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Kewaunee / Point Beach Nuclear  
Operated by Nuclear Management Company, LLC

NRC-02-110

December 20, 2002

10 CFR 50, App. E

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Ladies/Gentlemen:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant  
Radiological Emergency Response Plan Implementing Procedures

Pursuant to 10 CFR 50 Appendix E, attached is the latest revisions to the Kewaunee Nuclear Power Plant Radiological Emergency Response Plan Implementing Procedures (EPIPs). These revised procedures supersede the previously submitted procedures.

Pursuant to 10 CFR 50.4, two additional copies of this letter and attachment are hereby submitted to the Regional Administrator, U. S. Nuclear Regulatory Commission, Region III, Lisle, Illinois. As required, one copy of this letter and attachment is also submitted to the Kewaunee Nuclear Power Plant NRC Senior Resident Inspector.

Sincerely,

Thomas Coutu  
Site Vice President

SLC

Attachment

cc - US NRC Senior Resident Inspector, w/attach.  
US NRC, Region III (2 copies), w/attach.  
Electric Division, PSCW, w/o attach.  
QA Vault, wo/attach.

A045

# DOCUMENT TRANSMITTAL

KEWAUNEE NUCLEAR POWER PLANT

FROM: DIANE FENCL - KNPP

TRANSMITTAL DATE 12-19-2002

## EMERGENCY PLAN IMPLEMENTING PROCEDURES TRANSMITTAL FORM

### OUTSIDE AGENCY COPIES (1-20)

S. Campion - NRC Document Control Desk (1)\*  
S. Campion - NRC Region III (2, 3)\*  
S. Campion - NRC Resident Inspector (4) (receives Appx. A phone numbers)\*  
S. Campion - State of Wisconsin (5)\*  
S. Campion - KNPP QA Vault (NRC Letter & Memo Only) (15)\*

Krista Kappelman - PBNP - EP (10)\*  
Craig Weiss - Alliant Energy (11)\*  
Jill Stern - Nuclear Management Company (12)\*

PERSONAL COPIES (21-40) These copies are for the personal use of the listed individuals for reference or emergency response.

J. Bennett (33)

D. Seebart (24)

J. Ferris (13)

T. Coutu (28)

REFERENCE COPIES - CUSTODIAN (41-100) These copies are for general reference by anyone. They are distributed throughout the plant and corporate offices. The named individual is the responsible custodian for the procedures and shall insure they are properly maintained.

NO Library - KNPP (59)  
C. Sternitzky - ATF-2 (44)  
M. Daron - Security Building (46)  
C. Grant - EOF (81)  
C. Grant - OSF (52)  
LOREB - STF (62, 66, 67, 68, 70, 72, 73, 74)  
STF Library (43)

Resource Center - Training (82)  
D. Krall - CR/SS Office (51, 56)  
C. Grant - TSC (50)  
W. Galarneau - RAF (53)  
W. Galarneau - SBF/EMT (54)  
W. Galarneau - RPO (55)  
STF (86, 87, 88)

WORKING COPIES (101-199) These copies of procedures are kept in the areas designated for use in response to an emergency.

W. Galarneau - RAF/RPO (106, 107)  
W. Galarneau - SBF/ENV (108, 109)  
W. Galarneau - SBF/EM Team (110, 111, 111A)  
W. Flint - Cold Chem/HR Sample Room (113)  
S. Zutz - SBF/SEC (114)  
D. Krall - CR/Communicator (116)(Partial Distribution)

Simulator/Communicator (117)  
M. Fencl - Security (121)  
S. Zutz - Security Building (120)  
Ops Admin. (126)  
C. Grant - TSC Response Binder (Partial Distribution)  
C. Grant - EOF Response Binder (Partial Distribution)

Originals to KNPP QA Vault

Please follow the directions when updating your EPIP Manual. WATCH FOR DELETIONS!!! These are controlled procedures and random checks may be made to ensure the manuals are kept up-to-date.

