UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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April 1, 1999

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SUBJECT: FEDERAL EMERGENCY MANAGEMENT AGENCY'S REPORT

Dear Mr. Coleman:

Enclosed is a copy of the Federal Emergency Management Agency's final report for the September 16, 1998, emergency preparedness exercise at the Washington Nuclear Plant No. 2 (WNP-2).

The report indicates that no deficiencies were identified during the exercise; however, four areas requiring corrective action were identified. No response to the NRC is required.

If you have any questions concerning this letter, please contact Mr. Paul J. Elkmann at (817) 276-6539.

Sincerely,

Gail M. Good, Chief
Plant Support Branch
Division of Reactor Safety

Docket No.: 50-397
License No.: NPF-21

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Federal Emergency Management Agency
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November 13, 1998

Ellis W. Merschoff, Regional Administrator
U.S. Nuclear Regulatory Commission, Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Dear Mr. Merschoff:

Enclosed is a copy of the final report for the September 16, 1998, plume exposure pathway exercise of the offsite radiological emergency response plans for Washington Nuclear Plant No. 2 (WNP-2). The report also contains the results of out-of-sequence drills in which biennial exercise requirements were demonstrated. The State of Washington and the Washington Counties of Benton, Grant, Franklin, and Yakima fully participated in the exercise and the State of Oregon partially participated.

There were no Deficiencies identified during the exercise or related drills and there were only four Areas Requiring Corrective Action (ARCA) identified. FEMA Region X staff will monitor corrective actions for the ARCAs, as well as all other ARCAs that remain open from previous WNP-2 drills and exercises.

Based on the results of the September 16, 1998, exercise, the offsite radiological emergency response plans and preparedness for the States of Oregon and Washington and affected local jurisdictions, site-specific to WNP-2, can be implemented and are adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency at WNP-2. Therefore, our approval of the State and local government WNP-2 radiological emergency response plans under the Radiological Emergency Preparedness (REP) program remains in effect.

If you should have any questions, please contact Larry Moore, Training, Exercise, and Evaluation Team Leader, at (425) 487-4743.

Sincerely,

David L. de Courcy

David L. de Courcy
Regional Director

Enclosures

cc: List Enclosed

COURTESY COPY MAILING LIST
1998 WNP-2 FINAL EXERCISE REPORT

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(Baldwin/Bold/Converse/Cox/Duncan
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Final Exercise Report

Washington Nuclear Plant No. 2 (WNP-2)

Licensee: **Washington Public Power Supply System**

Exercise Date: **September 16, 1998**

Report Date: **November 12, 1998**

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION X
130 228th Street, SW
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TABLE OF CONTENTS

Page

I. EXECUTIVE SUMMARY 1

II. INTRODUCTION 2

III. EXERCISE OVERVIEW 4

A. Plume Emergency Planning Zone Description 4

B. Exercise Participants 5

C. Exercise Timeline 6

IV. EXERCISE EVALUATION AND RESULTS 8

A. Summary Results of Exercise Evaluation 8

B. Status of Jurisdictions Evaluated 10

1. WASHINGTON STATE 12

1.1 State Emergency Operations Center 12
1.2 Emergency Operations Facility 14
1.3 Joint Information Center 16
1.4 Radiological Field Monitoring Teams 17

2. RISK JURISDICTIONS (WASHINGTON STATE) 19

2.1 BENTON/FRANKLIN COUNTIES 19

2.1.1 Emergency Operations Center 19
2.1.2 Country Haven Academy 20
2.1.3 Emergency Worker Assistance Center 21
2.1.4 Kennewick General Hospital 22
2.1.5 Kennewick Fire Department 23
2.1.6 Our Lady of Lourdes Health Center 23
2.1.7 Pasco Fire Department 24

3. SUPPORT JURISDICTIONS (WASHINGTON STATE) 25

3.1 GRANT COUNTY 25

3.1.1 Emergency Operations Center 25

3.2 YAKIMA COUNTY 27

3.2.1 Emergency Operations Center 27

4. OREGON STATE 28

4.1 Emergency Coordination Center.....28

Appendices

APPENDIX 1 - ACRONYMS AND ABBREVIATIONS 29

APPENDIX 2 - EXERCISE EVALUATORS AND TEAM LEADERS 32

APPENDIX 3 - EXERCISE OBJECTIVES AND EXTENT-OF-PLAY AGREEMENT 34

APPENDIX 4 - EXERCISE SCENARIO 85

APPENDIX 5 - SUMMARY OF EXERCISE ISSUES 87

Tables

Table 1 - Exercise Timeline 7

Table 2 - Summary Results of Exercise Evaluation 9

I. EXECUTIVE SUMMARY

On September 16, 1998, an exercise was conducted in the plume exposure pathway emergency planning zone (EPZ) around Washington Nuclear Plant No. 2 (WNP-2) by the Federal Emergency Management Agency (FEMA), Region X. The purpose of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans (RERP) and procedures.

The most recent biennial exercise at this site was conducted on September 25, 1996. The qualifying emergency preparedness exercise was conducted on June 1, 1983.

FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In Washington (WA) State the risk counties of Benton and Franklin participated along with the ingestion counties of Grant and Yakima and various organizations of the State and County governments. Various agencies of the State of Oregon (OR) also participated in this exercise.

Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. Cooperation and teamwork of all the participants was evident during this exercise.

This report contains the final evaluation of the biennial exercise and the evaluation of the following out-of-sequence activities: Medical Services Drill for Our Lady of Lourdes Health Center and Pasco Fire Department, June 24, 1998; Medical Services Drill for Kennewick General Hospital and Kennewick Fire Department, June 25, 1998; the Emergency Worker Assistance Center (EWAC) Drill at Kiona-Benton High School, June 27, 1998; and the Unannounced/Off-hours Drill at the OR Emergency Coordination Center (ECC), August 12, 1998.

The State and local organizations, except where noted in this report, demonstrated knowledge of their emergency response plans and procedures and adequately implemented them. There were no Deficiencies identified as a result of the exercise or the related out-of-sequence drills. Four Areas Requiring Corrective Action (ARCA) were identified.

II. INTRODUCTION

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all offsite nuclear planning and response. FEMA's activities are conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350, 351, and 352. These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

FEMA Rule 44 CFR 350 establishes the policies and procedures for FEMA's initial and continued approval of State and local governments' radiological emergency planning and preparedness for commercial nuclear power plants. This approval is contingent, in part, on State and local government participation in joint exercises with licensees.

FEMA's responsibilities in radiological emergency planning for fixed nuclear facilities include the following:

- Taking the lead in offsite emergency planning and in the review and evaluation of RERPs and procedures developed by State and local governments;

- Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;

- Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993); and

- Coordinating the activities of Federal Agencies with responsibilities in the radiological emergency planning process:

  - U.S. Nuclear Regulatory Commission,
  - U.S. Environmental Protection Agency,
  - U.S. Department of Energy,
  - U.S. Department of Health and Human Services,
  - U.S. Department of Transportation,
  - U.S. Department of Agriculture,
  - U.S. Department of the Interior, and
  - U.S. Food and Drug Administration.

Representatives of these agencies serve on the FEMA Region X Regional Assistance Committee (RAC), which is chaired by FEMA.

Initial submission of the RERPs for WNP-2 to FEMA Region X by WA and involved local jurisdictions occurred in June 1981. OR and involved jurisdictions submitted their initial RERPs for WNP-2 to FEMA Region X in December 1993. All of the organizations in WA and OR have been responsive to suggestions for Plan improvements and have continued to

improve and update their RERPs following the guidance in 44 CFR 350. Washington State submitted their RERP for formal review and approval under 44 CFR 350 on June 12, 1998. However, the "350" review for WA is on hold pending revision of their Plan, and supporting plans and procedures, to reflect the proposed termination of Benton and Franklin Counties' joint planning and emergency response arrangement. The State of Oregon submitted their RERP for formal review and approval under 44 CFR 350 on March 21, 1994. It is currently under review by the FEMA Region X RAC. The alert and notification system for WNP-2 was approved by FEMA on June 17, 1994.

A REP exercise was conducted on September 16, 1998, by FEMA Region X to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving WNP-2. The purpose of this exercise report is to present the exercise results and findings on the performance of the offsite response organizations (ORO) during a simulated radiological emergency.

The findings presented in this report are based on the evaluations of the Federal evaluator team, with final determinations made by the FEMA Region X RAC Chairperson, and approved by the Regional Director.

The criteria utilized in the FEMA evaluation process are contained in:

- NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980;

- FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991; and

- FEMA-REP-15, "Radiological Emergency Preparedness Exercise Evaluation Methodology," September 1991.

Section III of this report, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section of the report contains a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

Section IV of this report, entitled "Exercise Evaluation and Results," presents detailed information on the demonstration of applicable exercise objectives at each jurisdiction or functional entity evaluated in a jurisdiction-based format. This section also contains: (1) descriptions of all Deficiencies and ARCAs assessed during this exercise, recommended corrective actions, and the State and local governments' schedule of corrective actions for each identified exercise issue and (2) descriptions of unresolved ARCAs assessed during previous exercises and the status of the OROs' efforts to resolve them.

III. EXERCISE OVERVIEW

Contained in this section are data and basic information relevant to the September 16, 1998, exercise to test the offsite emergency response capabilities in the area surrounding WNP-2. This section of the exercise report includes a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

A. Plume Emergency Planning Zone Description

WNP-2 is located at the Northeast corner of the U.S. Department of Energy's (DOE) Hanford Reservation. It is about ten miles north of the city of Richland, WA and three miles west of the Columbia River. WNP-2 is a boiling water reactor with a turbine generator rated at approximately 1,145 megawatts. It is operated by the Washington Public Power Supply System, referred to as the Supply System hereafter in this report.

The topography of the ten-mile EPZ is relatively flat except for a range of hills southwest of the site and bluffs and rolling hills west and north of the site along the Columbia River. The land is arid and desert like except where irrigated.

The total resident population of the ten-mile EPZ is estimated at 3,044. Only about 858 of these residents live in Benton County where WNP-2 is located. The other 2,186 residents live across the Columbia River to the east in Franklin County. There are no residents within three miles of the site.

There are no individuals within the ten-mile EPZ confined to facilities such as hospitals, nursing homes, or penal institutions. There are four schools, Edwin Markham Elementary, Country Haven Academy, Country Christian School, and Big River Country School, with a total of approximately 580 students and faculty. Most live within the ten-mile EPZ and are included in the 2,186 resident population estimate for Franklin County.

The transient population of the ten-mile EPZ could total 14,945 depending on the time of the year. This estimate is comprised of 7,926 industrial employees, mostly in Benton County; 4,244 migrant farm workers, mostly in Franklin County; and 2,775 recreationists, mostly along the east bank of the Columbia River and at the Off-Road Vehicle Park on the southern edge of the EPZ.

The land use within the Benton County portion of the EPZ is predominantly vacant except for scattered industrial sites, recreational sites, and some residents on the southern edge of the EPZ. The land use within the Franklin County portion of the EPZ is predominantly diversified agricultural production facilitated by irrigation. There are six recreation areas within the EPZ: Horn Rapids Park, Horn Rapids Off-

Road Vehicle Park and Rattlesnake Mountain Shooting Facility in Benton County; the Wahluke Hunting Area and Ringold Fishing Area in Franklin County; and the Columbia River.

B. Exercise Participants

The following agencies, organizations, and units of government participated in the WNP-2 exercise on September 16, 1998, and/or one of the out-of-sequence drills conducted earlier in 1998.

STATE OF WASHINGTON

Department of Agriculture
Department of Health, Division of Radiation Protection
Military Department, Emergency Management Division
State Patrol

RISK JURISDICTIONS (WASHINGTON STATE)

BENTON COUNTY
- Ben Franklin Transit
- Benton Franklin Health District
- County Emergency Management
- County Prosecutor's Office
- County Public Works
- Kennewick General Hospital
- Kennewick Fire Department
- Richland Fire Department
- Sheriff's Department
- Southeast Communications

FRANKLIN COUNTY
- County Commissioners
- County Emergency Management
- County Public Works
- Our Lady of Lourdes Health Center
- Pasco Fire Department
- Pasco/Franklin County Dispatch
- Pasco Police Department
- Sheriff's Department

SUPPORT JURISDICTIONS (WASHINGTON STATE)

ADAMS COUNTY
Emergency Management (Not evaluated. Participated for training.)

GRANT COUNTY
Emergency Management

WALLA WALLA COUNTY
Emergency Management (Not evaluated. Participated for training.)

YAKIMA COUNTY
Emergency Management

PRIVATE/VOLUNTEER ORGANIZATIONS

American Red Cross, Benton/Franklin Chapter
Country Haven Academy
Organization of Radiation Protection Technicians
Richland Fire Department Explorer Post 2271
Tri-City Amateur Radio Club

STATE OF OREGON

Governor's Office
Emergency Management
Health Division
Office of Energy
State Police

SUPPORT JURISDICTIONS (OREGON STATE)

MORROW COUNTY
Emergency Management (Not evaluated. Participated for training.)

UMITILLA COUNTY
Emergency Management (Not evaluated. Participated for training.)

C. Exercise Timeline

Table 1, on the following page, presents the time at which key events and activities occurred during the WNP-2 exercise on September 16, 1998. Also included are the times that notifications were made to the participating jurisdictions/functional entities. Event times related to the unique scenario for the Yakima County Emergency Operations Center (EOC) have not been included in Table 1.

Table 1. Exercise Timeline

DATE AND SITE: September 16, 1998, WNP-2

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken									
		Washington State EOC	Benton/Franklin Counties EOC	Grant County EOC	Yakima County EOC	Oregon State ECC	EOF/MUDAC at WNP-2	Joint Information Center			
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Alert	0822	0830	0833	0914	0911	0848	N/A	0827			
Site Area Emergency	0954	1003	1004	1020	1023	1012	1004	1006			
General Emergency	1118	1125	1125	1144	N/O	1125	1120	1125			
Simulated Rad. Release Started	0940	1004	1004	1020	N/A	1012	1004	0940			
Simulated Rad. Release Terminated	1341	N/O	N/O	N/O	N/A	N/O	1341	N/O			
Facility Declared Operational		0935	0912	1100	N/A	1030	0952	0859			
Declaration of State of Emergency		1124[D]	N/O	1455	N/A	N/O	1228	1139			
Exercise Terminated		1453	1340	1546	N/A	1255	1452	1452			
Early Precautionary Actions: N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
1st Protective Action Decision		1034	1009[D]					1011			
1st Siren Activation			1016[A]					1013			
1st EAS or EBS Message		1038	1021[A]				1042	1026			
2nd Protective Action Decision		1148	1140[D]					1146			
2nd Siren Activation			1143[A]					1146			
2nd EAS or EBS Message		1213	1148[A]				1200	1207			
3rd Protective Action Decision		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
3rd Siren Activation											
3rd EAS or EBS Message											
KI Decision:		1140[D]	1140				1140				

LEGEND: S - Support Jurisdiction D - Decision Making Jurisdiction A - Activating Jurisdiction N/A - Not Applicable

IV. EXERCISE EVALUATION AND RESULTS

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities that participated in the September 16, 1998, exercise and related out-of-sequence drills. The purpose of the exercise and drills was to test the offsite emergency response capabilities of State and local governments in the ten-mile EPZ surrounding WNP-2.

