



Kewaunee Nuclear Power Plant
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Kewaunee, WI 54216-9511
920.388.2560

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

NRC-02-073

August 7, 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 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, wo/attach.

A045-

DOCUMENT TRANSMITTAL

KEWAUNEE NUCLEAR POWER PLANT

FROM: DIANE FENCL - KNPP

TRANSMITTAL DATE 08-06-2002

EMERGENCY PLAN IMPLEMENTING PROCEDURES TRANSMITTAL FORM

OUTSIDE AGENCY COPIES (1-20)

T. Webb - NRC Document Control Desk (1)* Krista Kappelman - PBNP - EP (10)*
T. Webb - NRC Region III (2, 3)* Craig Weiss - Alliant Energy (11)*
T. Webb - NRC Resident Inspector (4) (receives Appx. A phone numbers)*
T. Webb - State of Wisconsin (5)* Jill Stern - Nuclear Management Company (12)*
T. Webb - KNPP QA Vault (NRC Letter & Memo Only) (15)*

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) Resource Center - Training (82)
C. Sternitzky - ATF-2 (44) D. Krall - CR/SS Office (51, 56)
M. Daron - Security Building (46) M. Lambert - TSC (50)
M. Lambert - EOF (81) W. Galarneau - RAF (53)
M. Lambert - OSF (52) W. Galarneau - SBF/EMT (54)
LOREB - STF (62, 66, 67, 68, 70, 72, 73, 74) W. Galarneau - RPO (55)
STF Library (43) 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) 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. Flint - Cold Chem/HR Sample Room (113) M. Kuether - Security Building (120)
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
August 06, 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 08-06-2002.

REMOVE		INSERT	
PROCEDURE	REV.	PROCEDURE	REV.
EPIP-EOF-02	Z	EPIP-EOF-02	AA
EPIP-EOF-04	AI	EPIP-EOF-04 Clears TCI dated 05/28/2002.	AJ
EPIP-RET-02B	R	EPIP-RET-02B	S
EPIP-TSC-01	Q	EPIP-TSC-01	R
Form EPIPF-AD-18-01	A	Form EPIPF-AD-18-01	B
Form EPIPF-EOF-02-01	S	Form EPIPF-EOF-02-01	T
Form EPIPF-EOF-02-02	L	Form EPIPF-EOF-02-02	M
EPIP FORM RET 2B.1	C	Form EPIPF-RET-02B-01	D
EPIP FORM RET 2B.2	C	Form EPIPF-RET-02B-02	D
EPIP FORM RET 2B.3	C	Form EPIPF-RET-02B-03	D
EPIP FORM RET 2B.4	B	Form EPIPF-RET-02B-04	C
EPIP FORM RET 2B.5	C	Form EPIPF-RET-02B-05	D
EPIP FORM RET 2B.6	A	Form EPIPF-RET-02B-06	B

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. _____ (WPSC 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

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PROC. NO.	TITLE	REV.	DATE
EP-AD			
EPIP-AD-01	Personnel Response to the Plant Emergency Siren	J	01-08-2002
EPIP-AD-02	Emergency Class Determination	AD	07-19-2002
EPIP-AD-03	KNPP Response to an Unusual Event	AF	06-20-2002
EPIP-AD-04	KNPP Response to Alert or Higher	AJ	06-20-2002
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	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

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EPIP-AD-20	KNPP Response to a Security Threat	C	05-23-2002
EP-ENV			
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	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	V	10-09-2001
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	S	06-15-2000
EPIP-ENV-04B	Air Sampling and Analysis	W	10-09-2001
EP-ENV-4C	Environmental Monitoring Teams	Deleted	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	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
EP-ENV-5E	Reuter-Stokes Operation	Deleted	08-27-85

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PROC. NO.	TITLE	REV.	DATE
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
EP-EOF			
EP-EOF-1	Corporate Emergency Response Organization	Deleted	03-11-94
EPIP-EOF-02	Emergency Operations Facility (EOF) Activation	AA	08-06-2002
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
EP-EOF-7	Notification of Unusual Event	Deleted	04-06-94
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
EP-EOF-9	Notification of Site Emergency	Deleted	04-24-87
EP-EOF-10	Notification of General Emergency	Deleted	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	Q	06-20-2002