**\*THIS IS NOT A CONTROLLED COPY. IT IS A COPY FOR INFORMATION ONLY.**

**KEWAUNEE NUCLEAR POWER PLANT  
 REVISION OF EMERGENCY PLAN IMPLEMENTING PROCEDURES  
 December 19, 2002**

Please follow the directions listed below. If you have any questions regarding changes made to the EIPs, please contact Dave Seebart at ext-8719.

**EPIP Index, dated 12-19-2002.**

REMOVE		INSERT	
PROCEDURE	REV.	PROCEDURE	REV.
EPIP-AD-11	R	EPIP-AD-11	S
Form EPIPF-AD-11-01	G	Form EPIPF-AD-11-01	H

Return a signed and dated copy of this transmittal letter, within 10 days of transmittal date, to the sender. If you have any questions or comments, please contact Dave Seebart at ext. 8719.

I CERTIFY Copy No. \_\_\_\_\_ (WPS No.) of the Kewaunee Nuclear Power Plant's EIPs has been updated.

\_\_\_\_\_  
 SIGNATURE DATE

Please return this sheet to **DIANE FENCL.**

Diane Fencl  
 Enclosure

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EPIP-AD-02	Emergency Class Determination	AE	11-26-2002
EPIP-AD-03	KNPP Response to an Unusual Event	AF	06-20-2002
EPIP-AD-04	KNPP Response to Alert or Higher	AK	08-20-2002
EP-AD-5	Site Emergency	Deleted	04-27-87
EPIP-AD-05	Emergency Response Organization Shift Relief Guideline	D	05-09-2002
EP-AD-6	General Emergency	Deleted	04-24-87
EPIP-AD-07	Initial Emergency Notifications	AR	06-20-2002
EP-AD-8	Notification of Alert or Higher	Deleted	02-26-96
EP-AD-9	Notification of Site Emergency	Deleted	04-27-87
EP-AD-10	Notification of General Emergency	Deleted	04-27-87
EPIP-AD-11	Emergency Radiation Controls	S	12-19-2002
EP-AD-12	Personnel Assembly and Accountability	Deleted	03-26-94
EP-AD-13	Personnel Evacuation	Deleted	04-25-94
EP-AD-13A	Limited Area Evacuation	Deleted	03-01-83
EP-AD-13B	Emergency Assembly/Evacuation	Deleted	03-01-83
EP-AD-13C	Site Evacuation	Deleted	03-01-83
EP-AD-14	Search and Rescue	Deleted	05-25-94
EPIP-AD-15	Recovery Planning and Termination	P	09-12-2002
EP-AD-16	Occupational Injuries or Vehicle Accidents During Emergencies	Deleted	03-14-97
EP-AD-17	Communications	Deleted	03-05-84
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EPIP-ENV-02	Environmental Monitoring Team Activation	X	10-02-2001
EP-ENV-3A	Environmental Protection Director Actions and Directives	Deleted	09-26-84
EP-ENV-3B	EM Team Actions	Deleted	09-26-84
EPIP-ENV-03C	Dose Projection Using RASCAL Version 2.2 Software	W	08-20-2002
EP-ENV-3D	Revision and Control of ISODOSE II	Deleted	02-14-95
EP-ENV-3E	Manual Determination of X/Q	Deleted	04-24-87
EP-ENV-3F	Manual Determination of X/Q (Green Bay Meteorological Data)	Deleted	05-30-86