Each jurisdiction and functional entity was evaluated on the basis of its demonstration of criteria delineated in exercise objectives contained in FEMA-REP-14, REP Exercise Manual, September 1991. Detailed information on the exercise objectives and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.

A. Summary Results of Exercise Evaluation – Table 2

The matrix presented in Table 2, on the following page, presents the status of all exercise objectives from FEMA-REP-14 which were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise objectives are listed by number and the demonstration status of those objectives is indicated by the use of the following letters:

M - Met (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercises)

D - Deficiency assessed

A - ARCA(s) assessed or unresolved ARCA(s) from prior exercise(s)

N - Not Demonstrated (Reason explained in Subsection B)

Table 2. Summary Results of Exercise Evaluation

DATE AND SITE: September 16, 1998, WNP-2

JURISDICTION/FUNCTIONAL ENTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	32	33
WASHINGTON STATE																																
Emergency Operations Center & ACP/TCP	M	M	M	A	M		M		M	M	M	M	M	M			M															
Emergency Operations Facility	M	M	M	M	A		M							M																		
Joint Information Center	M	M		M							M	M	A																			
Radiological Field Monitoring Teams	M			M	M	A		M						M																		
RISK JURISDICTIONS (WASHINGTON STATE)																																
BENTON/FRANKLIN COUNTIES																																
Emergency Operations Center & Field Locations	M	M	M	M	M				M	M	M	M	M	M	M	M	M															
Country Haven Academy				M												M																
Emergency Worker Assistance Center					M													M	M			M										
Kennewick General Hospital					M																M											
Kennewick Fire Department					M															M												
Our Lady of Lourdes Health Center					M																M											
Pasco Fire Department					M															M												
SUPPORT JURISDICTIONS (WASHINGTON STATE)																																
GRANT COUNTY																																
Emergency Operations Center	M	M	A	M							M	A	M																			
YAKIMA COUNTY																																
Emergency Operations Center	M	M	M	M							M	M	M																			
OREGON STATE																																
Emergency Coordination Center	M	M	M	M							M	M	M																		M	M

LEGEND:

M = Met (No Deficiency or ARCAs assessed and no unresolved prior ARCAs)

D = Deficiency(ies) assessed

A = ARCA(s) assessed and/or unresolved prior ARCAs

N = Not Demonstrated

Blank = Not scheduled for demonstration

B. Status of Jurisdictions Evaluated

This subsection provides information on the evaluation of each participating jurisdiction and functional entity in a jurisdiction based format. Presented below is a definition of the terms used in this subsection relative to objective demonstration status.

- **Met** – Listing of the demonstrated exercise objectives under which no Deficiencies or ARCAs were assessed during this exercise and under which no ARCAs assessed during prior exercises remain unresolved.

- **Deficiency** – Listing of the demonstrated exercise objectives under which one or more Deficiencies was assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.

- **Area Requiring Corrective Actions** – Listing of the demonstrated exercise objectives under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises that remain unresolved. Included is a description of the ARCAs assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.

- **Not Demonstrated** – Listing of the exercise objectives that were not demonstrated as scheduled during this exercise and the reason they were not demonstrated.

- **Prior ARCAs - Resolved** – Descriptions of ARCAs assessed during previous exercises that were resolved in this exercise and the corrective actions demonstrated.

- **Prior ARCAs - Unresolved** – Descriptions of ARCAs assessed during prior exercises, which were not resolved in this exercise. Included is the reason the ARCA remains unresolved and recommended corrective actions to be demonstrated before or during the next biennial exercise.

The following are definitions of the two types of exercise issues, which are discussed in this report.

- A **Deficiency** is defined in FEMA-REP-14 as "...an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant."

- An **ARCA** is defined in FEMA-REP-14 as "...an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety."

FEMA has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among FEMA Regions and site-specific exercise reports within each Region. It is also used to expedite tracking of exercise issues on a nationwide basis.

The identifying number for Deficiencies and ARCAs includes the following elements with each element separated by a hyphen (-).

- **Plant Site Identifier** – A two-digit number corresponding to the Utility Billable Plant Site Codes.

- **Exercise Year** – The last two digits of the year the exercise was conducted.

- **Objective Number** - A two-digit number corresponding to the objective numbers in FEMA-REP-14.

- **Issue Classification Identifier** – (D = Deficiency, A = ARCA). Only Deficiencies and ARCAs are included in exercise reports.

- **Exercise Issue Identification Number** – A separate two-digit indexing number assigned to each issue identified in the exercise.

1. WASHINGTON STATE

1.1 Emergency Operations Center (EOC) - This facility is located in Building 20 at Camp Murray, WA.

a. MET: Objectives 1, 2, 3, 5, 7, 9, 10, 11, 12, 13, 14 and 17.

The WA EOC staff were promptly and efficiently mobilized. The new EOC is a multi-level facility consisting of four rooms; the operations room, message center, duty officer's room, and on a mezzanine, the executive decision room. The EOC is outfitted with state-of-the-art communications and operations equipment. Information can be electronically distributed to everyone through the EOC computer network. WA EOC staff, including the Health Physicist and Nuclear Engineer, received and reviewed the available data pertaining to emergency worker exposure projections. Dose and dose rate projections were compared to exposure limits and appropriate advice was provided. The EOC staff also demonstrated the ability to review and concur in county protective action decisions (PAD). WA Public Information staff prepared three accurate and timely news releases. In concurrence with the recommendation received from the WNP-2 Emergency Operations Facility (EOF), the WA Department of Health, Division of Radiation Protection (DOH/DRP) authorized use of potassium iodide (KI) by emergency workers. The State Patrol successfully demonstrated the establishment of a traffic and access control point in Benton County.

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: Objective 4

Issue No.: 69-98-04-A-01

Description: Failure of CRASH telephone. At approximately 1000 hours, when notification of the Site Area Emergency (SAE) emergency classification level (ECL) was received, the CRASH line malfunctioned and was inoperative at the WA EOC until approximately 1330. The Telecommunications Supervisor was able to implement a conference bridge within an hour. This bridge provided the conferencing capabilities of the CRASH line. However, it was a fragile fix. The Operations Coordinator and Executive Room were patched into the bridge, but the connection with the Executive Room was lost. Therefore, the Executive Room did not have the CRASH line or alternate conference line capabilities for most of the exercise. Criterion 1 of REP Objective 4 states that applicable OROs must demonstrate that "Communication systems are available, operate properly, and communication links are established with appropriate locations." (NUREG-0654, F.1, 2)

Recommendation: The telephone company and the Supply System should be consulted to determine the reason for the malfunction and to make the changes

necessary to prevent its reoccurrence. Procedures for establishing alternate conferencing capabilities may also need to be developed and staff trained.

Schedule of Corrective Actions: The telephone company and the Supply System will be consulted to determine the reason for the malfunction and to make changes necessary to prevent its reoccurrence. In addition, training will be conducted regarding the use of the "Quorum Bridge" for conference calling. This was the alternate method that was used in the exercise. Milestone Date: June 1999. This objective and corrective action will be evaluated in, or before, the 2000 Biennial Exercise.

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs – RESOLVED:**

Issue No.: WA 94-8 (Objective 12)

Description: Inaccurate information in news releases.

Corrective Action Demonstrated: Information in the three WA news releases was accurate. The news releases addressed activation of the State EOC, Washington Emergency Information Center (WEIC) telephone number, Governor's emergency proclamation, and establishment of roadblocks. The ARCA is now closed.

Issue No.: 69-96-03-A-03

Description: Classification Notification Forms (CNF) were not promptly faxed to the Oregon State ECC.

Corrective Action Demonstrated: CNFs received at the WA EOC from the licensee were promptly transmitted via facsimile (FAX) to the Oregon State ECC. These FAX transmissions were received by the Oregon ECC 10 to 20 minutes after the CNFs were received at the WA EOC. The ARCA is now closed.

f. **PRIOR ARCAs – UNRESOLVED:** NONE

1.2 **Emergency Operations Facility (EOF)/Meteorology and Unified Dose Assessment Center (MUDAC)** – These functions are located in the basement of the Supply System's Support Facility near WNP-2.

a. **MET:** Objectives 1, 2, 3, 4, 7 and 14.

Mobilization occurred in accordance with the pre-exercise extent-of-play agreement. The EOF/MUDAC facilities are adequate to support the State and local functions. Direction and Control were effectively demonstrated and the appropriate personnel were involved in developing protective action recommendations (PAR). Communications were effective; however, a failure of the EOF CRASH phone system indicates the need for a fall back procedure to complete timely offsite notifications. All State and Local EOF and MUDAC personnel had the appropriate dosimetry, but they did not complete the appropriate record keeping forms associated with the dosimetry. Dose assessment was effectively carried out with timely updates in response to changing plant conditions or new field monitoring data. The KI recommendation and implementation was in accordance with criteria in the plan and procedures.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** Objective 5

Issue No.: 69-98-05-A-02

Description: Some State and local government representatives at the EOF did not follow dosimetry procedures. During the exercise, ten emergency workers picked up dosimetry kits at the Richland Fire Station prior to arriving at the EOF. Two signed out the wrong kits and several failed to complete Implementing Procedure (IP) X-2.3 and IP X-2.1. One worker's dosimeter read 5.0 R when checked out and turned in. The worker neither documented the readings nor followed the instruction to zero the dosimeter or exchange it if it read greater than 5.0 when checked out. (NUREG-0654, K.3.a, N.1.a)

Recommendation: Since no oversight is provided when these emergency workers obtain their dosimetry kits, greater emphasis should be placed on training them to following the instructions included with the kits.

Schedule of Corrective Actions: State responders to the EOF will receive additional emphasis in their training regarding the procedures to be followed when picking up dosimetry kits prior to responding to the EOF. Training will be coordinated with Benton and Franklin Counties and the State of Oregon. Milestone Date: July 1999. This objective and corrective action to be evaluated in, or before, the 2000 Biennial Exercise.

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs – RESOLVED:**

Issue No.: 69-96-03-A-04

Description: Inaccurate and inconsistent statements of PAR on CNF and during CRASH call.

Corrective Action Demonstrated: The CNFs issued during the exercise accurately reflected the PARs and were accurately stated in the verbal briefings on the CRASH calls. The ARCA is now closed.

Issue No.: 69-96-07-A-06

Description: The Mutual Unified Dose Assessment Center (MUDAC) was not a unified operation.

Corrective Action Demonstrated: Although this was a plume-only exercise and protective actions were "automatic," a unified approach to discussion and implementation of the PARs was demonstrated. There were numerous discussions concerning dose projections between the Radiological Emergency Manager, the Assistant Radiological Emergency Manager, Dose Assessment Coordinator and the Dose Assessors. In addition, the excellent coordination and cooperation between the MUDAC, WA DOH/DRP and Supply System Field Monitoring Teams and Field Team Coordinators demonstrated a unified field monitoring effort. The ARCA is now closed.

Issue No.: OR94-2 (Objective 5)

Description: Oregon EOF representative did not wear dosimetry.

Corrective Action Demonstrated: The Oregon representative picked up a dosimetry kit at the Richland Fire Station prior to arrival at the EOF and wore the direct reading dosimeter (DRD). This ARCA is now closed.

f. **PRIOR ARCAs – UNRESOLVED:** NONE

1.3 **Joint Information Center (JIC)** – This facility is located at 3300 George Washington Way, Richland, WA.

a. **MET:** Objectives 1, 2, 4, 11, and 12

The JIC was staffed by representatives of the Supply System, WA Emergency Management, WA DOH/DRP, State of Oregon, Benton/Franklin Counties, and U.S. Department of Energy. The JIC facilities are adequate and appropriate. Minor equipment problems were experienced, but staff worked around the problems effectively. Staff provided information to the news media through a series of briefings and news releases. Staff worked effectively together exchanging information and coordinating news releases before issuing them. Spokespersons effectively answered questions posed by the media, and corrected instances of rumors or misinformation. Providing copies of documents containing additional details supported the press and technical briefings.

Phone teams answered inquiries from the media and the public. Phone teams had access to current information and resource materials. Staff actively assisted one another in researching responses to calls. Responses were accurate and up to date. When necessary, calls were appropriately referred to technical experts or other agencies. Phone teams reported numerous rumors and trends to JIC spokespersons, who addressed them in media briefings.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** Objective 13

Issue No.: 69-98-13-A-03

Description: Rumor control staff did not demonstrate their capability to monitor radio and television broadcasts as called for in JIC Procedures. Furthermore, there was no provision for an exception or alternate method of demonstration in the extent-of-play agreement. (NUREG-0654, G.4.a, c; N.1.a)

Recommendation: At the next exercise, rumor control staff should demonstrate their ability to "...evaluate TV or radio news broadcasts for misinformation and promptly report misinformation to Information Manager, giving station, time and newscaster," per JIC Procedure 13.12.20, B, 2, b.

Schedule of Corrective Actions: Washington State participants at the JIC will coordinate with the Supply System to insure that the television or radio broadcasts are monitored. Milestone Date: December 1999. This objective and corrective action will be evaluated in, or before, the 2000 Biennial Exercise.

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs – RESOLVED:** NONE

f. **PRIOR ARCAs – UNRESOLVED:** NONE

1.4 Radiological Field Monitoring Teams

a. **MET:** Objectives 1, 4, 5, 8 and 14.

In accordance with the exercise extent-of-play agreement, the members of the WA DOH/DRP Field Monitoring Teams were pre-staged in Richland. Field monitoring activities started at 0826 hours, when the team members were notified that an Alert had been declared at WNP-2. The two WA Field Monitoring Teams reported to the Franklin County Emergency Management Office in Pasco, which is the pre-deployment location for the teams. The teams checked their equipment and supplies, issued dosimetry, conducted briefings, and contacted the Field Team Coordinator at the MUDAC. By 1040, both teams had received assignments and had been deployed to the area where the plume was expected. Both field teams encountered the plume. Each team identified and tracked the edges of the plume, took gamma radiation measurements, demonstrated the ability to determine the presence of beta radiation, obtained air samples, and made field measurements of radionuclide concentrations and particulate activity in the airborne plume. The knowledge and skill of the team members contributed to the successful resolution of three ARCAs from previous exercises.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs – RESOLVED:**

Issue No.: WA 94-5 (Objective 5)

Description: No certification of leak check for dosimeters used by WA Field Team.

