



Kewaunee Nuclear Power Plant  
N490 Highway 42  
Kewaunee, WI 54216-9511  
920.388.2560

Point Beach Nuclear Plant  
6610 Nuclear Road  
Two Rivers, WI 54241  
920.755.2321

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

NRC-02-034

April 17, 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 (EIPs). 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 J. Webb  
Regulatory Affairs Manager

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, w/attach.

AX45

# DOCUMENT TRANSMITTAL

KEWAUNEE NUCLEAR POWER PLANT

FROM: DIANE FENCL - KNPP

TRANSMITTAL DATE 04-16-2002

## EMERGENCY PLAN IMPLEMENTING PROCEDURES TRANSMITTAL FORM

### OUTSIDE AGENCY COPIES (1-20)

T. Webb - NRC Document Control Desk (1)\*  
T. Webb - NRC Region III (2 & 3)\*  
T. Webb - NRC Resident Inspector (4) (receives Appx. A phone numbers)\*  
T. Webb - State of Wisconsin (5)\*  
T. Webb - KNPP QA Vault w/NRC Letter (15)\*

Krista Kappelman - PBNP - EP (10)\*  
Craig Weiss - Wisconsin Power & Light (11)\*  
Jim Holthaus - 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. Mielke (35)                      J. Ferris (13)                      T. Coutu (28)  
D. Masarik (32)                      D. Seebart (24)                      B. Bartelme (34)

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.

STF (86, 87, 88)                      LOREB - STF (62, 66, 67, 68, 70, 72, 73, 74)  
L. Welch - Fuel Services (65)                      STF Library (43)  
NO Library - KNPP (59)                      Resource Center - Training (82, 89, 94, 131)  
C. Sternitzky - ATF-2 (44)                      D. Schrank - Maintenance Off. (41)  
D. Braun - ATF-3 (45)                      D. Krall - CR/SS Office (51, 56)  
P. Ehlen - I&C Office (42)                      M. Lambert (Nuclear Library) (84)  
M. Daron - Security Building (46)                      H. Kocourek - TSC (50)  
M. Lambert (EOF) (81)                      W. Galarneau - RAF (53)  
H. Kocourek - OSF (52)                      W. Galarneau - SBF/EMT (54)  
C. Hutter - ATF-1 (64)                      W. Galarneau - RPO (55)

WORKING COPIES (101-199) These copies of procedures are kept in the areas designated for use in response to an emergency. These are not complete sets, but contain only those procedures that are used to implement activities in the location where they are kept. Please dispose of any sections distributed that are not tabbed in the indicated copy.

W. Galarneau - RAF/RPO (106, 107)                      D. Krall - CR/Communicator (116)(Partial Distribution)  
W. Galarneau - SBF/ENV (108, 109)                      Simulator/Communicator (117)  
W. Galarneau - SBF/EM Team (110, 111, 111A)                      M. Fencl - Security (121)  
W. Galarneau - Aurora Medical Center (118, 119)                      M. Kuether - Security Building (120)  
W. Flint - Cold Chem/HR Sample Room (113)                      S. VanderBloomen (125)  
M. Kuether - SBF/SEC (114)                      J. Stoeger (126)

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  
 April 16, 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 04-16-2002.**