EP-ENV-3G	Manual Dose Projection Calculation	Deleted	06-02-89
EP-ENV-3H	Protective Action Recommendations	Deleted	04-13-90
EPIP-ENV-04A	Portable Survey Instrument Use	T	08-20-2002
EPIP-ENV-04B	Air Sampling and Analysis	X	08-20-2002
EP-ENV-4C	Environmental Monitoring Teams	Deleted	04-13-90
EPIP-ENV-04C	Ground Deposition Sampling and Analysis	X	08-20-2002
EPIP-ENV-04D	Plume Tracking for Environmental Monitoring Teams	O	08-20-2002
EP-ENV-5A	LCS-1 Operation	Deleted	04-14-86
EP-ENV-5B	MS-3 Operation	Deleted	04-14-86
EP-ENV-5C	SAM II Operation	Deleted	04-14-86
EP-ENV-5D	PAC-4G (Alpha Counter) Operation	Deleted	04-14-86
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EP-ENV-6	Data Analysis, Dose Projections and Protective Action Recommendations	Deleted	12-21-81
EP-ENV-6	Alternate Sample Analysis and Relocation of EM Team	Deleted	04-14-86
EP-ENV-6A	Relocation of Site Access Facility (Habitability)	Deleted	03-23-84
EP-ENV-6B	SAF Environmental Sample Analysis Relocation	Deleted	03-23-84
EP-ENV-7	Site Access Facility Communications	Deleted	09-26-84
EP-ENV-8	Total Population Dose Estimate Calculations	Deleted	04-14-86
<b>EP-EOF</b>			
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EPIP-EOF-03	EOF Staff Action for Unusual Event	AC	02-06-2002
EPIP-EOF-04	EOF Staff Action for Alert or Higher	AJ	08-06-2002
EP-EOF-5	Corporate Staff Action for Site Emergency	Deleted	04-24-87
EP-EOF-6	Corporate Staff Action for General Emergency	Deleted	04-24-87
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EP-EOF-8	Relocation of EOF	Deleted	03-01-83
EPIP-EOF-08	Continuing Emergency Notifications	X	06-20-2002
EP-EOF-9	Interface with Support Organizations	Deleted	03-05-84
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EP-EOF-10	Notification of General Emergency	Deleted	04-24-87
EPIP-EOF-11	Internal Communication and Documentation Flow	V	11-07-2002
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EP-OP-3	Control Room Communications	Deleted	04-24-87
<b>EP-OSF</b>			
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EPIP-OSF-02	Operational Support Facility Operations	V	11-26-2002
EPIP-OSF-03	Work Orders During an Emergency	P	05-09-2002
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EPIP-OSF-04	Search and Rescue	E	05-23-2002
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EPIP-RET-03	Chemistry Emergency Team	O	02-01-2000
EPIP-RET-03A	Liquid Effluent Release Paths	L	11-29-2001
EP-RET-3B	Post-Accident Reactor Coolant Alternate Sampling Procedure	Deleted	01-25-88