Corrective Action Demonstrated: The DRDs used by the WA Field Teams were labeled with the date of inspection and records in the field team kits listed dates that leak checks had been accomplished. Inspection and leak check dates were current, within one year, on all of the DRDs. The DRDs were inspected prior to use and one found to have unacceptable drift was not used. The ARCA is now closed.

Issue No.: 69-96-06-A-08

Description: The operational check for an Eberline RO-2 survey meter was performed incorrectly by a WA Field Team member. The instrument was used even though the source response check exceeded the 20% criteria specified on the instrument check worksheets.

Corrective Action Demonstrated: All instruments used by the WA Field Teams were response checked in accordance with the procedures. Initial response check data sheets were included in logs used to response check all instruments. All instruments used in the exercise responded within 20% of the initial readings. The ARCA is now closed.

Issue No.: 69-96-08-A-10

Description: Sample labels on an iodine cartridge and on a particulate filter were not completed according to WA Field Team procedures.

Corrective Action Demonstrated: Field Team members completed the labels on all samples in accordance with the revised WA Field Team procedures. The ARCA is now closed.

f. **PRIOR ARCAs – UNRESOLVED:** Objective 6

Issue No.: 69-96-06-A-09

Description: The MUDAC requested to be notified if radiation readings greater than background were encountered. A WA Field Team encountered elevated radiation readings on Russell Road at 1218 hours, but did not report this information to the Field Team Coordinator (FTC) until 1257. (NUREG-0654, H.12; I.7, 8, 11)

Reason ARCA Unresolved: WA DOH/DRP field monitoring team procedures direct the field team captain to "Report survey ... results to the Field Team Coordinator as soon as possible" (page 8-2). In addition, the procedures direct field team members to "Contact the Field Team Coordinator (FTC) when the microR meter reads 100 microR/h or greater" (page 8-13). At 1137, one of the Field Teams received a reading of 100 microR/hr. At 1202, the FTC contacted the team by cellular telephone and the team then reported that they had encountered the 100 microR/hr plume boundary. Although field teams members in this exercise were more cognizant of the prompt reporting requirement, the 25-minute delay in reporting the 100 microR/hr or greater reading is the reason this issue remains unresolved.

Schedule of Corrective Actions: Field Team training will be revised so that members will receive increased emphasis on the importance of promptly reporting

results to the Field Team Coordinator in the EOF. Milestone Date: July 1999. This objective and corrective action will be evaluated in, or before, the 2000 Biennial Exercise.

2. RISK JURISDICTIONS (WASHINGTON STATE)

2.1 BENTON/FRANKLIN COUNTIES

2.1.1 Emergency Operations Center – This facility is located at 651 Truman Avenue, Richland, WA. Benton and Franklin (B/F) Counties jointly staff this facility in response to WNP-2 emergencies.

a. MET: Objectives 1, 2, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16 and17.

The EOC was activated in a prompt fashion after receiving notification of the emergency at WNP-2. Mobilization of staff was efficient in spite of numerous busy phone lines. The EOC is co-located with the Southeast Communications Center (local 911 service) in a relatively new facility. The facility is more than adequate to support emergency operations for an extended period. The facility has numerous communication systems available. In addition, Radio Amateur Civil Emergency Service (RACES) volunteers were present to assist with communications to the EWACs (simulated) and other response locations. With the exception of a relatively short malfunction of the dedicated telephone line to WNP-2, all communications systems functioned well.

Overall management of the EOC was provided by the Emergency Chairman, assisted by the Emergency Management Director. Key EOC staff contributed to the well-organized approach to the response. Protective action decisions (PAD) were made promptly after suitable discussion among the appropriate staff. The public was alerted and notified promptly after each PAD. EOC staff managed access and traffic control points. Transportation resources were identified and dispatched as needed. Field activities associated with the traffic and access control points included appropriate use of dosimetry and KI.

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs – RESOLVED:

Issue No.: 69-96-02-A-11

Description: Incorrect event information was posted in the B/F Counties EOC.

Corrective Action Demonstrated: Posting of significant event information at the B/F Counties EOC was timely (less than 10 minutes) and accurate. One of two manual status boards was used to display the current ECL and other significant events. Information related to the status of the evacuation was displayed on the other board. A computer screen with the current ECL, event time, meteorological data, and the PAD was displayed on one of two large projection screens in the EOC. This display was also available on the computer monitor at each workstation. The ARCA is now closed.

Issue No.: 69-96-11-A-12

Description: Scripts of Emergency Broadcast System (EBS) messages that had been broadcast were not FAXed to the WA EOC, as required by B/F Counties Procedures.

Corrective Action Demonstrated: The two Emergency Alert System (EAS) messages broadcast to the public (simulated) during the Exercise were promptly FAXed to the WA EOC, the JIC, and the EOF, per B/F Counties Procedures. The ARCA is now closed.

f. **PRIOR ARCAs – UNRESOLVED:** NONE

2.1.2 **Country Haven Academy** – This private school is located at 510 Country Haven Loop, Pasco, WA.

a. **MET:** Objectives 4 and 16

Officials of Country Haven Academy demonstrated the capability to accomplish protective actions for their students and faculty in a timely manner. The demonstration was primarily through an interview with the school's Emergency Management Coordinator (EMC). The private school has a permanent population of 70 students and faculty who reside in homes and dormitories on campus.

As per Benton/Franklin Counties procedures, the school was notified to stand-by following the ALERT notification and later to initiate a precautionary evacuation following the SAE notification. Upon receiving the notification, the school's EMC simulated actions to telephone or visit all faculty members to organize the students at a central location evacuation. The school has sufficient buses and vans to transport the students and faculty to their designated relocation facility in Pasco. The EMC demonstrated his knowledge of the procedure, IP-A-6, including the route to the relocation facility. Faculty bus drivers have not been issued dosimetry since the evacuation should be accomplished in one trip and prior to any release of radiation.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:** NONE

f. **PRIOR ARCAs - UNRESOLVED:** NONE

2.1.3 **Emergency Worker Assistance Center (EWAC), Kiona-Benton High School** - This facility is located at 1205 Horn Drive, Benton City, WA.

a. **MET:** Objectives 5, 18, 19 and 22

The exercise objectives were satisfactorily demonstrated in an out-of-sequence drill on June 27, 1998. Benton County Fire District 2 personnel provided effective overall management of the facility. Fire District personnel and others involved in preparing the facility for use as an EWAC were quick and efficient. The EWAC was declared operational in less than two hours of the notification to activate. WA DOH/DRP staff effectively managed radiological aspects of the facility with monitoring and decontamination activities being performed by a staff of enthusiastic volunteers. America Red Cross staff provided exemplary registration and shelter services. Members of the Tri-Cities Amateur Radio Club provided valuable communication support. The excellent performance by all the participants is especially impressive since the drill was at a new location and portal monitors were used for the first time.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:**

Issue No.: 69-96-18-A-01

Description: Inconsistent vehicle monitoring.

Corrective Action Demonstrated: The Radiation Health Physicists (RHP) assigned each monitor specific portions of the vehicles to survey. These instructions were followed and all vehicles were monitored as specified in the County procedures. The ARCA is now closed.

Issue No.: 69-96-18-A-02

Description: Failure to monitor personal belongings.

Corrective Action Demonstrated: At the initial monitoring location, individuals carrying personal possessions were asked to place them on a table where the items were monitored for contamination. Items found to be below the contamination trigger level were tagged "Monitored" and returned to the owner after the person passed through the portal monitor. The ARCA is now closed.

f. **PRIOR ARCAs - UNRESOLVED:** NONE

2.1.4 **Kennewick General Hospital -** This facility is located at 900 South Auburn, Kennewick, WA, 99301. It is an alternate to Kadlec Medical Center in Richland, WA, which is the primary facility for treating patients with radiological exposure or contamination under the RERPs for WA and B/F Counties.

a. **MET:** Objectives 5 and 21.

The exercise objectives were satisfactorily demonstrated in an out-of-sequence Medical Services (MS-1) Drill on June 25, 1998.

Notification of appropriate hospital staff and off-site organizations was completed within sixteen minutes. The hospital's radiation procedures and radiation kit were utilized to establish a Radiation Emergency Area (REA) within the Emergency Department prior to the patient's arrival. A nurse and a medical technician were issued thermoluminescent dosimeters (TLD) and dressed in protective clothing. The Supply System Health Physics Technician (HPT) assigned inside the REA was also issued a TLD and wore appropriate protective clothing. Additional TLDs and protective clothing were available for the physician and other staff, if needed. Appropriate contamination control measures were practiced throughout the drill and the teamwork of all participants was outstanding.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:** NONE

f. **PRIOR ARCAs - UNRESOLVED:** NONE

2.1.5 **Kennewick Fire Department** - The Kennewick Fire Department is the principal ambulance transportation service for Kennewick General Hospital, Kennewick, WA.

a. **MET:** Objectives 5 and 20.

This Medical Transportation Drill was successfully completed on June 25, 1998, in conjunction with the Medical Services Drill at Kennewick General Hospital. Personnel of Kennewick Fire Department, Stations 1 and 2 demonstrated their abilities and the adequacy of their vehicles, equipment, and procedures for transporting contaminated, injured, or exposed individuals. Through the proper issue and use of dosimeters, the fire department staff also demonstrated the ability to monitor and control their exposure to radiation. On-scene patient assessment, radiation monitoring, patient preparation, and transfer to the ambulance were accomplished in a timely and efficient manner. Appropriate communications with the hospital emergency department staff were demonstrated, including providing patient information and their estimated time of arrival (ETA). Following transfer of the patient to the hospital, the fire department staff correctly described the monitoring and decontamination procedures applicable to the ambulance and to themselves.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:** NONE

f. **PRIOR ARCAs - UNRESOLVED:** NONE

2.1.6 **Our Lady of Lourdes Health Center** - This facility is located at 520 North 4th Avenue, Pasco, WA. It is an alternate to Kadlec Medical Center in Richland, WA, which is the primary facility for treating patients with radiological exposure or contamination under the RERPs for WA and B/F Counties.

a. **MET:** Objectives 5 and 21.

The exercise objectives were satisfactorily demonstrated in an out-of-sequence Medical Services (MS-1) Drill on June 24, 1998.

Notifications to Health Center staff and off-site organizations were completed within 15 minutes. The Health Center's radiation kit and action cards were effectively used to establish a Radiation Emergency Area (REA) within the Emergency Room. Two nurses and a member of the house keeping staff were issued thermoluminescent dosimeters (TLD) and suited in protective clothing. All

of these tasks were accomplished within 26 minutes of the notification and well in advance of the patient's arrival. Two Supply System HPTs reported to the Health Center. One HPT dressed in protective clothing and assisted with patient monitoring and decontamination. Appropriate contamination control procedures were practiced throughout the drill. Excellent teamwork was observed and the dedication and professionalism of all the participants was evident.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:** NONE

f. **PRIOR ARCAs - UNRESOLVED:** NONE

2.1.7 **Pasco Fire Department** - Pasco Fire Department is the principal ambulance transportation service for Our Lady of Lourdes Health Center in Pasco, WA.

a. **MET:** Objectives 5 and 20.

This Medical Transportation Drill was satisfactorily completed on June 24, 1998, in conjunction with the Medical Services Drill for Our Lady of Lourdes Health Center.
Personnel of Pasco Fire Department, Station 81, demonstrated their abilities and the adequacy of their vehicles, equipment, and procedures for transporting contaminated, injured, or exposed individuals. Two paramedics were issued TLDs and DRDs. Patient assessment, radiation monitoring, patient preparation, and transfer to the ambulance were accomplished in a timely and efficient manner. Excellent contamination control procedures were carried out during the entire drill. The paramedics kept the Health Center Emergency Room staff updated with patient information and their ETA. Following transfer of the patient to the hospital, the paramedics correctly described the monitoring and decontamination procedures they would follow for themselves, their equipment and the ambulance.

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:** NONE

f. **PRIOR ARCAs - UNRESOLVED:** NONE

3. SUPPORT JURISDICTIONS (WASHINGTON STATE)

3.1 GRANT COUNTY

3.1.1 Emergency Operations Center – This facility is located at 6500 32nd Avenue, Moses Lake, WA.

a. MET: Objectives 1, 2, 4, 11 and 13.

As a county in the Ingestion Planning Zone of WNP-2, the Grant County Plan calls for staffing the County EOC at a SAE or General Emergency classification. Most staff were mobilized and the EOC declared operational within 40 minutes of the SAE notification to the County Emergency Management Office. The EOC had sufficient space, lighting, telephones, facsimile machines, personal computers, copiers, maps, and displays to support emergency operations. A backup power source is available for the EOC. There were no breakdowns of the primary or backup communications systems. The EOC staff communicated with several organizations including the WA EOC, JIC, and Sheriff's Office.

The Emergency Management Director (EMD), under the authority of the County Commissioner, was effectively in charge of the emergency response. The EMD kept close coordination with the State EOC throughout the exercise. Several briefings were provided by the EMD to keep the EOC staff well informed of the current situation. Grant County required no protective actions.

The Grant County Public Information Officer (PIO) prepared three emergency information releases during the exercise with the approval and authorization of the EMD and the County Commissioner. No media briefings were conducted. However, if needed, a media center could have been established in a large classroom in the Armory portion of the building. The EMD, PIO, and County Commissioner were prepared to conduct media briefings, if needed. The PIO, EMD, and other EOC staff were also available to answer calls from the public related to Grant County.

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: Objective 12

Issue No.: 69-98-12-A-04

Description: A Grant County news release contained inaccurate and confusing information. News Release #2 erroneously stated that the radiological release had moved "outside the 12 mile radius from the plant". In addition, the areas in Benton and Franklin Counties advised to evacuate or shelter-in-place were not clearly described. (NUREG-0654, E.7)

Recommendation: Additional training should be provided to the County PIO staff. The training should emphasis the need to include only factual information in news releases and to coordinate draft releases with the JIC, prior to release. The training should also emphasize that County news releases should only contain detailed information on protective actions applicable to Grant County residence. It is usually best to describe the actions taken by other jurisdictions in more general terms.

In addition, the JIC should establish procedures to more effectively review and comment on draft news releases from jurisdictions that do not have a representative in the JIC.

Schedule of Corrective Actions: Additional training will be provided to Grant County PIO staff, with emphasis on appropriate content and coordination of news releases. The Supply System will revise the JIC procedures to ensure the timely review of draft news releases from all organizations, including those not represented at the JIC. Milestone Date: December 1999. This objective and corrective action will be demonstrated in, or before, the 2000 Biennial Exercise.

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs - RESOLVED:** NONE

f. **PRIOR ARCAs - UNRESOLVED:** Objective 3.