REMOVE		INSERT	
PROCEDURE	REV.	PROCEDURE	REV.
EPIP-RET-09	K	EPIP-RET-09	L
EPIP FORM RET 9	C	Form EPIPF-RET-09-01	D

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

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

\_\_\_\_\_  
 SIGNATURE

\_\_\_\_\_  
 DATE

Please return this sheet to *DIANE FENCL.*

Diane Fencl

Enclosure

**EMERGENCY PLAN IMPLEMENTING PROCEDURES**

**INDEX**

**DATE: 04-16-2002**

<b>PROC. NO.</b>	<b>TITLE</b>	<b>REV.</b>	<b>DATE</b>
<b>EP-AD</b>			
EPIP-AD-01	Personnel Response to the Plant Emergency Siren	J	01-08-2002
EPIP-AD-02	Emergency Class Determination	AC	11-15-2001
EPIP-AD-03	KNPP Response to an Unusual Event	AE	02-06-2002
EPIP-AD-04	KNPP Response to Alert or Higher	AH	02-27-2002
EP-AD-5	Site Emergency	Deleted	04-27-87
EPIP-AD-05	Emergency Response Organization Shift Relief Guideline	C	06-05-2001
EP-AD-6	General Emergency	Deleted	04-24-87
EPIP-AD-07	Initial Emergency Notifications	AP	02-27-2002
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	R	04-11-2002
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	O	10-30-2001
EP-AD-16	Occupational Injuries or Vehicle Accidents During Emergencies	Deleted	03-14-97
EP-AD-17	Communications	Deleted	03-05-84
EPIP-AD-18	Potassium Iodide Distribution	P	02-27-2002
EPIP-AD-19	Protective Action Guidelines	Q	11-27-2001

**EMERGENCY PLAN IMPLEMENTING PROCEDURES**

**INDEX**

**DATE: 04-16-2002**

<b>PROC. NO.</b>	<b>TITLE</b>	<b>REV.</b>	<b>DATE</b>
EPIP-AD-20	KNPP Response to a Security Threat	B	02-06-2002
<b>EP-ENV</b>			
EPIP-ENV-01	Environmental Monitoring Group Organization and Responsibilities	V	10-02-2001
EPIP-ENV-02	Environmental Monitoring Team Activation	X	10-02-2001
EP-ENV-3A	Environmental Protection Director Actions and Directives	<b>Deleted</b>	09-26-84
EP-ENV-3B	EM Team Actions	<b>Deleted</b>	09-26-84
EPIP-ENV-03C	Dose Projection Using RASCAL Version 2.2 Software	V	10-09-2001
EP-ENV-3D	Revision and Control of ISODOSE II	<b>Deleted</b>	02-14-95
EP-ENV-3E	Manual Determination of X/Q	<b>Deleted</b>	04-24-87
EP-ENV-3F	Manual Determination of X/Q (Green Bay Meteorological Data)	<b>Deleted</b>	05-30-86
EP-ENV-3G	Manual Dose Projection Calculation	<b>Deleted</b>	06-02-89
EP-ENV-3H	Protective Action Recommendations	<b>Deleted</b>	04-13-90
EPIP-ENV-04A	Portable Survey Instrument Use	S	06-15-2000
EPIP-ENV-04B	Air Sampling and Analysis	W	10-09-2001
EP-ENV-4C	Environmental Monitoring Teams	<b>Deleted</b>	04-13-90
EPIP-ENV-04C	Ground Deposition Sampling and Analysis	W	10-09-2001
EPIP-ENV-04D	Plume Tracking for Environmental Monitoring Teams	N	10-02-2001
EP-ENV-5A	LCS-1 Operation	<b>Deleted</b>	04-14-86
EP-ENV-5B	MS-3 Operation	<b>Deleted</b>	04-14-86
EP-ENV-5C	SAM II Operation	<b>Deleted</b>	04-14-86
EP-ENV-5D	PAC-4G (Alpha Counter) Operation	<b>Deleted</b>	04-14-86
EP-ENV-5E	Reuter-Stokes Operation	<b>Deleted</b>	08-27-85