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EP-RET-3E	Post Accident Operation of High Rad Sample Room Inline Multiported Count Cave	Deleted	08-27-85
EPIP-RET-04	SBF Activation	T	10-17-2002
EP-RET-4A	EOF Radiological Monitoring	Deleted	03-10-83
EPIP-RET-04A	SBF Operation/Relocation	Deleted	10-02-2001
EP-RET-4B	Radiological Controls at Site Access Facility	Deleted	07-12-94
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EP-RET-5	Plume Projection	Deleted	09-26-84
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EPIP-SEC-02	Security Force Response to Emergencies	Y	11-14-2002
EP-SEC-2A	Manual Activation of Emergency Sirens	Deleted	04-16-82
EPIP-SEC-03	Personnel Assembly and Accountability	AF	11-26-2002
EPIP-SEC-04	Security Force Actions for Dosimetry Issue	P	10-02-2001

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EPIP-TSC-03	Plant Status Procedure	V	10-09-2001
EPIP-TSC-04	Emergency Physical Changes, Major Equipment Repair	N	05-09-2002
EP-TSC-5	Technical Support Center Communications Equipment	Deleted	04-24-87
EP-TSC-6	Assessment of Reactor Core Damage	Deleted	09-30-86
EPIP-TSC-07	RV Head Venting Time Calculation	J	06-20-2002
EPIP-TSC-08A	Calculations for Steam Release from Steam Generators	O	11-26-2002
EPIP-TSC-08B*	STMRLS Computer Program	G	06-20-2002
EP-TSC-8C*	See EP-TSC-8B	Deleted	04-16-92
* EP-TSC-8B was totally deleted; therefore, EP-TSC-8C was changed to EP-TSC-8B			
EP-TSC-9	Core Damage Assessment Using Released Radionuclides	Deleted	09-30-86
EPIP-TSC-09A*	Core Damage Assessment	J	05-16-2002
EPIP-TSC-09B*	CORE Computer Program	Deleted	05-16-2002
EP-TSC-9C*	See EP-TSC-9B	Deleted	04-16-92
* EP-TSC-9A, Rev. D was totally deleted; therefore, EP-TSC-9B became EP-TSC-9A. EP-TSC-9B was previously EP-TSC-9C.			
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EPIP-APPX-A-06	EP-FIG-005	APPX-A-06-02	Site Boundary Facility - KNP Floor Plan	A	10-31-2000
EPIP-APPX-A-06	EP-FIG-008	APPX-A-06-01	Radiological Analysis Facility - KNP Floor Plan	A	10-31-2000
EPIP-EOF-12 Form EPIPF-EOF-02-01	EP-FIG-009	EOF-12-01	Division Office Building (2nd Floor) Floor Plan	B	10-24-2000
EPIP-APPX-A-06	EP-FIG-012	APPX-A-06-08	State/County Work Area - WPSC D2-1 Floor Plan	C	10-31-2000
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EPIP-APPX-A-06	EP-FIG-022	APPX-A-06-04	EOF - WPSC D2-3 Floor Plan	C	10-30-2001
EPIP-EOF-12	EP-FIG-024	EOF-12-02	Location of JPIC and Media Briefing Center Map	C	06-20-2002
EP-SEC-5	EP-FIG-026	SEC-05-01	KNP Site Map & Evacuation Routes	C	06-20-2002
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EPIP-EOF-12 EPIP-APPX-A-06	EP-FIG-035	APPX-A-06-06	General Office Building - WPSC (1st Floor) Floor Plan	C	10-24-2000
APPX-A-6	EP-FIG-037	---	Floor Plan - Corporate Response Center	Deleted	08-04-98
APPX-A-6	EP-FIG-038	---	Floor Plan - JPIC	Deleted	08-04-98
EPIP-OSF-02	EP-FIG-039	OSF-02-01	High Priority Work	A	10-02-2001
EPIP-OSF-02	EP-FIG-039A	OSF-02-02	Lower Priority Work	A	10-02-2001
EPIP-APPX-A-06	EP-FIG-043	APPX-A-06-10	JPIC - Federal Work Area - WPSC D2-9	B	12-21-2001
EPIP-APPX-A-06	EP-FIG-044	APPX-A-06-07	JPIC - State and County Work Area - WPSC D2-8	C	12-21-2001
EPIP-APPX-A-06	EP-FIG-045	APPX-A-06-05	JPIC - Utility Work Area - WPSC D2-7	C	12-21-2001
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EPIP-APPX-A-02	---	APPX-A-02-01	ERO Call Tree	Deleted	12-04-2001

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EPIP-APPX-A-02	Response Personnel Call List	Deleted	02-06-2002
EPIP-APPX-A-03	Off-Site Telephone Numbers	Deleted	02-06-2002
EPIP-APPX-A-06	KNPP Emergency Response Facility Telephone Numbers	AA	12-21-2001

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AD-11-01	Emergency Radiation Work Permit	H	12-19-2002
AD-18-01	Airborne Radioiodine Dose Accountability and Potassium Iodide Distribution	B	08-06-2002
AD-18-02	Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide	A	02-27-2002
<b>EP-ENV</b>			
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ENV-01-02	EMT Status	B	10-31-2000
ENV-01-03	Meteorological and Plant Status Data	C	12-14-2001
ENV-01-04	EMT Orders/Field Data	B	10-31-2000
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EOF-04-01	SRCL Initial Action Checklist	C	12-14-2001
EOF-04-02	Telephone Communications Log Sheet	A	12-14-2001
EOF-08-03	Fax for Emergency Declaration or Status Updates	G	11-27-2001
EOF-08-05	Plant Emergency Status Report	A	11-27-2001
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EOF-12-01	I.D. Badge Registration Form	G	10-24-2000