Issue No.: GR95-1

Description: Lack of coordination on shelter-in-place PAD.

Reason ARCA Unresolved: The plume-only scenario for this exercise, with the wind direction moving away from Grant County, provided no opportunity for the County EOC staff to demonstrate a PAD and the associated coordination.

Schedule of Corrective Actions: Training will be provided on the PAD process, including required coordination and decision authority. Milestone Date: December 1999. This objective and corrective action to be evaluated in, or before, the 2000 Biennial Exercise.

3.2 YAKIMA COUNTY

3.2.1 Emergency Operations Center – This facility is located in the basement of the Yakima County Courthouse, 128 North 2nd Street, Yakima, WA.

a. MET: Objectives 1, 2, 3, 4, 11, 12 and 13.

Yakima County is in the Ingestion EPZ only of WNP-2 and, therefore, has few activities during the Plume Phase. In order to provide a greater training opportunity, FEMA Region X approved the County Emergency Manager's request to demonstration their plume phase objectives in a separate scenario involving both plume and ingestion phase activities. This effort provided a very good training experience for the EOC staff. A number of new County personnel gained an initial familiarization with the Yakima County Plan and the Yakima County EOC.

The Emergency Operations Group provided a very good demonstration of their capabilities, the facility, and its resources. A new automated telephone dialing system was utilized to provide the first and second notification for alert and mobilization of emergency personnel. The County Commissioners made the necessary and appropriate protective action decisions and provided excellent feedback to the EOC staff including concerns regarding implementing some pre-planned protective actions. There were two shifts demonstrated at the County EOC and all of the staff involved were very professional and enthusiastic about the exercise activities.

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

4. OREGON STATE

4.1 Emergency Coordination Center (ECC) – This facility is located at 595 Cottage Street , Salem, OR.

a. MET: Objectives 1, 2, 3, 4, 11, 12, 13, 32 and 33.

The Oregon State ECC quickly mobilized in response to the incident at the utility and then proceeded to deal in a professional and competent manner with the issues that could have potentially impacted the people of Oregon. The ECC staff demonstrated their ability to effectively communicate with the utility, the State of Washington, the local media, and the public. The ECC staff also demonstrated their ability to establish an effective rumor control operation.

A new status board clearly defined the positions in the ECC. In addition, new status boards and a revised event log were tailored to the needs of the ECC. The ECC Messenger was effective in making sure everyone had the most current information. It was apparent that Oregon staff had worked hard to address the concerns identified at the dress rehearsal.

Exercise Objectives 32 and 33 were successfully demonstrated in an out-of-sequence drill at the ECC on August 12, 1998.

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs – RESOLVED:

Issue No.: OR 94-7 (Objective 13)

Description: Callers to the Rumor Control staff at the Oregon State ECC were not always provided current information.

Corrective Action Demonstrated: In this exercise, the event information provided to the Telephone Information Center Team for dissemination to the public was consistently current and accurate. The operators' responses to the 44 calls received from the Oregon public and media were consistently professional, courteous, and accurate. The ARCA is now closed.

f. PRIOR ARCAs - UNRESOLVED: NONE

APPENDIX 1
ACRONYMS AND ABBREVIATIONS

The following is a list of the acronyms and abbreviations used in this report.

ACCESS	A Centralized Computerized Enforcement Service System
ACP	Access Control Point
ANL	Argonne National Laboratory
ARC	American Red Cross
ARCA	Area(s) Requiring Corrective Action
ARMs	Area Radiation Monitor
B/F	Benton/Franklin Counties
CCC	Congregate Care Center
CDE	Committed dose equivalent
CFR	Code of Federal Regulations
CNF	Classification Notification Form
CRASH	dedicated emergency telephone line
DOH/DRP	Department of Health/Division of Radiation Protection
DOE	U.S. Department of Energy
DOE-RL	U.S. Department of Energy-Richland
DOT	U.S. Department of Transportation
DRD	Direct Reading Dosimeter
DTL	Deputy Team Leader
EAL	Emergency Action Level
EAS	Emergency Alert System
EBS	Emergency Broadcast System
ECC	Emergency Coordination Center
ECL	Emergency Classification Level
ED	Emergency Director
EDPS	Emergency Dose Projection System
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EO	Emergency Operations
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	U.S. Environmental Protection Agency
EPZ	Emergency Planning Zone
ERO	Emergency Response Organization
ETA	Estimated Time of Arrival
EW	Emergency Worker
EWAC	Emergency Worker Assistance Center

FAX	facsimile
FDA	U.S. Food and Drug Administration
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team
FTC	Field Team Coordinator
HPT	Health Physics Technician
IP	Implementing Procedure
INEEL	Idaho National Engineering and Environmental Laboratory
JIC	Joint Information Center
KI	Potassium Iodide
LOCA	Loss of Coolant Accident
LPCS	Low Pressure Core Spray
MSIV	Main Stream Line Isolation Valves
MUDAC	Meteorology and Unified Dose Assessment Center
NOUE	Notification of Unusual Event
NR	news release
NRC	U.S. Nuclear Regulatory Commission
NUREG-0654	NUREG-0654/FEMA-REP-1, Rev. 1, *"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plant," November 1980*
OR	State of Oregon
OR DOE	Oregon Department of Energy
ORO	Offsite Response Organization
PAD	Protective Action Decision
PAR	Protective Action Recommendation
PIO	Public Information Officer
R	Roentgen
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Service
RCIC	reactor core isolation cooling
RCS	Reactor Coolant System
REA	Radiation Emergency Area
REM	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan

RHP	Radiation Health Physicists
RHR	residual heat removal
RO	Radiological Officer
SAE	Site Area Emergency
SITREP	Situation Report
SM	switch gear – medium
Supply System	Washington Public Power Supply System
TA	Technical Advisor
TCP	Traffic Control Point
TL	Team Leader
TLD	Thermoluminescent Dosimeter
TSC	Technical Support Center
WA	State of Washington
WEIC	Washington Emergency Information Center
WNP-2	Washington Nuclear Plant No. 2

APPENDIX 2

EXERCISE EVALUATORS AND TEAM LEADERS

The following is a list of the personnel who evaluated the WNP-2 exercise on September 16, 1998, and the related out-of-sequence drills. Evaluation Team Leaders are indicated by the letters "(TL)" after their names and "(DTL)" indicates the Deputy Team Leaders. The organization, which each evaluator represents, is indicated by the following abbreviations:

FEMA	-Federal Emergency Management Agency
ANL	-Argonne National Laboratory
DOE-RL	-Department of Energy, Richland (U.S.)
DOT	-Department of Transportation (U.S.)
EPA	-Environmental Protection Agency (U.S.)
FDA	-Food and Drug Administration (U.S. Department of Health and Human Services)
INEEL	-Idaho National Engineering & Environmental Laboratory
NRC	-Nuclear Regulatory Commission

EVALUATION SITE	EVALUATOR	ORGANIZATION
WASHINGTON STATE		
Emergency Operations Center	T. Baldwin (TL)	ANL
	B. Young (DTL)	ANL
	P. Kier (DTL)	ANL
	Jerry Leitch	EPA
	J. Hall	FDA
	R. Graham	USDA
Access/Traffic Control	E. Castle	FEMA
Emergency Operations Facility		
MUDAC	B. Salmonson (TL)	INEEL
	F. Bold	ANL
	B. Sanford	INEEL
State & Local Government	R. Converse (DTL)	ANL
	D. Kunihiro	NRC
Joint Information Center	D. Newsom (TL)	ANL
	S. Bailey	ANL
	G. Lovejoy	DOE-RL
	M. Meshenberg	ANL
Radiological Field Monitoring Teams	J. Cox (TL)	INEEL
	F. Holmes	INEEL

EVALUATION SITE	EVALUATOR	ORGANIZATION
BENTON/FRANKLIN COUNTIES		
Emergency Operations Center	J. Keller (TL)	INEEL
	F. Bretsch	FEMA
	G. Beck	FEMA
	J. Uson	FEMA
Access/Traffic Control	L. Keen	FEMA
EAS Radio Station	L. Moore	FEMA
Pasco/Franklin Co.Dispatch	E. Castle	FEMA
School and School Bus	S. Curtis	ANL
Emergency Worker Assistance Center (June 27, 1998)		
Evacuee/EW Monitoring	J. Keller (TL)	INEEL
ARC Shelter	E. Castle	FEMA
Coordinator's Office	L. Moore	FEMA
Decontamination Monitoring	F. Bold	ANL
	B. Salmonson	INEEL
Vehicle Monitoring	G. Gibeault	INEEL
Kennewick General Hospital & Kennewick Fire Dept., (June 25, 1998)	F. Bold (TL)	ANL
	E. Castle	FEMA
	L. Moore	FEMA
Our Lady of Lourdes Health Center & Pasco Fire Dept., (June 24, 1998)	F. Bold (TL)	ANL
	E. Castle	FEMA
	L. Moore	FEMA
YAKIMA COUNTY EOC	D. Duncan (TL)	ANL
	K. Marsh	FEMA
GRANT COUNTY EOC	A. Teotia (TL)	ANL
	B. Rospenda	ANL
STATE OF OREGON		
State Emergency Coordination Center (ECC)	G. Gibeault (TL)	INEEL
	D. Thompson	INEEL

APPENDIX 3

EXERCISE OBJECTIVES AND EXTENT-OF-PLAY AGREEMENT

This appendix lists the exercise objectives which were scheduled for demonstration in the WNP-2 Biennial Exercise on September 16, 1998, and the related out-of-sequence drills held on June 24, 25, and 27, and August 12, 1998. The extent-of-play agreements approved by FEMA Region X for the exercise and drills are also included in this appendix.

The exercise objectives, contained in FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991, represent a functional translation of the planning standards and evaluation criteria of NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980.

Because the exercise objectives are intended for use at all nuclear power plant sites, and because of variations among offsite plans and procedures, an extent-of-play agreement is prepared by the State and approved by FEMA to provide evaluators with guidance on expected actual demonstration of the objectives.

A. Exercise Objectives

Listed below are the specific radiological emergency preparedness objectives scheduled for demonstration during this exercise and the related out-of-sequence drills.

OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

OBJECTIVE 2: FACILITIES – EQUIPMENT, DISPLAYS, AND WORK ENVIRONMENT

Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

OBJECTIVE 3: DIRECTION AND CONTROL

Demonstrate the capability to direct and control emergency operations.

OBJECTIVE 4: COMMUNICATIONS

Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

OBJECTIVE 5: EMERGENCY WORKER EXPOSURE CONTROL

Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

OBJECTIVE 6: FIELD RADIOLOGICAL MONITORING – AMBIENT RADIATION MONITORING

Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

OBJECTIVE 7: PLUME DOSE PROJECTION

Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

OBJECTIVE 8: FIELD RADIOLOGICAL MONITORING – AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING

Demonstrate the appropriate use of equipment and procedures for the measurement of airborne radioiodine concentrations as low as 10.7 (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

OBJECTIVE 9: PLUME PROTECTIVE ACTION DECISION-MAKING

Demonstrate the capability to make timely and appropriate protective action decisions.

OBJECTIVE 10: ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

OBJECTIVE 12: EMERGENCY INFORMATION – MEDIA

Demonstrate the capability to coordinate the development and dissemination of clear accurate, and timely information to the news media.

OBJECTIVE 13: EMERENCY INFORMATION – RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

OBJECTIVE 14: IMPLEMENTATION OF PROTECTIVE ACTIONS – USE OF POTASSIUM IODIDE FOR EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS, AND THE GENERAL PUBLIC

Demonstrate the capability and resources to implement potassium iodide protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS – SPECIAL POPULATIONS

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS – SCHOOLS

Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency-planning zone.

OBJECTIVE 17: TRAFFIC AND ACCESS CONTROL

Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

OBJECTIVE 18: RECEPTIOIN CENTER – MONITORING, DECONTAMINATION AND REGISTRATION

Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination and registration of evacuees.

OBJECTIVE 19: CONGREGATE CARE

Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

OBJECTIVE 20: MEDICAL SERVICES – TRANSPORTATION

Demonstrate the adequacy of vehicles, equipment, procedures, and personnel for transporting contaminated, injured, or exposed individuals.

OBJECTIVE 21: MEDICAL SERVICES – FACILITIES

Demonstrate the adequacy of equipment, procedures, supplies, and personnel of medical facilities responsible for treatment of contaminated, injured, or exposed individuals.

OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES - MONITORING AND DECONTAMINATION

Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

B. Extent-of-Play Agreement

1. State of Washington

The extent-of-play agreement on the following pages was submitted by WA in preparation for the WNP-2 Biennial Exercise on September 16, 1998. FEMA Region X's approval letter of July 9, 1998, is also included. The extent-of-play agreement includes any significant modification or change in the level of demonstration of the applicable exercise objectives listed in Subsection A of this appendix.

Federal Emergency Management Agency
Region X
130 228th Street, Southwest
Bothell, WA 98021-9796

July 9, 1998

D. W. Coleman, Manager
Regulatory Affairs
Washington Public Power Supply System
P.O. Box 968
Richland, Washington 99352-0968

Attention: Ron Jorgensen

Subject: **1998 WNP-2 Exercise Objectives and Limitations**

Dear Mr. Coleman:

We have completed our review of the exercise objectives and limitations submitted with your letter of June 22, 1998, on behalf of the State and local government participants in the WNP-2 Biennial Exercise scheduled for September 16, 1998. The 24-page document had also been submitted to NRC Region IV on June 10, 1998. Our review was based on the exercise requirements of FEMA's Radiological Emergency Preparedness (REP) program as stated in 44 CFR 350; NUREG-0654, Rev.1/FEMA REP-1; FEMA REP-14, Radiological Emergency Preparedness Exercise Manual; and applicable FEMA Guidance Memorandum.

We approve the objectives and limitations as submitted with the following exceptions.

- **Page 8, Washington State, Objective12,** *ARCA WA94-8, Inaccurate information in News Releases*, should be listed for demonstration of corrective action. This outstanding exercise issue was apparently inadvertently omitted.
- **Page 13, Grant County, Objective 3, Limitation,** The statement that the outstanding ARCA "Will be demonstrated during the DOE exercise (6/98)" is incorrect. Corrective action of this exercise issue should be demonstrated in the Biennial Exercise.
- **Page 21, Exercise Participants, State of Oregon,** It should be noted that Morrow and Umatilla Counties intend to participate for *training only*.

Just a reminder that the exercise scenario should be submitted to us by July 18. The "mini scenarios" for the offsite response organizations, as discussed at the exercise planning meetings, are also due on July 18. The "mini scenarios" may be brief, but appropriate controller injects should be included.