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EP-OP			
EP-OP-1	Control Room Emergency Organization	Deleted	04-24-87
EP-OP-2	Emergency Control Room Activation for Emergency Response	Deleted	04-24-87
EP-OP-3	Control Room Communications	Deleted	04-24-87
EP-OSF			
EP-OSF-1	Operation Support Facility Emergency Organization	Deleted	04-24-87
EPIP-OSF-02	Operational Support Facility Operations	U	02-06-2002
EPIP-OSF-03	Work Orders During an Emergency	P	05-09-2002
EP-OSF-4	Operational Support Facility Communications	Deleted	04-24-87
EPIP-OSF-04	Search and Rescue	E	05-23-2002
EP-RET			
EP-RET-1	Radiation Emergency Team Organization	Deleted	04-16-96
EPIP-RET-02	In-Plant Radiation Emergency Team	V	05-23-2002
EPIP-RET-02A	Radiation Protection Office/Radiological Analysis Facility (RPO/RAF) Activation	T	11-29-2001
EPIP-RET-02B	Gaseous Effluent Release Path, Radioactivity, and Release Rate Determination	S	08-06-2002
EP-RET-2C	Containment Air Sampling and Analysis	Deleted	03-01-83
EPIP-RET-02D	Emergency Radiation Entry Controls and Implementation	M	06-12-2001
EP-RET-2E	Handling of Injured Personnel	Deleted	04-16-96
EP-RET-2F	Personnel Decontamination	Deleted	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	Deleted	01-25-88

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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	Deleted	08-27-85
EPIP-RET-04	SBF Activation	S	06-20-2002
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
EP-RET-4C	Site Radiological Monitoring	Deleted	07-12-94
EP-RET-4D	SAM-II Operation	Deleted	07-12-94
EP-RET-5	Plume Projection	Deleted	09-26-84
EPIP-RET-05	Site Boundary Dose Rates During Controlled Plant Cooldown	H	10-09-2001
EP-RET-5A	Plume Projection	Deleted	04-27-87
EP-RET-6	Dose Projection	Deleted	04-24-87
EP-RET-7	Radiological Analysis Facility/Radiation Protection Office Communications	Deleted	04-24-87
EPIP-RET-08	Contamination Control of the Aurora Medical Center	Deleted	05-23-2002
EPIP-RET-09	Post-Accident Population Dose	L	04-16-2002
EP-SEC			
EP-SEC-1	Security Organization	Deleted	04-24-87
EPIP-SEC-02	Security Force Response to Emergencies	X	02-06-2002
EP-SEC-2A	Manual Activation of Emergency Sirens	Deleted	04-16-82
EPIP-SEC-03	Personnel Assembly and Accountability	AE	07-19-2002
EPIP-SEC-04	Security Force Actions for Dosimetry Issue	P	10-02-2001

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EP-SEC-5	Security Force Response to the EOF	Deleted	07-28-88
EPIP-SEC-05	Personnel Evacuation	G	06-20-2002
EP-TSC			
EPIP-TSC-01	Technical Support Center Organization and Responsibilities	R	08-06-2002
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	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	N	12-14-2001
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.			
EPIP-TSC-10	Technical Support for IPEOPs	K	05-09-2002

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FIGURES					
EPIP	FIG #	Figure EPIPFG	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	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
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	Deleted	05-23-2002
EPIP-APPX-A-02	---	APPX-A-02-01	ERO Call Tree	Deleted	12-04-2001

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	APPENDIX A		
APPX-A-1	Communication System Description	AF	08-04-98
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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APPENDIX B			
EP-AD			
AD-07-01	Event Notice (Wisconsin Nuclear Accident Reporting Form)	S	05-23-2002
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	B	08-06-2002
AD-18-02	Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide	A	02-27-2002
EP-ENV			
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
EP-EOF			
EOF-02-01	EOF Activation Checklist	T	08-06-2002
EOF-02-02	EOF Deactivation Checklist	M	08-06-2002
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