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RET-02B-01	Containment Stack Release (Grab Sample)	D	08-06-2002
RET-02B-02	Auxiliary Building Stack (Grab Sample)	D	08-06-2002
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RET-02B-04	Containment Stack (Sping Reading)	C	08-06-2002
RET-02B-05	Steam Release	D	08-06-2002
RET-02B-06	Field Reading (Grab Sample)	B	08-06-2002
RET-04-01	SAM-2 Counting Equipment Worksheet	E	06-12-2001
RET 8.3	Hospital Survey 1	Deleted	06-05-2001
RET 8.4	Hospital Survey 2	Deleted	07-25-97
RET 8.5	Hospital Survey 3	Deleted	07-25-97
RET-08-06	Hospital Survey 4	Deleted	05-23-2002
RET-09-01	Post-Accident TLD Record Sheet	D	04-16-2002
<b>EP-SEC</b>			
SEC-03.01	Emergency Accountability Log	A	03-28-2000
SEC-04-01	Emergency Dosimeter Log	G	06-20-2002
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TSC-01.02	Severe Accident Management Summary and Strategy Recommendation	B	02-06-2002
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TSC-02-03	Emergency Response Data System (ERDS) Link Initiation Checklist	G	05-04-2001
TSC-02-04	TSC Chart Recorder Operation Checklist	D	01-30-2001
TSC-02-05	TSC and OSF De-activation Checklist	A	10-09-2001
TSC-03-01	Plant System Status	L	06-12-2001
TSC-03-02	Plant Equipment Status	L	06-12-2001
TSC-03-03	Environmental Status Board	J	06-12-2001
TSC-03-04	Radiation Monitors	I	01-08-2002
TSC-04-01	Emergency Physical Change Request	G	05-09-2002
TSC-04-02	Emergency Physical Change Safety Review	Deleted	05-09-2002
TSC-04-03	Emergency Physical Change Index	F	08-29-2000
TSC-07-01	Head Venting Calculation	G	06-20-2002
TSC-08A-01	Steam Release Data Sheet (Energy Balance)	H	12-14-2001
TSC-08A-02	Steam Release Calculation Sheet (Energy Balance)	G	12-14-2001
TSC-08A-03	Steam Release Data/Calculation Sheet (Open Valve)	E	12-14-2001
TSC-08A-04	Steam Release Data/Calculation Sheet (STMRLS Program)	D	12-14-2001
TSC-09A-01	Core Exit Thermocouple Data	D	05-16-2002
TSC-09A-02	Fuel Rod Clad Damage Estimate	D	05-16-2002
TSC-09A-03	Fuel Rod Overtemperature Damage Estimate	E	05-16-2002
TSC 9A.4	Core Damage Based on Activity Ratios	Deleted	05-16-2002
TSC-09A-05	Core Damage Assessment (Monitoring Data)	E	05-16-2002
TSC 9A.6	Core Damage Summary	Deleted	05-16-2002

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>		No.	EPIP-AD-11	Rev.	S		
		Title	Emergency Radiation Controls				
		Date	DEC 19 2002	Page 1 of 7			
Reviewed By		William M. Bartelme		Approved By		W. L. Yarosz	
Nuclear Safety Related	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	PORC Review Required	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SRO Approval Of Temporary Changes Required	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

## 1.0 Purpose

- 1.1 This procedure provides instruction for maintaining exposure to emergency workers As Low As Reasonably Achievable (ALARA).

## 2.0 General Notes

### 2.1 Definitions

- 1.1 FEMA - Federal Emergency Management Agency
- 2.1.2 HP - Health Physics
- 2.1.3 PA - Protected Area
- 2.1.4 RCA - Radiologically Controlled Area

## 3.0 Precautions and Limitations

- 3.1 None

## 4.0 Initial Conditions

- 4.1 This procedure shall be implemented upon declaration of an Alert, Site Emergency, General Emergency, or when directed by the Shift Manager or Emergency Director.