Sincerely,

Larry E. Moore

Larry E. Moore, Chairman
Regional Assistance Committee

cc: (listed on following page)

cc: Gene Bates, NRC RIV
Gail Good, NRC RIV
Nick Goevelinger, OR HD
Mark Henry, WA DOH
Sam Lorenz, Grant Co. EM
Deanna Meggs, OR DOE
Max Messman, WA EM
Lorlee Mizell, Benton Co. EM
Mike Mills, EFSEC
Mary Alice Peterson, WA EM
Linda Ramsey, WA EM
John Scheer, Franklin Co. EM
Don Thompson, Yakima Co. EM
Myra Thompson-Lee, OR EM
Deborah Pringle, PT-EX-RG
Exercise Evaluators
RX RAC Members
George Bickerton, USDA
Dean Kunihiro, NRC RIV
Jerry Leitch, EPA
Ken Miles, FDA-SF
John Hall, FDA-Seattle
Judy Tokarz-Hames, USDOE-RL
Dave Swierkos, USDOT

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
P.O. Box 968 • Richland, Washington 99352-0968

June 22, 1998
GO2-98-104

COPY

RECEIVED
JUN 25 1998
FEMA - REGION X

Docket No. 50-397

L. E. Moore
RAC Chairman
FEMA Region X
130 228th Street SW
Bothell, WA 98011

Dear Mr. Moore:

Subject: **SUPPLY SYSTEM 1998 EXERCISE OBJECTIVES AND LIMITATIONS**

Attached please find a copy of the proposed objectives and limitations for the Supply System's 1998 exercise scheduled for September 16, 1998.

The objectives and limitations for the state and local agencies are being submitted on their behalf (attached). The plans of record for the state and local agencies have or will be submitted directly by the participating agencies.

Should you have any questions or desire additional information regarding this matter, please contact me or Ron Jorgensen at (509) 377-8465.

Respectfully,

D. W. Coleman

D. W. Coleman (Mail Drop PE20)
Manager, Regulatory Affairs

Attachment

WNP-2's BIENNIAL EXERCISE
SEPTEMBER 16, 1998

I. SCOPE

The primary purpose of this Exercise, scheduled for September 16, 1998, is to demonstrate effective management of the emergency and plant reentry operations with efficient coordination between the Supply System emergency centers and participating offsite agencies.

Emergency response actions during the Evaluated Exercise will include:

- prompt recognition and accurate classification of emergency conditions;
- assessment of onsite/offsite radiological consequences, and activities to minimize the offsite consequences;
- notification and mobilization of the emergency response organizations;
- implementation of in-plant corrective actions;
- activation/operation of emergency response facilities and equipment;
- preparation of adequate records to document decisions made and actions taken;
- formulation and recommendation of protective actions for personnel within the area; and
- termination of the emergency condition, including a preliminary discussion of the transition into recovery.

Specific objectives to be demonstrated by the SS WNP-2 Emergency Response Organization and Facilities, and the Offsite Agencies are identified in the following section.

Timely and proper response by the players will contribute to mitigation of the simulated accident consequences. Participants in this exercise will include activation of the Supply System Emergency Operations Facility (EOF), Technical Support Center (TSC), Operations Support Center (OSC), Simulated Control Room, and Joint Information Center (JIC). In addition, several offsite agencies will be participating and activating their emergency facilities. Offsite agency participation will include: Washington State Emergency Operations Center, Washington State Department of Health, Oregon State, Benton/Franklin County Emergency Operations Center, and Co-location by the Nuclear Regulatory Commission.

The objectives and limitations are contained in Section II and have been divided into six sections with a section for the Supply System and each of the participating state and county organizations. Following the objectives for the offsite agencies, a matrix has been included which specifies the objectives to be demonstrated and the location for the demonstration.

Specific guidelines on the conduct of the drill are described in Section III. Included in the guidelines is a descripiton of the general guidelines, participation, safety precautions and simulation guidelines. The simulation guidelines describe objective limitations and extent of play of Supply System emergency response personnel.

II. OBJECTIVES AND LIMITATIONS

As a result of discussions between WNP-2 staff, the Nuclear Regulatory Commission - Region IV (NRC), the Federal Emergency Management Agency - Region X (FEMA), the State of Washington, Benton and Franklin Counties, Yakima County, Grant County and the State of Oregon, the following general objectives and guidelines have been developed for the 1998 Emergency Preparedness Exercise at WNP-2.

A. For WNP-2 (Licensee Emergency Response Organization):

1. Demonstrate the ability to accurately assess the accident conditions and implement effective mitigation strategies.

2. Demonstrate the ability to assess the accident conditions and declare the appropriate emergency classifications.

3. Demonstrate notification of state, county and NRC including verification.

4. Demonstrate the ability to alert, notify, and mobilize emergency response personnel.

5. Demonstrate adequate initial emergency messages with appropriate content.

6. Demonstrate ability to make follow-up messages to offsite authorities which contain appropriate information.

7. Demonstrate the timely and adequate means to warn or advise individuals in the Protected Area and Owner Controlled Area.

8. Demonstrate the use of primary communications means in all areas:

   a. State and local 24 hour emergency response networks.

   b. Contiguous state/local governments within the EPZs.

   c. Federal emergency response.

   d. Plant to EOF, State and Local EOCs, and radiological monitoring teams.

   e. Provision for alerting or activating emergency response personnel in each response organization.

   f. Provisions for communication by the licensee with NRC headquarters, and regional office.

9. Demonstrate reliable primary communication for licensee, local and state response organizations.

10. Demonstrate reliable voice and data communications between CR, TSC and EOF.

11. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

12. Demonstrate reliable voice communications within the CR, TSC, and EOF using effective 3-way communications.

13. Demonstrate the ability of facility managers to direct, coordinate, and control the activities of their facilities.

14. Demonstrate the use of established onsite exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

15. Demonstrate the ability to monitor and control emergency exposures per exposure guidelines.

16. Demonstrate the capability to determine the doses received by emergency personnel.

17. Demonstrate reading of dosimeters at appropriate frequencies and maintenance of records.

18. Demonstrate action levels for determining the need for decontamination.

19. Demonstrate onsite contamination control measures including:

    a. area access control

20. Demonstrate radiological monitoring and decontamination of people evacuated from the site.

    Limitation: Two people will be pre-identified for radiological monitoring and decontamination to respond if a protective area evacuation is directed.

21. Demonstrate for individuals remaining or arriving onsite during the emergency, provision for:

    a. Individual respiratory protection

    b. Protective clothing

    c. KI

22. Demonstrate the ability to make appropriate Protective Action Recommendations to state and local officials.

23. Demonstrate the ability to activate onsite (OSC, TSC) and near site (JIC, EOF) emergency centers in a timely manner.

24. Demonstrate the ability to coordinate and dispatch repair team activities between the TSC and OSC.

25. Demonstrate capability for 24 hour continuous operations (Second shift will be identified, however, no shift change will be demonstrated).

26. Demonstrate the ability to dispatch a representative to principal offsite emergency operations centers.

27. Demonstrate the ability to transfer command and control of the emergency response in a timely manner.

28. Demonstrate the ability to augment the on-shift capabilities in a timely manner.

29. Demonstrate the operation of the JIC and availability of space for the media.

30. Demonstrate the ability to brief the media in a clear, accurate and timely manner.

31. Demonstrate coordinated arrangements for dealing with rumors.

32. Demonstrate the ability of the offsite radiological monitoring field teams to collect and report radiological field data.

33. Demonstrate the ability to perform offsite dose calculations.

34. Demonstrate the ability to show the relationship between effluent monitor readings and offsite exposures for various meteorological conditions:

    a. Estimate integrated dose from the projected and actual dose rates and compare these estimates with the PAGs.

35. Demonstrate the ability to account for all individuals onsite at the time of an emergency and ascertain the names of missing individuals within 30 minutes of an emergency and account for all onsite individuals continuously thereafter.

36. Demonstrate the ability to conduct a post-exercise critique to determine areas requiring additional improvements.

37. Demonstrate preliminary discussions of re-entry and recovery capabilities and availability of procedures.

38. Demonstrate the ability to effectively brief and interact with the NRC response team.

B. Washington State

1. **Mobilization of Emergency Personnel** - Demonstrate the ability to fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

   Limitation: The following Department of Health responders may be prestaged (a-f will have a one hour delay following notification):

   a. Senior State Official
   b. Dose Assessment Coordinator
   c. Dose Assessor
   d. Field Team Coordinator
   e. Technical Spokesperson
   f. State Emergency Management Rep to EOF
   g. Field Teams

2. **Facilities** - Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

   Limitation: None

3. **Direction and Control** - Demonstrate the capability to direct and control emergency operations.

   Limitation: In the event of an actual emergency, the exercise will be terminated.

   Outstanding ARCA 69-96-03-A-03: Classification Notification Forms were not promptly faxed to the State of Oregon.

   Outstanding ARCA 69-96-03-A-04: Neither the hard copy nor the CRASH phone transmission of a CNF from the Supply System to WA, OR, and B/F Counties correctly stated the intended PAR. The verbal misstatement of the PAR was further briefed to all EOF staff, including the WA, OR, and B/F Counties representatives. Although the PAR given was verbally inconsistent, none of the State or County personnel questioned it at that time.

   Corrective action will be demonstrated during this exercise.

4. **Communications** - Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

   Limitation: ACCESS and NAWAS messages will be prepared but not transmitted.

5. **Field Radiological Monitoring** - Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers.

Limitation: Any use of KI will be simulated.

Outstanding ARCA WA94-5: The DRDs had not been labeled to indicate the date of inspection and testing for leakage (WA FMT). Page D.5-6 of REP-14 states, "Those (DRDs) that read in roentgens should be inspected for electrical leakage on an annual basis and recharged or replaced, if necessary."

Corrective action will be demonstrated during this exercise.

Outstanding ARCA WA94-6: Emergency Worker kits, which include Direct Reading Dosimeters, were not issued to the FCP personnel as required by WSDA Radiological Response Procedures. There were no exceptions for issuing dosimeters to WA Emergency Workers in the Extent of Play Agreement.

Washington State Department of Agriculture has revised its procedures. The procedures now direct Franklin County to issue dosimetry to WSDA representatives. The Department of Health no longer has this responsibility. Corrective action will be demonstrated during this exercise.

6. **Field Radiological Monitoring - Ambient Radiation Monitoring** - Demonstrate the appropriate use of equipment and procedures for determining field measurements.

Outstanding ARCA 69-96-06-A-08: The criteria stated on the instrument check worksheets in the FMT kits imply that appropriate source responses should be within 20% of the initial source reading. The source check response for the Eberline RO-2 survey meter (serial number 5313) exceeded the 20% criteria and the FMT used it in their field surveys (Page 21 Final exercise Report-1996).

Corrective action will be demonstrated during the exercise.

Outstanding ARCA 69-96-06-A-09: The MUDAC requested to be notified if radiation readings greater than background were encountered. A WA FMT encountered elevated radiation readings on Russell Road at 1218, but did not report this information to the FTC until 1257.

Corrective action will be demonstrated during this exercise.

7. **Plume Dose Projection** - Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

   Limitation: None

   Outstanding ARCA 69-96-07-A-06: The MUDAC was not operated in a unified fashion in accordance with the plans and procedures. This was observed in all three areas: 1) Field Monitoring Team (FMT) Coordination, 2) Dose Assessment, and 3) PAR creation.

   Corrective action will be demonstrated during the exercise.

8. **Field Radiological Monitoring - Airborne Radioiodine and Particulate Activity Monitoring** - Demonstrate the appropriate use of equipment and procedures for measurement of airborne radioiodine concentrations as low as 10^{-7} (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

   Limitation: The use of silver zeolite cartridges when taking air samples will be simulated. Charcoal cartridges will be provided by the drill control team for use in the air samplers.

   Outstanding ARCA 69-96-08-A-10: Sample labels were not completed as required by procedures. Sample number and the time collected were not indicated for the iodine cartridge as required by procedure. The particulate filter label did not include the sample number and start and end times as required by procedure.

   Corrective action will be demonstrated during this exercise.

9. **Plume Protective Action Decision Making** - Demonstrate the capability to make timely and appropriate protective action decisions (PAD).

   Limitation: None

10. **Alert and Notification**- Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

    Limitation: Sirens and tone alert radios will not be activated. EBS/EAS message transmission will be simulated.

11. **Public Instructions and Emergency Information** - Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

    Limitation: Washington State JIC responders will be staged with a one hour delay.

12. **Emergency Information - Media** - Demonstrate the capability to coordinate the formulation and dissemination of clear, accurate, and timely information to the news media.

    Limitation: Washington State JIC responders will be staged with a one hour delay.

13. **Emergency Information - Rumor Control** - Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

    Limitation: None

14. **Implementation of Protective Actions - Use of KI for Emergency Workers, Institutionalized Individuals, and the General Public** - Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, and institutionalized individuals.

    Limitation: Any use of KI will be simulated.

15-16. Do not apply to this exercise.

17. **Traffic and Access Control** - Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

    Limitation: Only one state traffic control point will be activated.

18-33. Not applicable to this exercise.

C. Benton and Franklin Counties

1. **Mobilization of Emergency Personnel** - Demonstrate the ability to fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

   Limitation: (Criterion 1) Field demonstrations will be staffed consecutively rather than concurrently to allow for maximum use of evaluators and minimize first responder time.

2. **Facilities** - Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

   Outstanding ARCA 69-96-02-A-11, B/F EOC: incorrect event information posted. This objective will be demonstrated during this exercise.

   Limitation: (Criterion 1) Backup power will not be demonstrated as part of this exercise but will be evaluated by interview. No intentional computer failures will be a part of the play.

   Limitation (Criterion 2) The security demonstration will be terminated upon the B/F EOC being declared Operational and with concurrence of evaluation team leader.

3. **Direction and Control** - Demonstrate the capability to direct and control emergency operations.

   Limitation: None

4. **Communications** - Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

   Limitation: (Criterion 1) Amateur radio operators will demonstrate a minimum of one message sent and received. No intentional communication system failures are planned.

5. **Field Radiological Monitoring** - Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers.

   Limitation: (Criterion 3) This Criterion will not be demonstrated in the field, but exercise inputs will drive B/F EOC decisions for evaluation.

6-8. **Not applicable to Benton and Franklin Counties**

9. **Plume Protective Action Decision Making** - Demonstrate the capability to make timely and appropriate protective action decisions (PAD).

   Limitation: None

10. **Alert and Notification-** Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or Local officials.

    Limitation: (Criterion 1) The first sequence will be timed for evaluation. Any failure to meet the demonstration Criterion will be immediately brought to the attention of the players and Lead County Controller. Exercise play will continue and the next sequence will be timed for evaluation and immediate correction of the initial failure. After a successful demonstration, all subsequent notification sequences will be timed but not be subject to evaluation. Siren silent test will be initiated in lieu of actual actuation. An EAS test message will be sent in lieu of an actual message.