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EP-OSF			
OSF 2.2	Maintenance Work in Progress	Deleted	07-08-98
OSF-03-01	Operational Support Facility Team Briefing	C	12-04-2001
EP-RET			
RET-02A-02	Emergency Sample Worksheet	E	06-05-2001
RET-02B-01	Containment Stack Release (Grab Sample)	D	08-06-2002
RET-02B-02	Auxiliary Building Stack (Grab Sample)	D	08-06-2002
RET-02B-03	Auxiliary Building Stack (Sping Reading)	D	08-06-2002
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
EP-SEC			
SEC-03.01	Emergency Accountability Log	A	03-28-2000
SEC-04-01	Emergency Dosimeter Log	G	06-20-2002
EP-TSC			
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

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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	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

WISCONSIN PUBLIC SERVICE CORP. Kewaunee Nuclear Power Plant <i>Emergency Plan Implementing Procedure</i>		No. EPIP-EOF-02	Rev. AA
		Title Emergency Operations Facility (EOF) Activation	
		Date AUG 6 2002	Page 1 of 3
Reviewed By Scott VanderBloomen		Approved By Dave Seebart	
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 activating the Emergency Operations Facility (EOF).

2.0 General Notes

- 2.1 Telephone numbers and location of staff positions for the EOF are located in the KPB Emergency Telephone Directory.
- 2.2 A general description of communications equipment is contained in APPX-A-1, "Communication System Description," and may be helpful in resolving minor problems with the equipment.

3.0 Precautions and Limitations

- 3.1 If any of the actions on Form EPIPF-EOF-02-01, "EOF Activation Checklist," cannot be satisfied in a reasonable period of time, then the problem shall be noted on Form EPIPF-EOF-02-01 and an Action Request (AR) initiated at the next convenient opportunity. Consideration of activation should not be delayed for problems with individual actions on Form EPIPF-EOF-02-01.
- 3.2 The Emergency Response Manager (ERM) will make the decision whether the EOF can be activated prior to resolution of problems.
- 3.3 If it becomes necessary to evacuate or relocate the EOF, the ERM should utilize the guidance supplied in Section 5.2 to assist in transferring the functionality of the EOF to an alternate facility.

4.0 Initial Conditions

- 4.1 The EOF shall be activated for an Alert, Site Emergency, General Emergency, or at the discretion of the ERM.
- 4.2 Upon activation of the EOF, the Administrative and Logistics Director (ALD) shall assign and complete actions in accordance with this procedure.

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5.0 Procedure

5.1 Activation

5.1.1 Complete Form EPIPF-EOF-02-01, "EOF Activation Checklist."

5.1.2 IF communications or PC equipment problems are identified, THEN contact WPSC Information Technology Services (ITS) OR Telecommunications as listed in the KPB Emergency Telephone Directory, Section ETD 04, AND state the following:

- Telephone number or system with the problem
- The nature of the problem
- That emergency service is needed

5.1.3 WHEN Form EPIPF-EOF-02-01, "EOF Activation Checklist," (Items 1 through 4) is completed, give the form to the ERM for review and signature.

5.2 EOF Evacuation/Relocation

5.2.1 IF it becomes necessary to evacuate or relocate the EOF, THEN the ERM should consider the following in order to maintain the functionality of the EOF:

- EOF Dose Assessment and Protective Action Recommendations may be formulated in the TSC
- Command and control of Environmental Monitoring Teams may be transferred to the TSC
- NRC and State and County communications may be handled from the TSC
- The ERM may reposition to the TSC or the Point Beach EOF in the Point Beach Site Boundary Command Center

5.3 Deactivation

5.3.1 WHEN final conditions are met, complete Form EPIPF-EOF-02-02, "EOF Deactivation Checklist."

5.3.2 WHEN Form EPIPF-EOF-02-02 is completed, give the form to the ERM for review and signature.

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 EPIPs.

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7.0 References

- 7.1 Kewaunee Nuclear Power Plant Emergency Plan
- 7.2 APPX-A-1, Communication System Description
- 7.3 KPB Emergency Telephone Directory
- 7.4 COMTRAK 88-169, Title Markers for the EOF Staff
- 7.5 NAD-11.08, Action Request Process

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

- Form EPIPF-EOF-02-01, EOF Activation Checklist
- Form EPIPF-EOF-02-02, EOF Deactivation Checklist

8.1.2 Non-QA Records

None

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Reviewed By William 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 the Emergency Response Manager and other initial response personnel for an appropriate response to an **Alert, Site Emergency, or General Emergency**, at the Emergency Operations Facility (EOF).