## 5.0 Procedure

- 5.1 All emergency personnel are responsible for adhering to the requirements of this procedure.
- 5.1.1 The requirements of the Health Physics Procedure Manual shall be applicable during all radiological emergencies, except as authorized by the Radiological Protection Director (RPD) or Emergency Director (ED).
- 5.1.2 For RCA entries, if any 10CFR20 dose limit is likely to be exceeded, an "Emergency Radiation Work Permit" (ERWP), Form EPIPF-AD-11-01, shall be completed. Otherwise, use an existing Radiation Work Permit (RWP) or fill out a RWP in accordance with NAD-08.03, "Radiation Work Permit."

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5.1.3 A PRIORITY ENTRY can be used for quick action to expedite the entry of emergency response personnel into the RCA in accordance with EPIP-RET-02D, "Emergency Radiation Entry Controls and Implementation."

**Note**

*Dose extensions beyond 10CFR20 limits may be allowed within the dose guidelines specified by EPA-400 (see table before Step 5.2).*

5.1.4 For any entry where an exposure greater than 10CFR20 dose limits is likely, an Authorization For Increased Radiation Exposure (Form HPF-120) shall be completed in accordance with NAD-01.11, "Dosimetry and Personnel Monitoring." All exposures which could exceed 10CFR20 dose limits shall be approved by the ED.

5.1.5 Understand the risks and benefits of taking Potassium Iodide (KI) orally when radioactive iodine levels warrant taking KI.

**10CFR20 RADIATION DOSE LIMITS**

TEDE, ADULT	ANNUAL	5 REM
TODE, ADULT	ANNUAL	50 REM
LDE, ADULT	ANNUAL	15 REM
SDE, SKIN, ADULT	ANNUAL	50 REM
SDE, EXTREMITY, ADULT	ANNUAL	50 REM
DAC-HOUR, ADULT	ANNUAL	2,000 DAC-HOURS

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<b>EPA RADIATION DOSE GUIDELINES (EPA-400)</b>		
<b>Projected Dose (rem) to Emergency Team Workers</b>	<b>Action/Condition</b>	<b>Comments</b>
TEDE < 5 rem  All Other Organs < 50 rem TODE	Control exposure of emergency workers to these levels except for those instances listed below. (Appropriate controls for emergency workers include time limitations, respirators, and stable iodine.)	"All Other Organs" include: Skin Extremities and Thyroid.  Stable iodine may be made available for use where predicted doses exceed 25 rem to the thyroid. Although respirators and stable iodine should be used where effective to control dose to emergency team workers, thyroid dose may not be a limiting factor for lifesaving missions.  For Environmental/Monitoring Teams, refer to RASCAL "Maximum Doses at Selected Distances" output screen. Check bone, lung, and thyroid doses.
TEDE < 10 rem  All Other Organs < 100 rem TODE	Emergency workers' exposure should be controlled below these levels when their mission involves protecting valuable property.	
TEDE < 25 rem  All Other Organs < 250 rem TODE	Emergency workers' exposure should be controlled below these levels when their mission involves life saving or protection of large populations.	
TEDE > 25 rem  All Other Organs > 250 rem TODE	Exposures above these levels to emergency workers will be on a voluntary basis only to persons fully aware of the risks involved.	

- 5.2 The Emergency Director (ED) is responsible for approving all requests for exposure in excess of 10CFR20 dose limits and the distribution of Potassium Iodide.
- 5.3 The Radiological Protection Director (RPD) has the overall responsibility for in-plant personnel monitoring and shall:
- 5.3.1 Evaluate any potential exposure to radiation in excess of 10CFR20 dose limits for approval by the ED (Form HPF-110) in accordance with HP-05.001, "Survey and Sampling Techniques." In the absence of the RPD, the ED may authorize an overexposure after concurrence of the on-shift HP or an In-plant Radiation Emergency Team (IRET) member.
- 5.3.2 In accordance with EPIP-AD-18, "Potassium Iodide Distribution," advise the ED on the need to make thyroid blocking agent (Potassium Iodide, a stable iodine) available to Emergency Response Organization (ERO) members who may be subject to radioiodine intake.