## EMERGENCY PLAN IMPLEMENTING PROCEDURES

### INDEX

DATE: 04-16-2002

PROC. NO.	TITLE	REV.	DATE
EP-ENV-6	Data Analysis, Dose Projections and Protective Action Recommendations	<b>Deleted</b>	12-21-81
EP-ENV-6	Alternate Sample Analysis and Relocation of EM Team	<b>Deleted</b>	04-14-86
EP-ENV-6A	Relocation of Site Access Facility (Habitability)	<b>Deleted</b>	03-23-84
EP-ENV-6B	SAF Environmental Sample Analysis Relocation	<b>Deleted</b>	03-23-84
EP-ENV-7	Site Access Facility Communications	<b>Deleted</b>	09-26-84
EP-ENV-8	Total Population Dose Estimate Calculations	<b>Deleted</b>	04-14-86
<b>EP-EOF</b>			
EP-EOF-1	Corporate Emergency Response Organization	<b>Deleted</b>	03-11-94
EPIP-EOF-02	Emergency Operations Facility (EOF) Activation	Z	11-29-2001
EPIP-EOF-03	EOF Staff Action for Unusual Event	AC	02-06-2002
EPIP-EOF-04	EOF Staff Action for Alert or Higher	AI	02-06-2002
EP-EOF-5	Corporate Staff Action for Site Emergency	<b>Deleted</b>	04-24-87
EP-EOF-6	Corporate Staff Action for General Emergency	<b>Deleted</b>	04-24-87
EP-EOF-7	Notification of Unusual Event	<b>Deleted</b>	04-06-94
EP-EOF-8	Relocation of EOF	<b>Deleted</b>	03-01-83
EPIP-EOF-08	Continuing Emergency Notifications	V	02-27-2002
EP-EOF-9	Interface with Support Organizations	<b>Deleted</b>	03-05-84
EP-EOF-9	Notification of Site Emergency	<b>Deleted</b>	04-24-87
EP-EOF-10	Notification of General Emergency	<b>Deleted</b>	04-24-87
EPIP-EOF-11	Internal Communication and Documentation Flow	U	11-15-2001
EPIP-EOF-12	Media Center/Emergency Operation Facility/Joint Public Information Center Security	P	07-19-2001

**EMERGENCY PLAN IMPLEMENTING PROCEDURES**

**INDEX**

**DATE: 04-16-2002**

<b>PROC. NO.</b>	<b>TITLE</b>	<b>REV.</b>	<b>DATE</b>
<b>EP-OP</b>			
EP-OP-1	Control Room Emergency Organization	<b>Deleted</b>	04-24-87
EP-OP-2	Emergency Control Room Activation for Emergency Response	<b>Deleted</b>	04-24-87
EP-OP-3	Control Room Communications	<b>Deleted</b>	04-24-87
<b>EP-OSF</b>			
EP-OSF-1	Operation Support Facility Emergency Organization	<b>Deleted</b>	04-24-87
EPIP-OSF-02	Operational Support Facility Operations	U	02-06-2002
EPIP-OSF-03	Work Requests During an Emergency	O	09-27-2001
EP-OSF-4	Operational Support Facility Communications	<b>Deleted</b>	04-24-87
EPIP-OSF-04	Search and Rescue	D	09-12-2000
<b>EP-RET</b>			
EP-RET-1	Radiation Emergency Team Organization	<b>Deleted</b>	04-16-96
EPIP-RET-02	In-Plant Radiation Emergency Team	U	11-27-2001
EPIP-RET-02A	Radiation Protection Office/Radiological Analysis Facility (RPO/RAF) Activation	T	11-29-2001
EPIP-RET-02B	Gaseous Effluent Sample and Analysis	R	04-11-2002
EP-RET-2C	Containment Air Sampling and Analysis	<b>Deleted</b>	03-01-83
EPIP-RET-02D	Emergency Radiation Entry Controls and Implementation	M	06-12-2001
EP-RET-2E	Handling of Injured Personnel	<b>Deleted</b>	04-16-96
EP-RET-2F	Personnel Decontamination	<b>Deleted</b>	04-13-90
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	<b>Deleted</b>	01-25-88

