined with other scenario elements.			N/A
N.3.d	Resource Integration. Integration of offsite resources with onsite response.			
	i. A resource integration element is utilized once during each eight-year exercise cycle and;	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
	ii. This scenario element may be combined with other scenario elements.			N/A
N.3.e	10 CFR 50.54(hh)(2) Strategies. Demonstration of the use of equipment, procedures, and strategies developed in compliance with 10 CFR 50.54(hh)(2).	Licensee	N/A	N/A
N.4	Drills are designed to enable an organization's demonstration and maintenance of key skills and capabilities necessary to fulfill functional roles. Drills include, but are not limited to, the following at their noted frequencies:			
	i. All major elements of plans/procedures are tested at the minimum frequency specified.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.4.a	Emergency Medical Drills. Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).	Licensee	N/A	N/A
N.4.b	Medical Services Drills. Medical services drills are conducted annually at each medical facility			

	designated in the emergency plan. These drills involve a simulated, contaminated emergency worker and/or member of the general public and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).			
	i. Annual medical services drills are conducted annually at each medical facility identified in the emergency plan	State Local	Chapter 15.1 – Radiological Emergency Response Planning, Table 11, MS-1	N/A
N.4.c	Laboratory Drills. Laboratory drills are conducted biennially at each laboratory designated in the emergency plan. These drills involve demonstration of handling, documenting, provisions for record keeping, and analyzing air, soil, and food samples, as well as quality control and quality assurance processes. These drills also involve an assessment of the laboratory's capacity to handle daily and weekly samples and the volume of samples that can be processed daily or weekly.			
	i. Laboratory drills are conducted biennially.	State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.4.d	Environmental Monitoring Drills. Environmental monitoring drills are conducted annually. These drills include direct radiation measurements in the environment, collection and analysis of all sample media (e.g., water, vegetation, soil, and air), and provisions for record keeping.			
	i. Environmental monitoring drills are conducted annually.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.4.e	Ingestion Pathway and Post-Plume Phase Drills. Ingestion pathway and post-plume phase drills are conducted biennially. These drills involve sample plan development, analysis of lab results from samples, assessment of the impact on food and agricultural products, protective decisions for relocation, and food/crop embargos.			
	i. Ingestion pathway drills are conducted biennially; and.	Licensee State Local	Chapter 15.1 – Radiological Emergency Response Planning, Table 11	N/A
	ii. Participants include any OROs that have roles/responsibilities for the ingestion pathway and/or post-plume phase activities.		Chapter 15.1 – Radiological Emergency Response Planning	N/A
N.4.f	Communications Drills. Communications amongst and between emergency response organizations, including those at the state, local, and Federal level, the FMTs, and nuclear facility within both the plume and ingestion exposure pathway EPZs, are tested at the frequencies determined in evaluation criterion F.3. Communications drills include the			

	aspect of understanding the content of messages and can be done in conjunction with the testing described in evaluation criterion F.3.			
	i. Communications drills between all applicable emergency response organizations within the plume and ingestion exposure pathway EPZs are conducted at the frequencies determined in evaluation criterion F.3; and.	Licensee State Local	Chapter 7.2 – Testing Communications Systems, Table 6	N/A
	ii. A message content check is included in all communications drills.		Chapter 7.2 – Testing Communications Systems	N/A
N.4.g	Post-Accident Sampling Drills. Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.	Licensee	N/A	N/A
N.4.h	Off-Hours Report-In Drills. Off-hours report-in drills are conducted biennially and are unannounced.	Licensee	N/A	N/A
N.4.i	Off-Hours Call-In Drills. Off-hours call-in drills are conducted quarterly, such that each ERO member's normally expected response time is assessed at least biennially based on call-in drill responses or an alternate means for determining response time. Some drills are unannounced.	Licensee	N/A	N/A
N.4.j	Onsite Personnel Protective Action Drills. Onsite personnel protective action drills are conducted during every eight-year exercise cycle. These drills demonstrate the NPP site's ability to implement and coordinate protective actions for onsite personnel during hostile action	Licensee	N/A	N/A
N.4.j	Aircraft Threat/Attack Response Drills. Aircraft threat/attack response drills are conducted during every eight-year exercise cycle. These drills demonstrate the use of procedures and protective measures developed for responding to hostile action involving an aircraft threat or attack.	Licensee	N/A	N/A
Planning Standard O – Radiological Emergency Response Training				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
O.1	Each organization ensures the training of emergency responders and other appropriate individuals with an operational role described in the emergency plan. Initial training and at least annual retraining are provided.			
	i. The organization(s) or individual(s) responsible for ensuring training	Licensee State	Chapter 2.6, Emergency Planner	N/A