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5.3.3 Review all RWPs and ERWPs in use.

5.3.4 Establish control over radiation, high radiation or contamination areas discovered outside the normal RCA when levels are found to exceed the following:

- 2 mr/hr                      Direct Radiation
- 2,000 DPM/100 cm<sup>2</sup>      Beta-Gamma
- 200 DPM/100 cm<sup>2</sup>        Alpha

5.3.4.1 This control may include:

- a. Roping off and posting additional areas within the plant
- b. Roping off and posting all doors to an entire building
- c. Designating and posting the entire PA as RCA
- d. Establishing roadblocks in conjunction with the ED and Site Protection Director (SPD), and designating the entire area within the roadblocks as RCA

**Note**

*Emergency response personnel reporting to the plant shall **NOT** be required to initial their RWP prior to RCA entry when the RCA is expanded. The RWP shall be initialed prior to making entries at the Radiation Protection Office (RPO) or Radiological Access Facility (RAF). See EPIP-AD-11, Part 5.1, for Emergency RWP (ERWP) requirements.*

5.4 The In-Plant Radiation Emergency Team (IRET) is responsible for performing those activities necessary to implement the purpose of this procedure.

5.4.1 Make radiological assessments of all in-plant areas requiring access during an emergency.

5.4.2 Report in-plant radiological conditions to the RPD.

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- 5.4.3 Determine the projected amount of time in-plant emergency workers will be allowed to remain in any radiation/contaminated area through pre-entry review of:
- a. Projected route exposures
  - b. Measured dose rates and airborne concentrations
  - c. Personnel exposure history
  - d. Projected duration of task
  - e. Information on current plant conditions and the plant area under consideration
- 5.4.4 Provide radiation monitoring coverage for all continuously occupied areas.
- 5.4.5 Perform air sample surveys and direct radiation surveys as directed.
- 5.4.6 Control exposure to airborne radionuclides in accordance with the following:
- a. Use only Self-Contained Breathing Apparatus (SCBA) pressure demand respirators when entering areas of unknown airborne concentrations.
  - b. Limit airborne particulate exposures to < 200 DAC-HOURS to the maximum extent possible.
  - c. Remove any worker from further emergency duties upon exceeding 2,000 DAC-HOURS.
  - d. Assess internal dose by performing whole body counts in accordance with procedure HP-03.008, "Evaluation of Inhalations or Ingestions."

**Note**

*For entry teams originating from the Operational Support Facility (OSF), document the items below (Steps 5.4.7.a. through Step 5.4.7.h.) on Form EPIPF-OSF-03-01.*

- 5.4.7 Review all planned entries with the entry team members and discuss the following:
- a. Potential stress conditions and problems
  - b. Work methods, work location, and description of task
  - c. Number of personnel required and access routes inside the RCA
  - d. Allowable exposure limits, expected doses, stay times
  - e. Tools, equipment, and parts
  - f. Lighting
  - g. Communications requirements
  - h. Abort instructions

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- 5.4.8 As directed, accompany any worker entering an area where radiological conditions are unknown.
- 5.4.9 Remove any individual who has exceeded 10CFR20 dose limits from work involving additional radiation exposure. The worker's exposure record shall be reviewed by the RPD and ED prior to further radiation work. Any further radiation work must be authorized by the ED.
- 5.4.10 As directed, store samples collected post accident in designated storage locations. Liquid, air particulate, and halogen filter samples should be stored in the radioactive waste storage areas of the Auxiliary Building. At the Site Boundary Facility (SBF), shielded drums are available for storage of environmental samples.

## 6.0 Final Conditions

- 6.1 Plant Emergency has been Terminated or Recovery actions have begun and the Emergency Response Manager has suspended the use of EIPs.