**EMERGENCY PLAN IMPLEMENTING PROCEDURES**

**INDEX**

**DATE: 04-16-2002**

<b>PROC. NO.</b>	<b>TITLE</b>	<b>REV.</b>	<b>DATE</b>
EPIP-RET-03C	Post Accident Operation of the High Radiation Sample Room	P	01-15-2002
EPIP-RET-03D	Containment Air Sampling Analysis Using CASP	N	01-15-2002
EP-RET-3E	Post Accident Operation of High Rad Sample Room Inline Multiported Count Cave	<b>Deleted</b>	08-27-85
EPIP-RET-04	SBF Activation	R	10-02-2001
EP-RET-4A	EOF Radiological Monitoring	<b>Deleted</b>	03-10-83
EPIP-RET-04A	SBF Operation/Relocation	<b>Deleted</b>	10-02-2001
EP-RET-4B	Radiological Controls at Site Access Facility	<b>Deleted</b>	07-12-94
EP-RET-4C	Site Radiological Monitoring	<b>Deleted</b>	07-12-94
EP-RET-4D	SAM-II Operation	<b>Deleted</b>	07-12-94
EP-RET-5	Plume Projection	<b>Deleted</b>	09-26-84
EPIP-RET-05	Site Boundary Dose Rates During Controlled Plant Cooldown	H	10-09-2001
EP-RET-5A	Plume Projection	<b>Deleted</b>	04-27-87
EP-RET-6	Dose Projection	<b>Deleted</b>	04-24-87
EP-RET-7	Radiological Analysis Facility/Radiation Protection Office Communications	<b>Deleted</b>	04-24-87
EPIP-RET-08	Contamination Control of the Aurora Medical Center	P	10-30-2001
EPIP-RET-09	Post-Accident Population Dose	L	04-16-2002
<b>EP-SEC</b>			
EP-SEC-1	Security Organization	<b>Deleted</b>	04-24-87
EPIP-SEC-02	Security Force Response to Emergencies	X	02-06-2002
EP-SEC-2A	Manual Activation of Emergency Sirens	<b>Deleted</b>	04-16-82
EPIP-SEC-03	Personnel Assembly and Accountability	AC	12-14-2001
EPIP-SEC-04	Security Force Actions for Dosimetry Issue	P	10-02-2001

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

## INDEX

DATE: 04-16-2002

PROC. NO.	TITLE	REV.	DATE
EP-SEC-5	Security Force Response to the EOF	Deleted	07-28-88
EPIP-SEC-05	Personnel Evacuation	F	07-05-2001
<b>EP-TSC</b>			
EPIP-TSC-01	Technical Support Center Organization and Responsibilities	Q	02-06-2002
EPIP-TSC-02	Technical Support Center Activation	T	02-06-2002
EPIP-TSC-03	Plant Status Procedure	V	10-09-2001
EPIP-TSC-04	Emergency Physical Changes, Major Equipment Repair	M	10-02-2001
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	I	10-19-2001
EPIP-TSC-08A	Calculations for Steam Release from Steam Generators	N	12-14-2001
EPIP-TSC-08B*	STMRLS Computer Program	F	10-02-2001
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
EP-TSC-9A*	Core Damage Assessment	I	02-23-99
EPIP-TSC-09B*	CORE Computer Program	J	10-02-2001
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.			
EPIP-TSC-10	Technical Support for IPEOPs	J	02-27-2002

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

## INDEX

DATE: 04-16-2002

FIGURES					
EPIP	FIG #	Figure EPIPPG	DESCRIPTION	REV.	DATE
EP-SEC-5 EPIP-APPX-A-06	EP-FIG-003	APPX-A-06-03	Technical Support Center - KNP Floor Plan	B	06-12-2001
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
EPIP-APPX-A-06	EP-FIG-013	APPX-A-06-09	NRC Work Area - WPSC D2-4 Floor Plan	A	10-31-2000
EPIP-AD-19	EP-FIG-014	AD-19-01	Population Distribution by Geographical Sub-Areas (with sectors)	A	10-31-2000
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	Map - Location of JPIC, MBC, GOB, DOB, etc.	B	09-27-2001
EP-SEC-5	EP-FIG-026	SEC-05-01	Site Map	B	09-27-2001
APPX-A-6	EP-FIG-034	---	Floor Plan - Media Briefing Center	Deleted	08-04-98
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
RET-08	EP-FIG-046	RET-08-01	Aurora Medical Center Location	A	06-15-2000
EPIP-APPX-A-02	---	APPX-A-02-01	ERO Call Tree	Deleted	12-04-2001