    Limitation: (Criterion 2 thru 4) These Criterion do not apply to the B/F Counties.

11. **Public Instructions and Emergency Information** - Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

    Outstanding ARCA 69-96-11-A-12, B/F EOC: EBS messages were not faxed to Washington State EOC. Corrective action will be demonstrated during this exercise.

    Limitation: (Criterion 2) The limitations of the EAS system will be considered when evaluating the content of EAS messages and follow-up materials.

12. **Emergency Information - Media** - Demonstrate the capability to coordinate the formulation and dissemination of clear, accurate, and timely information to the news media.

    Limitation: None

13. **Emergency Information - Rumor Control** - Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

    Limitation: None

14. **Implementation of Protective Actions - Use of KI for Emergency Workers, Institutionalized Individuals, and the General Public** - Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, and institutionalized individuals.

    Limitation: (Criterion 1) No KI will be consumed.

15. **Implementation of Protective Actions - Special Populations** - Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

    Limitation: (Criterion 1) Transportation dependent and special assistant populations will be called during the course of the exercise and update as necessary. Any transportation will be simulated only.

    Limitation: (Criterion 2) Dispatching of transportation resources will be simulated only.

16. **Implementation of Protective Actions - Schools** - Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway Emergency Planning Zone (EPZ).

    Limitation: (Criterion 1) All schools within the Plume Emergency Planning Zone will receive the initial notification. Subsequent notifications will only be made to the participating school.

    Limitation: (Criterion 2) One bus and driver will demonstrate. No students will be transported.

    Limitation: (Criterion 3) A maximum of one school.

17. **Traffic and Access Control** - Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

    Limitation: (Criteria 1-2) Minimum of one field demonstration of an access control point. All other access control points will be simulated. Traffic past an access control point will not be blocked or otherwise impeded at any time by any access control demonstration.

    Limitation: (Criteria 3-4) Simulated only.

18. Not applicable to this exercise.

19. **Congregate Care** - Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

    Limitation: (Criterion 1) EWAC activation simulated only.

20-34. **Not applicable to this exercise, no demonstration.**

D. Grant County

1. **Mobilization of Emergency Personnel** - Demonstrate the ability to fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

   Limitation: Limited staff with partial mobilization.

2. **Facilities** - Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

   Limitation: None

3. **Direction and Control** - Demonstrate the capability to direct and control emergency operations.

   Outstanding ARCA GR-95-1: Lack of coordination on shelter-in-place PAD.

   Limitation: Will be demonstrated during the DOE exercise (6/98).

4. **Communications** - Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

   Limitation: None

5. **Objectives 5-10 are not applicable.**

11. **Public Instructions and Emergency Information** - Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

    Limitation: Message will be written, but broadcast will be simulated.

12. **Emergency Information - Media** - Demonstrate the capability to coordinate the formulation and dissemination of clear, accurate, and timely information to the news media.

    Limitation: None

13. **Emergency Information - Rumor Control** - Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

    Limitation: None

14-33. Objectives 14-33 do not apply to Grant County.

E. Yakima County

1. **Mobilization of Emergency Personnel** - Demonstrate the ability to fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

   Limitation: Personnel will have knowledge of scheduled drill date.

2. **Facilities** - Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

   Limitation EOC will be placed in "Ready" status before drill commences.

3. **Direction and Control** - Demonstrate the capability to direct and control emergency operations.

   Limitation: None

4. **Communications** - Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

   Limitation: Extent of communications will be based on scope of drill

5. **Objectives 5-10 not applicable.**

11. **Public Instructions and Emergency Information** - Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

    Limitation: None

12. **Emergency Information - Media** - Demonstrate the capability to coordinate the formulation and dissemination of clear, accurate, and timely information to the news media.

    Limitation: None

13. **Emergency Information - Rumor Control** - Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

    Limitation: None

14-33. Objectives 14-33 do not apply to Yakima County.

F. State of Oregon

1. **Mobilization of Emergency Personnel** - Demonstrate the ability to fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

   Limitation: Oregon representatives responding to the JIC and EOF will be pre-positioned in Richland. Oregon field teams responding to Morrow and Umatilla counties will be pre-positioned at the Hermiston Safety Center.

2. **Facilities** - Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

   Limitation: The activation and operation of the Morrow County EOC and the Umatilla County EOC will be simulated. Morrow and Umatilla counties will provide communications support only.

   ARCA: M094-1 will not be resolved in 98 exercise. Morrow County will not be activating the EOC.

3. **Direction and Control** - Demonstrate the capability to direct and control emergency operations.

   Limitation: None

4. **Communications** - Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

   Limitation: None

5. **Field Radiological Monitoring** - Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers.

   Limitation: None

   Outstanding ARCA OR 94-2: Failure of Oregon EOF representative to wear dosimetry.

   Corrective action will be demonstrated during this exercise.

6. **Field Radiological Monitoring - Ambient Radiation Monitoring** - Demonstrate the appropriate use of equipment and procedures for determining field measurements.

   Limitation: Field team functions will be conducted for training only (i.e., not for evaluation).

7. Objective 7 does not apply to Oregon.

8. **Field Radiological Monitoring - Airborne Radioiodine and Particulate Activity Monitoring** - Demonstrate the appropriate use of equipment and procedures for measurement of airborne radioiodine concentrations as low as 10^{-7} (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

   Limitation: Field team functions will be conducted for training only (i.e., not for evaluation).

9-10. Objectives 9 and 10 do not apply to Oregon.

11. **Public Instructions and Emergency Information** - Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

   Limitation: None

12. **Emergency Information - Media** - Demonstrate the capability to coordinate the formulation and dissemination of clear, accurate, and timely information to the news media.

   Limitation: None

13. **Emergency Information - Rumor Control** - Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

   Outstanding ARCA OR 94-7, Oregon EOC: Current information was not always provided to callers. Oregon will demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

   Corrective action will be demonstrated during this exercise.

   Limitation: None

14-22. Objectives 14-22 do not apply to Oregon.

23-27. Objectives 23-27 apply to Oregon but will not be demonstrated.

32-33. Unannounced exercises/off-hours exercise. Oregon will demonstrate this prior to the September 16, 1998 WNP-2 exercise. Oregon will coordinate with FEMA.

WNP-2's BIENNIAL EXERCISE
SEPTEMBER 16, 1998

OBJECTIVES TO BE DEMONSTRATED

JURISDICTION/FUNCTIONAL ENTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
WASHINGTON STATE																																	
Emergency Operations Center	X	X	X	X	X		X		X	X	X	X	X	X																			
Emergency Operations Facility/MUDAC	X	X	X	X	X		X		X																								
Joint Information Center	X	X		X							X	X	X																				
Radiological Field Monitoring Teams	X			X	X	X		X						X																			
Access/Traffic Control					X									X			X																
BENTON/FRANKLIN COUNTIES																																	
Emergency Operations Center	X	X	X	X	X				X	X	X	X	X	X	X	X	X																
EBS Radio Station										X	X																						
Franklin County Dispatch	X			X																													
Access/Traffic Control					X									X			X																
School & School Bus					X									X		X																	

B/F Counties received exercise credit for Objectives 32 and 33 as a result of their response to the May 14, 1998 incident at the Hanford Site.

WNP-2's BIENNIAL EXERCISE
SEPTEMBER 16, 1998

OBJECTIVES TO BE DEMONSTRATED

JURISDICTION/FUNCTIONAL ENTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
GRANT COUNTY																																	
Emergency Operations Center	X	X	X	X							X	X	X																				
YAKIMA COUNTY																																	
Emergency Operations Center	X	X	X	X							X	X	X																				
OREGON STATE																																	
OR State Emergency Coordination Center	X	X	X	X	X						X	X	X																				

Grant and Yakima Counties have LIMITED responsibilities related to Objectives 11, 12, and 13.

III. GUIDELINES

To define the scope and extent of participation by organizations and "participants," the following guidelines are established in order to meet the objectives listed in Section II of this manual.

A. General Guidelines

1. The exercise will be conducted on September 16, 1998. Exercise participants will not possess prior knowledge of the exercise start time, and will follow normal routines for that day until mobilized as part of the emergency response.

2. For the exercise, the Control Room staff will operate from the WNP-2 Simulator. Prior to the start of the exercise, a shift briefing will be conducted in the Simulator. The briefing will include "on-shift" exercise participants from Operations, Maintenance, Chemistry, Security, and Radiation Protection. The participants will be briefed on the postulated plant conditions and general guidelines for the conduct of the exercise. Following the briefing, the in-plant shift personnel (non-control room staff) will return to their normal workstations.

3. The exercise will commence with a postulated condition necessitating the declaration of an emergency classification and escalate to require other emergency classification declarations.

4. The exercise scenario contains simulated radiological release and plant conditions which will require consideration of protective actions for the general public.

5. Exercise participants will perform, as appropriate, radiological monitoring and dose assessment activities. Radiological field monitoring teams will be dispatched in order to evaluate, communications and monitoring procedures.

6. The Joint Information Center (JIC) will be staffed and activated. Participation by members of the media will be simulated. News bulletins will be made which depict simulated exercise events. However, no exercise press bulletins will actually be released to the public.

7. If exercise scenario accident conditions warrant evacuation of non-essential site personnel, these actions will be simulated.

NOTE
Care shall be taken to assure individuals who may overhear or observe exercise activities are not misled into believing that an actual emergency situation exists.

8. All emergency communications that are part of the exercise shall be clearly identified as part of the exercise. Verbal communications shall be initiated and closed by the statement "This is a drill." Any use of plant alarms (Station Alarm or Fire Alarm) will be preceded by announcing "This is a drill" over the plant page system. Any exercise documentation transmitted via facsimile machine shall have the word "Drill" stamped on them prior to transmittal.

9. Exercise participation will include the following emergency organizations and facilities:

WNP-2

Onshift Emergency Organization (Normal Operations, Shift Personnel, Chemistry, Radiation Protection, Maintenance, and Security)

Onsite Emergency Organization (TSC and OSC)

Nearsite Emergency Organization (EOF)

Joint Information Center (JIC)

All WNP-2 site personnel are potential participants, since the on-site personnel are expected to report abnormal conditions observed during the exercise, such as smoke, unusual noises, etc. The emergency organization may also call out additional personnel to assist in the response to the simulated emergency conditions.

State of Washington

- Emergency Operations Center
- Department of Health
- Department of Agriculture
- Washington Information Center (WIC)
- State Patrol
- JIC

WNP-2's BIENNIAL EXERCISE
SEPTEMBER 16, 1998

State of Oregon

- Emergency Operations Center
- Radiation Monitoring Teams (Training Only)
- Oregon Department of Energy
- Oregon Health Division
- Morrow County Emergency Management
- Umatilla County Emergency Management

Benton/Franklin County

- Emergency Operations Center
- Benton or Franklin County Sheriff's Department

Department of Energy - RL

- Field Team Support
- JIC Support

Nuclear Regulatory Agency

- Full Site Response

Safety Precautions

1. Personnel will not, in response to the postulated accident conditions, take any action which jeopardizes plant or personnel safety.

2. Actual plant valves, breakers, and controls shall not be manipulated in response to this exercise. The WNP-2 simulator and equipment mockups will be manipulated as necessary to meet specific exercise objectives.

3. In the event an actual emergency occurs during the conduct of this exercise, the drill Emergency Coordinator shall immediately contact the real Shift Manager and coordinate available resources to mitigate the emergency.

   - In the case of an actual fire report, the "operating shift" will provide the initial response.

   - In the case of an actual medical emergency, the "operating shift" will provide the initial response until relieved of that responsibility by the drill shift.

   - The drill clock and exercise activities may be stopped at the discretion of the drill Emergency Coordinator and the real Shift Manager until the actual emergency is assessed and/or under control.

   - Qualified drill participants and drill control team members may be directed to support the real Shift Manager in response to the actual emergency.

4. All personnel who enter RCA will be radiation worker qualified.

5. Exercise personnel will observe all radiological controls. In the event the data presented in this exercise package indicates lower radiation levels than those actually found in the plant, actions for the actual (higher) readings will be followed. In such instances the Health Physics Controller and the Lead Controller will be notified.

6. ALARA concepts will be observed during the course of the exercise. Activities associated with the performance of the exercise will not occur in areas where personnel will receive significant radiation exposures.

D. Simulation Guidelines

NOTE

Simulated exercise events will be initiated as indicated in this exercise scenario package under the direction of the Lead Controller. Since all possible participant reactions to the simulated events can not be anticipated, individual Controllers may initiate simulated situations to preserve the continuity of the overall scenario timeline without prior approval of the Lead Controller. However, individuals are prohibited from creating real or simulated situations which are not provided for in the scenario package and may affect the timeline without prior approval of the Lead Controller.

1. Exercise participants are expected to carry out all responses to the postulated scenario events as if responding to a real emergency. Actions required by Plant Operating Procedures and Emergency Plan Implementing Procedures shall be carried out to the fullest extent possible, unless otherwise directed by the drill control team.

2. Since the exercise will be performed using the WNP-2 Control Room Simulator, exercise plant parameter data and radiological monitoring data will be obtained from the Simulator control panels and the GDS terminals, which will be configured to display the Simulator data.

   If a failure of the Simulator occurs, and the Simulator can not be recovered in a reasonable period of time, either backup data sheets may be used to continue exercise play or at the discretion of the drill coordinator the exercise may be terminated.

3. Portable fire extinguishers or other sealed canisters shall not have the seals broken or safety pins removed in response to the postulated scenario events, except when specifically required by instructions provided in this scenario package.

4. Exercise participants will be expected to obtain the proper tools and equipment necessary in responding to the scenario conditions in order to receive credit for their actions to mitigate the consequences of the simulated conditions.

   The exercise package includes the use of mock-ups to simulate plant equipment. In most situations where mock-ups are available, the exercise participants will be expected to respond to the actual plant equipment and then the drill control team will direct them to the mock-up. Due to the location of some mock-ups, the drill control team may instruct the participants to proceed directly to the mock-up. Specific instructions are provided in the scenario package regarding the use of individual mock-ups.

5. The use of protective clothing will not be simulated by the exercise participants in the plant.

6. To prevent unnecessarily alarming members of the general public, who may observe their activities, the use of protective clothing will be simulated by the radiological field monitoring teams.

7. SCBAs will be donned, as required by the scenario conditions, but, after initial fitting on the face, hose connections will be disconnected.

8. The use of silver zeolite cartridges when taking air samples will be simulated. Charcoal cartridges will be provided by the drill control team for use in the air samplers.

9. The use of potassium iodide for personnel protection will be simulated.

10. If a decision is made to use the Post Accident Sampling System (PASS), sampling activities will be simulated.

11. No plant equipment will actually be removed from service or tagged out in response to the scenario events. However, all necessary authorizations required by procedures are expected to be obtained prior to the simulation of the tag out.