## 7.0 References

- 7.1 Kewaunee Nuclear Power Plant Emergency Plan
- 7.2 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 (Nov. 1980)
- 7.3 EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (Oct. 1991)
- 7.4 10CFR20, Code of Federal Regulations
- 7.5 Kewaunee Nuclear Power Plant Health Physics Procedure Manual
- 7.6 KNPP Commitment Tracking System number 97-125, NRC Inspection Report 97-13, Repair Personnel

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**7.7 Implementing Procedures**

- 7.7.1 EPIP-RET-02D, Emergency Radiation Entry Controls and Implementation
- 7.7.2 NAD-08.03, Radiation Work Permit
- 7.7.3 EPIP-AD-18, Potassium Iodide Distribution
- 7.7.4 EPIP Appendix B, Forms
- 7.7.5 HP-03.008, Evaluation of Inhalations or Ingestions
- 7.7.6 NAD-01.11, Dosimetry and Personnel Monitoring
- 7.7.7 HP-05.001, Survey and Sampling Techniques

**8.0 Records**

8.1 The following QA records and non-QA records are identified in this directive/procedure and are listed on the KNPP Records Retention Schedule. These records shall be maintained according to the KNPP Records Management Program.

8.1.1 QA Records

- Emergency Radiation Work Permit, Form EPIPF-AD-11-01

8.1.2 Non-QA Records

None

# EMERGENCY RADIATION WORK PERMIT

RWP NO. \_\_\_\_\_ DATE PREPARED \_\_\_\_\_  
 ALARA NO. \_\_\_\_\_ DCR NO. \_\_\_\_\_ EFFECTIVE \_\_\_\_\_ TO \_\_\_\_\_  
 SYSTEM NO. \_\_\_\_\_ MWR NO. \_\_\_\_\_ ESTIMATED DOSE \_\_\_\_\_  
 ESTIMATED MAN-HOURS \_\_\_\_\_

JOB DESCRIPTION AND LOCATION

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ASSIGNED WORKERS								
NAME	TLD	INIT	NAME	TLD	INIT	NAME	TLD	INIT

CONTACT RADIATION \_\_\_\_\_ mR/hr INSTRUMENT USED \_\_\_\_\_  
 GEN. AREA RADIATION \_\_\_\_\_ mR/hr SERIAL NO. \_\_\_\_\_  
 CONTAMINATION LEVELS \_\_\_\_\_ DPM/100cm<sup>2</sup> HP COVERAGE IS REQUIRED.

INDIVIDUAL REQUIREMENTS			
DOSIMETRY	CLOTHING	CLOTHING	RESPIRATORY
<input type="checkbox"/> DOSIMETER	<input type="checkbox"/> LAB COAT	<input type="checkbox"/> GLOVE LINERS	<input type="checkbox"/> FULL FACE
<input type="checkbox"/> TLD BADGE	<input type="checkbox"/> COVERALLS	<input type="checkbox"/> RUBBER GLOVES	<input type="checkbox"/> IN-LINE
<input type="checkbox"/> _____	<input type="checkbox"/> HOOD/CAP	<input type="checkbox"/> PAPER SUIT	<input type="checkbox"/> SCBA
<input type="checkbox"/> _____	<input type="checkbox"/> SHOE COVERS	<input type="checkbox"/> PLASTIC SUIT	<input type="checkbox"/> _____

### SPECIAL INSTRUCTIONS

WORKERS LISTED MUST READ AND INITIAL RWP PRIOR TO FIRST CONTROLLED AREA ENTRY.  
 WORKERS MUST CHECK CREW DOSE DAILY FOR UP-TO-DATE EXPOSURE LIMITS.  
 PERIODICALLY CHECK YOUR ED MORE FREQUENTLY IN HIGH NOISE AND HIGH RADIATION AREAS.

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#### APPROVAL

WORK SUPERVISOR \_\_\_\_\_  
 R.P.D. \_\_\_\_\_  
 E.D. \_\_\_\_\_

#### TERMINATION

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 COMP.     CANC.     EXP.

REMARKS:

GRID MAP LOC. \_\_\_\_\_ / \_\_\_\_\_  
 \_\_\_\_\_ / \_\_\_\_\_  
 \_\_\_\_\_ / \_\_\_\_\_

FINAL DOSE \_\_\_\_\_ MAN-HOURS \_\_\_\_\_