**EMERGENCY PLAN IMPLEMENTING PROCEDURES****INDEX****DATE: 04-16-2002**

<b>NUMBER</b>	<b>TITLE</b>	<b>REVISION</b>	<b>DATE</b>
	<b>APPENDIX A</b>		
APPX-A-1	Communication System Description	AF	08-04-98
EPIP-APPX-A-02	Response Personnel Call List	<b>Deleted</b>	02-06-2002
EPIP-APPX-A-03	Off-Site Telephone Numbers	<b>Deleted</b>	02-06-2002
EPIP-APPX-A-06	KNPP Emergency Response Facility Telephone Numbers	AA	12-21-2001

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

## INDEX

DATE: 04-16-2002

FORM EPIPF	TITLE	REV.	DATE
<b>APPENDIX B</b>			
<b>EP-AD</b>			
AD-07-01	Event Notice (Wisconsin Nuclear Accident Reporting Form)	R	12-14-2001
AD-07-02	State Call-Back - Question Guideline	C	11-15-2001
AD-11-01	Emergency Radiation Work Permit	G	04-11-2002
AD-18-01	Airborne Radioiodine Dose Accountability and Potassium Iodide Distribution	A	02-27-2002
AD-18-02	Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide	A	02-27-2002
<b>EP-ENV</b>			
ENV-01-01	Environmental Dispatch Area Activation Checklist	D	10-31-2000
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
ENV-02-01	EMT Activation Checklist	M	06-15-2000
<b>EP-EOF</b>			
EOF-02-01	EOF Activation Checklist	S	10-30-2001
EOF-02-02	EOF Deactivation Checklist	L	10-30-2001
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
EOF-08-06	Radiological Status Report	D	11-27-2001
EOF-11-02	Operating Status	F	11-15-2001
EOF-11-03	Environmental Status Board	F	11-15-2001
EOF-12-01	I.D. Badge Registration Form	G	10-24-2000

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

## INDEX

DATE: 04-16-2002

FORM EPIPF	TITLE	REV.	DATE
<b>EP-OSF</b>			
OSF 2.2	Maintenance Work in Progress	Deleted	07-08-98
OSF-03-01	Operational Support Facility Team Briefing	C	12-04-2001
<b>EP-RET</b>			
RET-02A-02	Emergency Sample Worksheet	E	06-05-2001
RET 2B.1	Containment Stack Release (Grab Sample)	C	04-16-96
RET 2B.2	Auxiliary Building Stack (Grab Sample)	C	04-16-96
RET 2B.3	Auxiliary Building Stack (Sping Reading)	C	04-16-96
RET 2B.4	Containment Stack (Sping Reading)	B	04-16-96
RET 2B.5	Steam Release	C	04-16-96
RET 2B.6	Field Reading (Grab Sample)	A	04-16-96
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	F	06-15-2000
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 4.1	Emergency Dosimeter Log	F	02-16-2000
<b>EP-TSC</b>			
TSC-01.01	Plant Status Summary for SAM Implementation	B	02-06-2002
TSC-01.02	Severe Accident Management Summary and Strategy Recommendation	B	02-06-2002
TSC-01.03	Severe Accident Management – Status	B	02-06-2002
TSC-02-01	TSC and OSF Activation Checklist	O	09-27-2001