12. Radiological postings as required by the simulated scenario radiation levels will not be simulated. The drill control team will insure that the postings are appropriately labeled to identify them as part of the drill.

13. If consideration is given to relocating the Primary Access Point (PAP) due to the simulated radiological conditions, this activity will be simulated.

14. Onsite response to a medical emergency is not an objective of this exercise.

15. The activation of the Emergency Response Data System (ERDS) will not be simulated. ERDS will be activated to transmit drill data from the Simulator.

16. The use of the Automated Notification System (ANS) will not be simulated. Auto-dialer drill scenarios are provided to be used during the response to the simulated exercise events.

2. State of Oregon, Unannounced/Off-hours Drill

The extent-of-play agreement on the following page was submitted to OR in preparation for the WNP-2 Unannounced/Off-hours Drill conducted on August 12, 1998. The extent-of-play agreement includes any significant modification of change in the level of demonstration of the applicable exercise objectives listed in Subsection A of this appendix.

Federal Emergency Management Agency
Region X
130 228th Street, Southwest
Bothell, WA 98021-9796

July 24, 1998

Deanna Meggs
Oregon Department of Energy
Nuclear Safety Division
625 Marion Street NE
Salem, OR 97310

COPY

Dear Ms. Meggs:

This letter is to confirm our agreement to conduct an unannounced and off-hours drill at the State Emergency Coordination Center (ECC) during the week of August 9, 1998. I understand you have coordinated this with Oregon Emergency Management staff.

All applicable criterion and points of review under FEMA Exercise Objective 32, Unannounced Exercise or Drill, and Objective 33, Off-Hours Exercise or Drill, will be evaluated. The two exercise objectives are part of Oregon State's required objectives to be demonstrated once in each six-year exercise cycle for Washington Nuclear Plant No. 2 (WNP-2).

The FEMA evaluator will arrive at the Oregon ECC between 6:00 p.m. and 4:00 a.m. sometime during the week of August 9. I will provide you with a controller inject to initiate the drill. Our evaluator will contact you to set a time for your call to the Duty Officer at the ECC. Our evaluator will also have a copy of the controller inject to initiate the drill if you are unavailable.

Only one staff member will be required to report to the ECC upon notification. As we agreed, that person is to be the Oregon Department of Energy Duty Officer, who will then make the required notifications from the ECC. All other staff receiving notification of the drill event need only acknowledge the time they were contacted and provide the ECC or DOE Duty Officer with an estimate of the time they could have reported to the ECC or other duty location for the WNP-2 "emergency." The drill will end when all required notifications have been completed.

We will issue a draft report for comments within 30 days of the drill. The final report will be incorporated in the report on the WNP-2 Biennial Exercise, scheduled for September 16, 1998.

If you have any questions or concerns, please call me at (425) 487-4743.

Sincerely,

Larry E. Moore

Larry E. Moore, Chairman
Regional Assistance Committee

COPY

cc: Myra Thompson-Lee, OR EM
Nick Goevelinger, OR HD
Tim Messersmith, SS EP
Joe Keller, INEEL
Gene Bates, NRC, RIV
Vanessa Quinn, PT-EX-RG
D. Pringle, PT-EX-RG

3. Benton/Franklin Counties, EWAC Drill

The extent-of-play agreement on the following pages was submitted by Benton/Franklin Counties in preparation for the EWAC Drill on June 27, 1998. FEMA Region X's approval letter of April 8, 1998, is also included. The drill is considered an out-of-sequence demonstration of REP biennial exercise requirements for WNP-2. The extent-of-play agreement includes any significant modification or change in the level of demonstration of the applicable exercise objectives listed in Subsection A of this appendix.

Federal Emergency Management Agency
Region X
130 228th Street, Southwest
Bothell, WA 98021-9796

April 8, 1998

MEMORANDUM FOR: Susan May, WA-DOH-NSS
Lorlee Mizell, Benton County ESD
John Scheer, Franklin County EMD

COPY

SUBJECT: 1998 EWAC Drill for WNP-2

We have reviewed the proposed objectives, limitations, extent-of-play, timeline and response procedures for the Emergency Worker Assistance Center (EWAC) Drill to be held on Saturday, June 27, 1998, at Kiona-Benton High School. The drill packages sent to us on April 1, 1998, are acceptable with the following changes:

1. Point of Review (POR) #18, Objective 18, is applicable and should be demonstrated; and

2. Exercises Issues 69-96-18-A-01 and 69-96-18-A-02, identified at the Isaac Stevens EWAC Drill in 1996, should be demonstrated for verification of corrective action.

Just a reminder that the drill scenario is due to us by April 28,1998. The scenario package should include copies of the drill messages, CNFs, evacuee profiles, and all other controller injects.

In addition to Eleanor Castle and myself, the evaluators scheduled for this drill are Frank Bold, Argonne, and Joe Keller, Brad Salmonson, Jill Cox and Gerry Gibeault, INEEL/LMITCO. We are looking forward to the drill and the demonstration of your new portal monitors.

Please contact me at (425) 487-4743 or Eleanor at (425) 487- 4697 if you have any questions.

Larry E. Moore

Larry E. Moore, RAC Chairman

cc: Mark Henry, WA-DOH
Terry Hobbs, Brian Calvert – Benton County EM
Timothy Messersmith, Fred Klauss – SS
Mike Mills, EFSEC
Tom Rogers, Franklin County
Maillian Uphaus, Max Messman, Mary Alice Peterson - WA-EM
Gene Bates, NRC RIV
Ihor Husar, Deborah Pringle - FEMA, PT-EX-RG
RX RAC Members

BENTON AND FRANKLIN COUNTIES
WASHINGTON STATE DEPARTMENT OF HEALTH
BENTON/FRANKLIN CHAPTER AMERICAN RED CROSS
KIONA-BENTON SCHOOL DISTRICT
BENTON COUNTY FIRE DISTRICT 2
BENTON COUNTY FIRE DISTRICT 4
TRI-CITY AMATEUR RADIO CLUB
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

RECEPTION /CONGREGATE CARE/EMERGENCY WORKER CENTER
EVALUATED EXERCISE JUNE 27, 1998

I. INTRODUCTION

There are two principal radiological hazards having possible effects within the boundaries of Benton and Franklin Counties, Washington. They are the DOE-RL and contractors Hanford Site clean-up and research operations related to former plutonium production and extraction and the WNP-2 boiling water commercial nuclear power reactor operated by the Washington Public Power Supply System within the boundaries of the Hanford Site. Additional nuclear industrial companies are located within the Counties. As part of their individual Emergency Management programs, Benton and Franklin Counties jointly maintain Radiological Emergency Preparedness Plans for both major radiological hazards. The Counties in cooperation with the Benton/Franklin Chapter American Red Cross, the Tri-City Amateur Radio Club, the Kiona-Benton School District and Benton County Fire Districts 2 and 4 also have established plans and procedures for the receiving, monitoring and sheltering of the general public evacuated from within the Plume Emergency Planning Zone of the WNP-2 Nuclear Power Plant. These Radiological Emergency Preparedness Plans and Standard Operating Procedures establish a method for providing assistance to individuals who are required to leave recreation areas, their homes and businesses and other areas and who may be contaminated with radioactive materials during an emergency involving the local nuclear industry.

The Benton/Franklin Chapter American Red Cross, Kiona-Benton School

RECEIVED
APR 02 1998
FEMA - REGION X

District, Benton County Fire Districts 2 and 4, Tri-City Amateur Radio Club, Washington Public Power Supply System and the Benton and Franklin County Emergency Management agencies have requested FEMA evaluation of a Reception/Congregate Care/Emergency Worker Center Exercise.

There are eight essential tasks to be performed:

Activation of Emergency Worker Assistance Center personnel.

Set up and activation of the Emergency Worker/Assistance Center

Set-up outdoor area, directing signs, vehicle monitoring, vehicle decontamination, hotline, evacuee pathways and reception.

Set-up personnel monitoring and decontamination areas, floor coverings (if any), step-off pads, monitoring equipment, clean evacuee path to dose tracking, contaminated evacuee path to decontamination, decontamination supplies, path from decontamination to dose tracking, path from dose tracking to shelter.

Set-up of the Shelter Area (Red Cross).

Activation of the Emergency Worker Center Administration and Communications Center, Runners, Radio Operators, Information Officer, Switchboard Operator, EWAC Coordinator Assistant.

Reception of vehicles and individuals for monitoring and decontamination.

Registration and sheltering of individuals who utilize the services of the Emergency Worker/Assistance Center.

II. BASIS FOR THE DEMONSTRATION

Procedures adopted by the participating groups provide for the set up and activation of the Emergency Worker/Assistance Center, reception of vehicles and individuals for monitoring and decontamination, registration and sheltering of individuals who utilize the services of the Emergency Worker/Assistance Center.

For this demonstration it shall be assumed that:

An accident has occurred at the WNP-2 commercial nuclear power reactor and has resulted in the release of radioactive materials. The release of radioactive materials resulted in the evacuation of Section 3 of the WNP-2 Plume EPZ.

The number of individuals within Section 3 for purposes of demonstrating the ability to monitor evacuees is 5000.

The applicable sections of existing procedures include:

Benton and Franklin Counties, Fixed Nuclear Facility, Emergency Response Plan IP A-2.

Washington State Department of Social and Health Services, Response Procedures for Radiation Emergencies, Section 9, Attachment B.

American Red Cross standard operating procedures for shelter operations.

III. EXTENT OF PLAY

The demonstration shall not involve the activation of any agencies other than Benton and Franklin County Emergency Management, Benton/Franklin Chapter American Red Cross, Kiona-Benton School District Benton County Fire Districts 2 and 4, health physics technicians and the Tri-City Amateur Radio Club.

The Stand-by portion of the relevant procedures shall not be demonstrated as part of this drill. The personnel involved in the demonstration will be identified prior to the drill date. Radiation Monitors will be pre-staged at the Benton County Emergency Operations Center.

Upon receiving notification that the FEMA evaluators are in place, the play shall begin when the Controller contacts the Emergency Worker Center Coordinator and the DOH controller will dispatch pre-staged DOH personnel from the Emergency Operations Center 20 minutes later. The notification process shall then follow standard operating procedure.

A Controller shall input simulated contamination information at the scene

as needed during exercise play.

The length of the field demonstration shall be limited to the period of time necessary to allow the evaluators to observe the arrival of personnel, setup of the EWAC, monitoring, decontamination and registration of evacuees.

DOH personnel will be pre-staged at the Benton County Emergency Operations Center. DOH survey equipment and portal monitor will be transported to the EWAC from the Emergency Operations Center.

Emergency vehicles involved in the demonstration shall not be required to utilize sirens or travel in excess of the posted speed limit.

Radioactive contamination will be simulated only. Any signs or stickers posting or marking material as radioactive shall also be marked with "DRILL".

The demonstration shall be terminated in the event of an actual emergency requiring the services of any of the personnel elsewhere.

The informational handout will be in both English and Spanish. No other translation or Spanish language activities will be demonstrated.

Benton and Franklin Counties propose the following as the Objectives and Extent of Play for the June 1998 Evaluated EWAC Exercise. No other Objectives shall be demonstrated.

Objective	Points of Review	Limitations
5	All Points of Review	This Objective will be limited to participants on the hot side of the monitoring line. KI will not be demonstrated.
18	All Points of Review except 18.16-18 17	Evaluation of Point of Review 18.24 will be by interview only.

19	All Points of Review	Evaluation of Point of Review 19.9 shall be by interview and inspection of the facility. Evaluation of Point of Review 19.10 shall be by interview and inspection of resource lists and agreements. Evaluation of Point of Review 19.11 shall be by interview and inspection of the facility and shelter layout. Evaluation of Point of Review 19.12 shall be by interview. Evaluation of Point of Review 19.13 shall be by interview and inspection of resource lists and agreements.
22	All Points of Review	Evaluation of Point of Review 22.20 will be by interview only.

IV. TIME LINE

Local Time	Elapsed Time	
0800	00:00	Evaluator in place. Controller injects activation message.
	00:50	Approximate time participants on scene.
	01:20	Approximate time contamination control areas established.
	01:30	Approximate time EWAC activated.
0930	01:30	First evacuees begin to arrive
1130	03:30	Approximate time EWAC demonstration is completed.
1200	04:00	Critique and comments over lunch

V. ATTACHMENTS

Benton and Franklin Counties, Fixed Nuclear Facility, Emergency Response Plan, Implementing Procedures IP O-1, and IP A-2.

Relevant portions of the Washington State Department of Health Response Procedures for Radiation Emergencies.

VI. ADDITIONAL INFORMATION

Anyone needing additional information or having any questions about this evaluated exercise should contact Brian Calvert at (509)628-2600, Tom Rogers at (509)545-3546, Mark Henry at (509)377-3841, or Fred Klauss at 377-8100.

4. Benton/Franklin Counties, MS-1 Medical Drills

The extent-of-play agreement on the following pages was submitted by Benton/Franklin Counties in preparation for the MS-1 Medical Drills on June 24 and 25, 1998. FEMA Region X's April 8, 1998, approval letter is also included. The drills are considered out-of-sequence demonstrations of REP biennial exercise requirements for WNP-2. The extent-of-play agreement includes any significant modification or change in the level of demonstration of the applicable exercise objectives listed in Subsection A of this appendix.

Federal Emergency Management Agency
Region X
130 228th Street, Southwest
Bothell, WA 98021-9796

April 8, 1998

MEMORANDUM FOR: John R. Scheer, Director
Franklin County EM

Lorlee Mizell, Director
Benton County ES

FROM: Larry E. Moore
RAC Chairman

SUBJECT: Medical Services-1 (MS-1) Drills for WNP-2

The response procedures and other documents have been received for the Kennewick and Pasco Fire Departments, Kennewick General Hospital and Our Lady of Lourdes Medical Center Drills to be held on June 24 and 25, 1998.

We have reviewed the documents and agree with the scenario, objectives, and extent-of-play included in your March 12, 1998, transmittal.

There are no outstanding issues associated with these drills. Arrangements have been made for Frank O. Bold to be the Lead Evaluator, and Eleanor and I will assist in the evaluation process.

cc: Timothy Messersmith, Fred Klauss - SS
Max Messman, Maillian Uphaus, Jeff Parsons - WA EM
Mike Mills - EFSEC
Terry Hobbs, Brian Calvert – Benton County EM
Tom Rogers, Franklin County EM
Ihor Hussar, Deborah Pringle – FEMA HQ, PT-EX-RG
Gene Bates - NRC
Suzan May, Mark Henry – WA DOH
FEMA RX RAC Members: George Bickerton, USDA; Dean Kunihiro, NRC; Jerry Leitch, EPA; Judy Tokarz-Hames, DOE-RL; Ken Miles, FDA/CA; John Hall, FDA/WA; Dave Swierkos, DOT

BENTON AND FRANKLIN COUNTIES
EMERGENCY MANAGEMENT OFFICES

509-628-2600 509-545-354

March 12, 1998

PT&E	Act	Info
DIR		
SEC		
SLA		
		✓
TEE		

Mr. Larry Moore
FEMA Region X
Federal Regional Center
130 228th St SW
Bothell, WA 98021-7996

Dear Mr. Moore,

The documents and procedures attached are those which pertain to the Medical Services-1 (MS-1) drills which are being conducted in both Benton and Franklin counties on June 24 and 25 of this year.