	requirements are met, including a description of their responsibilities;	Local		
	ii. Provisions to ensure personnel with an operational role receive appropriate training;		Chapter 16.2, Table 13	N/A
	iii. A description of training programs, including scope, time intervals at which training will be offered, and organization(s) that will provide training assistance;			N/A
	iv. Identification of mutual aid organizations and applicable arrangements for offering or receiving training;		Chapter 16.1 – Training Programs	N/A
	v. Provisions for initial training;			N/A
	vi. Provisions for at least annual retraining;			N/A
	vii. Provisions for just-in-time training; and			N/A
	viii. Documentation of attendance for training.			N/A
O.1.a	Site-specific emergency response training is developed and conducted for those offsite organizations that may be called upon to provide onsite assistance in the event of an emergency	Licensee	N/A	N/A
O.2	The ERO training program consists of learning objectives that are used to develop and maintain key skills. This includes a systematic analysis of jobs and tasks to be performed from which learning objectives are derived.	Licensee	N/A	N/A
O.2.a	The ERO training program is reviewed at least annually and revised as necessary.	Licensee	N/A	N/A
O.2.b	Training sessions that provide performance opportunities to develop, maintain, or demonstrate key skills are critiqued in order to identify weak or deficient areas that need correction.	Licensee	N/A	N/A
Planning Standard P – Responsibility for the Planning Effort: Development, Periodic Review, and Distribution of Emergency Plans				
Planning Standards and Evaluation Criteria		**Applicability**	**Plan Location**	**Procedure**
P.1	The training program, including initial training and periodic retraining, of individuals responsible for the planning effort is described.			
	i. The individual(s), by title/position, that require training because of their planning responsibilities; and	Licensee State Local	Chapter 17.1 – Responsibility for the Planning Effort, Table14	N/A
	ii. A description of the initial and recurrent training program for the identified individuals.			N/A

P.2	The individual with the overall authority and responsibility for radiological emergency planning is identified by title/position.			
	i. The individual(s), by title/position, with the overall authority and responsibility for radiological emergency response planning.	Licensee State Local	Chapter 17.1 – Responsibility for the Planning Effort	N/A
P.3	The individual(s) with the responsibility for the development, maintenance, review, updating, and distribution of emergency plans, as well as the coordination of these plans with other response organizations, is identified by title/position.			
	i. The individual(s), by title/position, responsible for developing, maintaining, reviewing, updating, and distributing emergency plans/procedures, as well as coordinating plans/procedures with other response organizations.	Licensee State Local	Chapter 17.1 – Responsibility for the Planning Effort	N/A
P.4	The process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements is described. The process includes a method for recording changes made to the documents and, when appropriate, how those changes are retained.			
	i. A description of the process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements;	Licensee State Local	Chapter 17.2 – Periodic Review	N/A
	ii. A method to indicate where and when the most recent plans/procedures changes were made;			N/A
	iii. A method to indicate how plan/procedure changes are retained and historical context preserved;			N/A
	iv. The process for correcting identified findings and plan issues; and		Chapter 15.3 – Tracking Identified Findings/Issues and Corresponding Corrective Action	N/A
	v. Acknowledgment/documentation that plans/procedures and agreements have been reviewed for accuracy and completeness of information, and when appropriate, changes have been made, within the last year		Chapter 17.2 – Periodic Review	N/A
P.5	Provisions for distributing the emergency plan and implementing procedures to all organizations and appropriate individuals with responsibility for implementation of the plan/procedures are described..			
	i. A list of the organizations and individuals, by title/position, who are	Licensee State	**Record of Distribution**	N/A

	to receive the updated plans/procedures;	Local		
	ii. The process for distributing the latest plans/procedures to appropriate organizations and individuals; and		Chapter 17.2 – Periodic Review	N/A
	iii. A process to verify that updated plan/procedures have been received.		Chapter 17.3 – Distribution of Emergency Plan	N/A
P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan			
	i. A list of annexes, appendices, and supporting plans; and	Licensee State Local	Chapter 17.4 – Supporting Plans and Procedures	N/A
	ii. Originating agency for each listed annex, appendix, and support plan.			N/A
P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.			
	i. A list of all implementing procedures associated with the emergency plan; and	Licensee State Local	Annex D	N/A
	ii. Identification of which section(s) of the plan are implemented by each procedure		Chapter 18 - Crosswalk	N/A
P.8	A table of contents and a cross-reference index to each of the NUREG-0654/FEMA-REP-1, Rev.2 evaluation criteria are included. The evaluation criteria that do not apply are identified.			
	i. A table of contents; and	Licensee State Local	**Table of Contents**	N/A
	ii. A cross-reference between the plans/procedures and the NUREG-0654/FEMA-REP-1, Rev. 2 evaluation criteria.		Chapter 18 - Crosswalk	N/A
P.9	Provisions for addressing the requirements of 10 CFR 50.54(t) are described.	Licensee	N/A	N/A
P.10	The administrative process for the periodic review and updating of contact information identified in the emergency plan and implementing procedures is described.			
	i. The process for reviewing and updating contact information.	Licensee State Local	Chapter 17.2 – Periodic Review	N/A
P.11	The process for entering EP program-related issues that could reduce the effectiveness of the emergency plan into the sitewide corrective action program is described.	Licensee	N/A	N/A
P.12	The process to evaluate changes in plant configuration for their impact on the effectiveness of the emergency plan is described.	Licensee	N/A	N/A