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

## INDEX

DATE: 04-16-2002

FORM EPIPF	TITLE	REV.	DATE
TSC 2.2	TSC Ventilation Checklist	H	04-01-99
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	F	08-29-2000
TSC-04-02	Emergency Physical Change Safety Review	F	08-29-2000
TSC-04-03	Emergency Physical Change Index	F	08-29-2000
TSC-07-01	Head Venting Calculation	F	10-31-2000
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 9A.1	Core Damage Based on Reactor Vessel Level & Fuel Rod Temp:	C	02-14-95
TSC 9A.2	Core Damage Based on Radiation Monitors	C	02-14-95
TSC 9A.3	Cs-134 and Cs-137 PCF Determination	D	04-16-96
TSC 9A.4	Core Damage Based on Activity Ratios	C	02-14-95
TSC 9A.5	Core Damage Assessment (Monitoring Data)	D	04-16-96
TSC 9A.6	Core Damage Summary	C	02-14-95

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>	<b>No.</b> EPIP-RET-09		<b>Rev.</b> L
	<b>Title</b> Post-Accident Population Dose		
	<b>Date</b> APR 16 2002		<b>Page 1 of 7</b>
<b>Reviewed By</b> Tom Schmidli		<b>Approved By</b> Bill Yarosz	
<b>Nuclear Safety Related</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>PORC-Review Required</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		<b>SRO Approval Of Temporary Changes Required</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 1.0 Purpose

- 1.1 This procedure provides instruction for determining integrated radiation doses at preselected geographical locations within the 10-mile EPZ and at other locations of interest based on population density.

## 2.0 General Notes

- 2.1 Approximately 179 Thermoluminescent Dosimeters (TLDs) are posted in the environment for the purpose of post-accident environmental dose determination. It is these TLDs which would be utilized during the recovery phase of an accident to acquire data for use in quantifying dose to the population from radioactive materials released from the plant to the environment.
- 2.2 Other TLDs placed in the environment by Kewaunee Nuclear Power Plant (KNPP) as part of the Radiological Environmental Monitoring Program (REMM, Table 2.2.1-A) and the Area Monitoring Program (TLD), per procedure HP-03.010, can also be used for this same purpose.

## 3.0 Precautions and Limitations

- 3.1 It must be stressed that this procedure is to be done only after the plant has been placed in a safe shutdown condition and releases of radioactive material to the environment greater than Offsite Dose Calculation Manual (ODCM) limits have ceased. Changeout of these TLDs is to be part of the long-term recovery and assessment of an accident involving radioactive releases.

## 4.0 Initial Conditions

- 4.1 None

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>	<b>No.</b>	EPIP-RET-09	<b>Rev.</b>	L
	<b>Title</b>	Post-Accident Population Dose		
	<b>Date</b>	APR 16 2002	<b>Page 2 of 7</b>	

## 5.0 Procedure

### 5.1 Preparation for TLD Changeout

- 5.1.1 Obtain a duplicate set of TLDs used for post-accident monitoring. These are obtained from the vendor per the applicable purchase order. Each post-accident TLD is mounted near a 3" x 4" sign. Signs are green with white lettering and attached to the power poles (See Attachment A).
- 5.1.2 Place the control TLDs into a lead safe.
- 5.1.3 Spike 10 additional TLDs to a nominal exposure of 1 Rem (Cesium-137). Then place these into the lead safe. Label all badges placed in the lead safe with the date spiked, exposure, and batch to which they belong. Retain these for further reference along with the control TLDs.

### 5.2 TLD Changeout

- 5.2.1 Obtain a copy of the electrical distribution department pole maps. If not readily available at KNPP, contact the Electric Distribution and Engineering Department (EDE) in Green Bay for a set of these maps as stated under step 2.1. Mounting locations for the TLDs are as follows:

TLD #	LOCATION	TLD #	LOCATION	TLD #	LOCATION
1	2124-2R5	61	2224-23E19	121	2324-14W19
2	2124-11R14	62	2224-23W9	122	2324-22W12
3	2124-11L1	63	2224-26W1	123	2324-16L18
4	2124-10W2	64	2224-22R4	124	2324-29E6
5	2124-2W1	65	2224-27R1	125	2324-19L6
6	2124-2L18	66	2224-27R7	126	2324-27L20
7	2124-3W20	67	2224-34E5	127	2324-26E17
8	2124-4W3	68	2224-24R4	128	2325-30L20
9	2124-6W12	69	2224-33R6	129	2325-31E10
10	2124-6R26	70	2224-28R9	130	2223-10L13
11	2124-4L18	71	2224-28E5	131	65A7
12	2124-8L3	72	2224-22L2	132	2025-31E11
13	2124-7L12	73	2224-22W8	133	2325-8E1
14	2124-16W5	74	2224-22E11	134	2425-32R4
15	2124-16E9	75	2224-12R3	135	2324-1R11
16	2124-15L13	76	2224-12L9	136	2324-10L6
17	2124-16L9	77	2224-14W6	137	2323-13E6

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>	<b>No.</b> EPIP-RET-09	<b>Rev.</b> L
	<b>Title</b> Post-Accident Population Dose	
	<b>Date</b> APR 16 2002	<b>Page 3 of 7</b>

TLD #	LOCATION	TLD #	LOCATION	TLD #	LOCATION
18	2124-20W5	78	2224-14W11	138	2323-24L3
19	2123-13R7	79	2224-16E5	139	2323-33E6
20	2123-14L1	80	2224-16L15	140	2223-9W15
21	2123-11R4	81	2224-8R11	141	2223-29E9
22	2323-1W2	82	2224-8L4	142	2123-8E2
23	2124-26E1	83	2223-12L2	143	2123-21R11
24	2124-23L27	84	2223-13R8	144	2123-35L12
25	2124-26E14	85	2224-17R10	145	2024-9L10
26	2124-25L8	86	2224-20R6	146	2024-14R4
27	2025-4W17	87	2224-19R3	147	2025-30E11
28	2025-6R12	88	2224-29R19	148	Coast Guard Station - Two Rivers
29	2024-2R15	89	2224-31E8	149	WPSC - Two Rivers Ops Bldg.
30	2025-6W14	90	2224-32E14	150	Manitowoc City Hall Roof
31	2124-27R13	91	2224-32R22	151	1924-9E11
32	2124-33E6	92	2224-31R1	152	2525-33R9
33	2124-32L27	93	2224-31L5	153	KNPP SW Fence
34	2024-10R12	94	2223-25E1	154	KNPP West Fence @ SW End
35	2025-7L23	95	2223-23E5	155	KNPP West Fence Center
36	2025-9R2	96	2223-33E2	156	KNPP West Fence @ North End
37	2124-21L8	97	2223-35E7	157	KNPP North Fence West End
38	2124-29W1	98	2223-27E5	158	KNPP North Fence Center
39	2124-14L21	99	2223-16E11	159	KNPP North Fence East End
40	2124-31L48	100	2223-15E7	160	KNPP East Fence North End
41	2124-25R3	101	2223-3E5	161	KNPP East Fence East of ATF
42	2123-26W15	102	2223-2R5	162	KNPP East Fence East of Admin

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>	<b>No.</b> EPIP-RET-09	<b>Rev.</b> L
	<b>Title</b> Post-Accident Population Dose	
	<b>Date</b> APR 16 2002	<b>Page</b> 4 of 7

TLD #	LOCATION	TLD #	LOCATION	TLD #	LOCATION
43	2123-16E14	103	2224-6L11	163	KNPP @ Vent House over Forebay
44	2123-4R30	104	2324-32L7	164	KNPP East Fence Near Gatehouse
45	2123-4W8	105	2224-9W15	165	KNPP South Fence Near Gatehouse
46	2224-26R4	106	2224-4R22	166	KNPP South Fence Near Anx/Whse
47	2224-26L7	107	2224-4E1	167	Near Circ Water Discharge
48	2224-35R12	108	2224-3W2	168	SE Corner of KNPP South Plant Parking Lot
49	2224-35R1	109	2224-2E7	169	Pole Near Old Met Tower
50	2224-36W6	110	2225-6W2	170	2224-36W15 Near New Met Tower
51	2224-35E2	111	2224-12W11	171	KNPP Sewage Plant N Wall at Fence
52	2224-26R18	112	2224-2L12	172	NE Corner of Microwave Tower Fence
53	2224-26R15	113	2224-3L8	173	SE Corner of Switch Yard Fence Line
54	2224-26R11	114	2323-35E2	174	Substation SE Corner of Building
55	2224-26E13	115	2323-36E11	175	SE Corner of STF Building
56	2224-23R1	116	2324-29L3	176	Power Pole Near STF Pump House
57	2224-25W16	117	2324-35W13	177	North Woods @ Garage
58	2224-24R1	118	2324-36W7	178	South School Forest Gazebo NW Corner Post
59	2224-13R3	119	2325-8L1	179	South Parking Lot @ SW Corner
60	2224-24W3	120	2324-13L4		