A specific listing of these documents is found on page 7 of this package. In brief, the procedures to be used by Kennewick and Pasco Fire Departments, Kennewick General Hospital and Our Lady of Lourdes Medical Center, as well as Emergency Worker Kit Instructions are included. Also attached are the applicable extracts of REP-15.

If you have any comments, questions or suggestions concerning the drills or the content of the procedures enclosed please call;

Brian Calvert, Benton County Emergency Management: (509) 628-2600 or,
Tom Rogers, Franklin County Emergency Management: (509) 545-3546.

Sincerely,

Lorlee Mizell,
Director,
Benton County Emergency Services

John R. Scheer,
Director,
Franklin County Emergency Management

RECEIVED
MAR 27 1998
FEMA - REGION X

Benton County E.M.
651 Truman Ave.
Richland, WA 99352

Franklin County E.M.
502 Boeing St.
Pasco, WA 99301
E-Mail: fcem@3-cities.com

KENNEWICK / PASCO

MEDICAL SERVICES

TRANSPORTATION AND FACILITIES

EVALUATED DRILL

24-25 JUNE 1998

BENTON AND FRANKLIN COUNTIES
OUR LADY OF LOURDES HEALTH CENTER
PASCO FIRE DEPARTMENT
KENNEWICK GENERAL HOSPITAL
KENNEWICK FIRE DEPARTMENT
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

BENTON AND FRANKLIN COUNTIES
OUR LADY OF LOURDES HEALTH CENTER
PASCO FIRE DEPARTMENT
KENNEWICK GENERAL HOSPITAL
KENNEWICK FIRE DEPARTMENT
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

MEDICAL SERVICES TRANSPORTATION AND FACILITIES
EVALUATED EXERCISE 1998

I. INTRODUCTION

There are two principal radiological hazards having possible effects within the boundaries of Benton and Franklin Counties, Washington. They are the DOE-RL and contractors Hanford Site clean-up and research operations related to former plutonium production and extraction and the WNP-2 boiling water commercial nuclear power reactor operated by the Washington Public Power Supply System within the boundaries of the Hanford Site. Additional nuclear industrial companies are located within the Counties. As part of their individual Emergency Management programs, Benton and Franklin Counties jointly maintain Radiological Emergency Preparedness Plans for both major radiological hazards. Pasco and Kennewick Fire Departments and Kennewick General Hospital and Our Lady of Lourdes Health Center have also established Standard Operating Procedures for the initial evaluation, transportation and treatment of contaminated patients with life threatening or other injuries. These Radiological Emergency Preparedness Plans and Standard Operating Procedures establish a method for providing emergency medical services for individuals who may be injured and contaminated during an emergency involving the local nuclear industry.

Our Lady of Lourdes Health Center, Pasco Fire Department, Kennewick General Hospital, Kennewick Fire Department, Washington Public Power Supply System and Benton and Franklin County Emergency Management have requested FEMA evaluation of a Medical Services - Transportation

* Request Health Physics support

Prepare for a contaminated patient

* Follow SOP's with regard to prepping the Emergency Room and staff for a radioactive contaminated patient

Receive and treat the patient

* Decontaminate patients without life threatening conditions and then treat the patient
* Treat patients with life threatening conditions without regard to non-lethal contamination

II. BASIS FOR THE DEMONSTRATION

Procedures adopted by Our Lady of Lourdes Health Center, Pasco Fire Department, Kennewick General Hospital and Kennewick Fire Departments as part of their Standard Operating Procedures provide for the field treatment, transportation and hospital treatment of radioactively contaminated patients.

For this demonstration it shall be assumed that:

An accident has occurred and has resulted in one individual sustaining non-life-threatening injuries and becoming contaminated with radioactive materials.

The ambulance response dispatched to the scene has been notified of possible radioactive contamination at the time of dispatch.

Our Lady of Lourdes Health Center and Pasco Fire Department are the responding agencies for one demonstration and Kennewick General Hospital and Kennewick Fire Department are the responding agencies for the other.

The applicable sections of the fire department Standard Operating Procedures include performance of the following:

Benton and Franklin Counties Radiological Emergency Preparedness Implementing Procedures IP X-2 Emergency Worker

Emergency vehicles involved in the demonstration shall not be required to utilize sirens or travel in excess of the posted speed limit. Passengers in the vehicle used for the transportation demonstration are limited to the number of available seat belts.

Once the area outside the emergency room has been set-up and checked by the evaluator, ropes, signs and barricades can be removed.

The length of the Emergency Room demonstration shall be limited to the period of time necessary to allow the evaluator to observe the arrival of the patient, observe the contamination control measures employed by the Medical Center Staff, observe the simulated decontamination of the patient and simulated injuries, observe the transfer of the patient to a treatment and examination room within the Emergency Department or to another area within the hospital, observe hospital personnel exiting the contaminated area and allow the evaluator to interview the personnel assigned to the Emergency Room demonstration.

Radioactive contamination will be simulated only. Injuries will be simulated only. Only one simulated victim shall be involved. Signs or stickers will be posted indicating that the incident is only a drill.

The demonstration shall be terminated in the event of an actual emergency requiring the services of any of the personnel elsewhere.

The evaluation requested shall be limited to demonstration of the following from REP-14 and REP-15:

> Objective 5; Criterion 1, 2, 4; Points of Review 5.1, 5.2, 5.3, 5.4, 5.5, 5.7, 5.14(1).
>
> Objective 20; Criterion 1, 2, 3, 4, 5 and 6; All Points of Review. However, Points of Review 20.20 and 20.21 shall be evaluated by interview and not by demonstration. Demonstration of Criterion 1 will be limited to determining the presence or absence of beta-gamma contamination. Radioactive contamination will be simulated only. Injuries will be simulated only.
>
> Objective 21; Criterion 1, 2, 3, 4 and 5; All Points of Review.

IV. TIME LINE

Local Time	Elapsed Time	
0900	00:00	Evaluator in place. Controller inject initiates play.
	00:05	Notifications completed and participants in route.
	00:10	Approximate time participants on scene.
	00:20	Approximate time field contamination control areas established and patient evaluated and stabilized.
	00:45	Approximate time Emergency Room contamination control areas established.
1000	01:00	Approximate time field demonstration is completed and patient transport begins.
	01:05	Approximate time patient arrives at the Emergency Room.
1200	03:00	Approximate time Emergency Room demonstration is completed.
1230	03:30	Critique and comments over lunch

V. ATTACHMENTS

Scenario and Initial Message

Benton and Franklin Counties Radiological Emergency Preparedness Implementing Procedures IP X-2 Emergency Worker Kit Instructions.

Kennewick Fire E.O.P. #1.01.40, Emergency Response to Radiological Incidents

Pasco Fire Department E.O.P. 3.01 Ambulance Response to Emergency Worker Center or Other Medical Emergency Involving Radiological Conditions

MS-1 SCENARIO
24, 25 JUNE 1998

BENTON AND FRANKLIN COUNTIES
OUR LADY OF LOURDES HEALTH CENTER
PASCO FIRE DEPARTMENT
KENNEWICK GENERAL HOSPITAL
KENNEWICK FIRE DEPARTMENT
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

INTRODUCTION

This Medical Services Drill involves response to an Emergency Worker Assistance Center. The victim failed to evacuate his farm when advised to do so, sustained a large cut on his leg and a slight shoulder separation, and became contaminated from deposition left by the passing plume. After taking care of his farm, the victim drove himself to the Emergency Worker Assistance Center and informed the personnel at the center that he had injured himself and needed assistance. Health Physics personnel at the Emergency Worker Assistance Center determined that both the victim and his vehicle were contaminated. Since the injuries were not life threatening and the first aid personnel at the center were not trained to treat contaminated injured, the fire department was requested to transport the victim to an Emergency Room prepared to handle contaminated injured patients.

SCENARIO

A General Emergency was declared at the WNP-2 Commercial Power Reactor. Residents in the Plume Emergency Planning Zone down wind were told to evacuate. Emergency Worker Assistance Centers were opened and staffed to monitor the evacuees for radioactive contamination. The victim did not evacuate as requested and was in the process of securing his cattle under cover and protecting their feed and water supplies when he was injured. While attempting to get the last cow into the holding pen, the cow bolted and knocked the victim against a sharp object. The victim sustained a large cut on his leg and also injured his shoulder in the fall. He got the cow into the pen and then drove to the Emergency Worker Assistance Center.

Upon arrival at the Assistance Center, the vehicle and victim were found to be

Benton and Franklin Counties Emergency Management	Date: 24,25 June 1998
Exercise Message	Time: 0900
County Control Cell	No: 1

Message For: Dispatch Center

Purpose: Initiate Drill

Point of Review:

Phone:

Message From: Emergency Worker Assistance Center Health Physics person

Message: This is a drill.

An injured farmer has shown up at the Emergency Worker Assistance Center. He is injured and contaminated with radioactive material. He has a severe cut on his lower leg that appears to have stopped bleeding and he has a very sore shoulder. We would like to have him transported to the hospital for treatment and decontamination. Could you have an ambulance respond to _____ to take him to the hospital?

Time Delivered:

Desired Action: Dispatcher will gather any additional information needed and dispatch EMS to the scene

Observed Action:

Critique:

APPENDIX 4

EXERCISE SCENARIO

This appendix contains a summary of the simulated sequence of events – Exercise Scenario – which was used as the basis for invoking emergency response actions by OROs in the WNP-2 exercise on September 16, 1998.

This exercise scenario was submitted by the State of Washington and Washington Public Power Supply System and approved, following revision, by FEMA Region X on September 11, 1998.

The scenario was implemented with a computerized simulator which provided "live" plant data to the WNP-2 Control Room. Exercise activities for the offsite organizations were initiated by the standard procedural notification methods. Exercise controllers with the field Monitoring Teams and at key offsite locations injected pre-scripted information at the appropriate times. Control cells used pre-scripted messages to simulated the media and concerned citizens. Predetermined weather conditions were also used for the exercise. The morning is overcast with a temperature of 68° F and northwest winds at 3 mph. The forecast is for continued overcast skies, light winds, and a high of 75° F.

SCENARIO SUMMARY

0740 Exercise begins.

0800 A fire in a plant building occurs at the site.

0810 An **ALERT** is declared due to confirmed fire in a safe shutdown building and report of visible damage to equipment in that building (EAL 8.2.A.1). A plant alarm and announcement is made. The ERO is activated and offsite notifications are made.

~0820 State, County, and DOE 24-hour communications centers begin notification of response organizations.

~0845 Responders begin arriving and activating emergency facilities.

~0900 Offsite emergency facilities are fully operational.

0945 A **SITE AREA EMERGENCY** is declared due to an unisolable leak outside containment as indicated by any temperature or radiation exceeding maximum safe operating values (EAL 4.1.S.1), or potential loss of two fission product barriers (9.1.S.2).

Protected Area Evacuation will be simulated. Offsite notifications are performed.

1040 A radiation release to the environment begins. However, the projected levels at this time are below the guidelines for upgrading the emergency classification. Winds carry the plume southeast towards Franklin County. Field teams from WNP-2, DOE, and Washington get involved in tracking and assessing the plume.

1100 A **GENERAL EMERGENCY** is declared due to loss of two fission product barriers with a potential loss of the third (EAL 2.1.G.2 or 9.1.G.2). Public protective actions are determined. Offsite notifications are performed.

1110 Public protective action decision-making and implementation occurs at the County(s).

1200 Lunches provided during this time period.

1320 The release of radiation is stopped by actions taken at the plant. Field teams verify and take samples to determine if contamination is present offsite.

1345 Declassification discussions commence.

1415 Begin transition into recovery at the Plant.

1515 The Evaluated Exercise is terminated. Critique sessions are conducted.

1600 All exercise documentation is gathered. Emergency facilities and equipment are restored to standby conditions.

APPENDIX 5

SUMMARY OF EXERCISE ISSUES by LOCATION, 1998 WNP-2 BIENNIAL EXERCISE

	ISSUE NO.	PAGE NO.	BRIEF DESCRIPTION	SCHEDULE OF CORRECTIVE ACTIONS (All to be demonstrated in, or prior to, the 2000 Biennial Exercise)
WA EOC	69-98-04-A-01	12	Failure of CRASH telephone.	The telephone company and the Supply System will be consulted to determine the reason for the malfunction and to make changes necessary to prevent its reoccurrence. In addition, training will be conducted regarding the use of the "Quorum Bridge" for conference calling. This was the alternate method that was used in the exercise. Milestone Date: June 1999.
EOF/ MUDAC	69-98-05-A-02	14	Some EOF staff did not follow dosimetry procedures.	State responders to the EOF will receive additional emphasis in their training regarding the procedures to be followed when picking up dosimetry kits prior to responding to the EOF. Training will be coordinated with Benton and Franklin Counties and the State of Oregon. Milestone Date: July 1999.
JIC	69-98-13-A-03	16	Media monitoring not demonstrated.	Washington State participants at the JIC will coordinate with the Supply System to ensure that the television or radio broadcasts are monitored. Milestone Date: December 1999.
FMT	69-96-06-A-09	18	WA FMT delayed reporting elevated readings to MUDAC.	Field Team training will be revised so that members will receive increased emphasis on the importance of promptly reporting results to the Field Team Coordinator in the EOF. Milestone Date: July 1999.

APPENDIX 5 (continued)

	ISSUE NO.	PAGE NO.	BRIEF DESCRIPTION	SCHEDULE OF CORRECTIVE ACTIONS (All to be demonstrated in, or prior to, the 2000 biennial exercise.)
Grant Co.	69-98-12-A-04	25	Inaccurate information in News Release.	Additional training will be provided to Grant County PIO staff, with emphasis on appropriate content and coordination of news releases. The Supply System will revise the JIC procedures to ensure the timely review of draft news releases from all organizations, including those not represented at the JIC. Milestone Date: December 1999.
Grant Co.	GR-95-1	26	Lack of coordination on PAD.	Training will be provided on the PAD process, including required coordination and decision authority. Milestone Date: December 1999. (This ARCA remains open from the 1995 WNP-2 Ingestion Counties Drill. The scenario for the 1998 Biennial Exercise did not provide the opportunity to demonstrate the corrective action.)