5.2.2 Obtain a portable micro-rem meter (Eberline PRM-7 or Ludlum-12S).

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>	<b>No.</b>	EPIP-RET-09	<b>Rev.</b>	L
	<b>Title</b>	Post-Accident Population Dose		
	<b>Date</b>	APR 16 2002	<b>Page 5 of 7</b>	

- 5.2.3 Assemble the maps, TLDs, micro-rem meter, data sheets, tools, and a clipboard in a vehicle. Then proceed to each location listed above.
- 5.2.4 TLDs are mounted on power poles approximately 2 meters above ground level. The TLDs are attached to the pole by a metal clip or velcro.
- 5.2.5 TLD placement on the pole is in relation to the plant. In other words, it is mounted on the pole such that it is facing the direction of KNPP, not shielded from the plant by the pole.
- 5.2.6 Remove the existing TLD, replace it with the new one.
- 5.2.7 Complete Form EPIPF-RET-09-01, logging the date and time changed, notes as to its condition (e.g., tampered with, sign defaced, missing, etc.). Take a reading with the micro-rem meter and record.
- 5.2.8 After all TLDs have been replaced, return to the plant.

### 5.3 TLD Dose Determination

- 5.3.1 Ship all post-accident TLDs, spiked TLDs, and control TLDs to the vendor.
- 5.3.2 Once the TLD dose report is received back from the vendor, prepare a report of gamma dose by TLD location and micro-R per hour readings at the same location. Also determine from all results obtained:
  - a. Average corrected gamma reading for each EPZ sector.
  - b. Highest corrected gamma reading for each EPZ sector.
- 5.3.3 Based on previously available TLD readings at these locations, calculate a net dose attributable to the release of radioactivity from the plant.
- 5.3.4 Route all results to the Radiation Protection Manager. These results will be factored in with existing land use census data from REMM 2.4.1.b and population distribution data from the Emergency Plan, Appendix C, to determine total population dose.

## 6.0 Final Conditions

- 6.1 None

<b>WISCONSIN PUBLIC SERVICE CORP.</b>  <b>Kewaunee Nuclear Power Plant</b>  <i>Emergency Plan Implementing Procedure</i>	<b>No.</b>	EPIP-RET-09	<b>Rev.</b>	L
	<b>Title</b>	Post-Accident Population Dose		
	<b>Date</b>	APR 16 2002	<b>Page 6 of 7</b>	

## 7.0 References

- 7.1 WPSC Electrical Distribution and Engineering Department drawings:
  - 7.1.1 E-131-2, Two Rivers Rural Primary District
  - 7.1.2 E-134, Kewaunee Rural Primary District
  - 7.1.3 E-134-2, Kewaunee Rural Primary District
  - 7.1.4 F-1036, City of Kewaunee, Kewaunee Urban Primary District
- 7.2 EPIP Appendix B, Forms
- 7.3 HP-03.010, Area Monitoring Program (TLD)

## 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
    - Environmental TLD Record Sheet, Form EPIPF-RET-09-01
  - 8.1.2 Non-QA Records
    - None

- Environmental TLD Sign
- Actual Size 3" x 4"
- Green with White Lettering