2.0 General Notes

- 2.1 Personnel on-site depart for the EOF promptly through the security building, unless instructed to assemble elsewhere by the Gai-tronics announcement or security personnel.
- 2.2 IF notified by radio-pager and the message is not understood, THEN emergency response personnel should confirm contact by telephoning Meridian Mail at 1-800-236-1588. A Meridian Mail voice message will indicate that the radio-pager activation was for an **actual** declared emergency and NOT a drill or exercise.
- 2.3 As more information becomes available, initial protective action recommendations should be adjusted in accordance with plant conditions, dose projections, time available to evacuate, estimated evacuation times, and meteorological conditions (EPIP-AD-19).
- 2.4 IF approached by the media during a declared emergency, THEN refer them to the Telephone Response Center at 920-433-1400 or 1-800-838-6192 and tell them that this is their most accurate source for information.

3.0 Precautions and Limitations

- 3.1 "Event Notice," Form EPIPF-AD-07-01, should be initiated and in progress to State and Local Emergency Governments within 15 minutes of the emergency level being declared or as soon as possible without further compromise to plant or public safety.
- 3.2 The Emergency Response Manager has the nondelegable responsibility for making protective action recommendations.
- 3.3 IF an emergency class escalation occurs during implementation of this procedure, THEN immediately reinitiate this procedure appropriate to the new emergency level declared.

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3.4 Only the following personnel may authorize support personnel without Kewaunee I.D. cards access to the EOF during a declared emergency:

- 3.4.1 Emergency Response Manager (ERM)
- 3.4.2 Administrative/Logistics Director (ALD)
- 3.4.3 Environmental Protection Director (EPD)

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 Emergency Response Manager.

5.0 Procedure

Note

It is the ERM's responsibility to provide overall direction and coordination of the KNPP emergency response activities, make protective action recommendations to government authorities, coordinate efforts with external organizations (governmental, industry, vendors, etc.), and support the plant's efforts to mitigate the accident by ensuring continuity of resources for long term operation of the emergency response organization.

5.1 Emergency Response Manager (ERM) shall:

- 5.1.1 WHEN notified that an Emergency has been declared,
 - a. Report to the Emergency Operations Facility.
 - b. IF an Emergency Response Manager has been designated, until released, THEN:
 - 1. If appropriate, plan a shift relief per EGIP-AD-05, "Emergency Response Organization Shift Relief Guideline."
 - 2. Assist the designated Emergency Response Manager.
 - c. IF an Emergency Response Manager has NOT been designated, THEN assume the responsibilities of the Emergency Response Manager or continue implementation of this procedure.

Note

Verbally inform the Emergency Director that you have accepted the PAR responsibilities.

5.1.2 Notify the Emergency Director of your arrival and assumption of the Emergency Response Manager duties.

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- 5.1.3 Accept formal turnover of the responsibility for PARs from the ED.
- 5.1.4 Ensure date and time is entered in the EOF log for turnover of responsibilities for PARs from the ED in the TSC.
- 5.1.5 When appropriate, direct the Off-Site Communicator in the EOF to take responsibility for off-site notifications from the TSC.
- 5.1.6 Verify a State Radiological Coordinator Liaison (SRCL) or the Radiological Protection Director (RPD) is prepared to transmit radiological related data and general plant conditions to the State Radiological Coordinator in the State Emergency Operations Center (Madison).
- 5.1.7 Verify engineering/licensing and communicator support are available in the EOF.
- 5.1.8 IF director(s) or supporting staff positions are not arriving at the EOF in a reasonable amount of time, THEN instruct the Off-Site Communicator to contact the individuals needed by telephone and/or by individual radio-pager codes.
- 5.1.9 IF a director position cannot be filled, THEN assign that director's duties to another director's position.
- 5.1.10 Ensure the ALD is completing EOF activation in accordance with "Emergency Operations Facility (EOF) Activation," EPIP-EOF-02.
- 5.1.11 Ensure the ALD is establishing security in accordance with "Media Center/Emergency Operation Facility/Joint Public Information Center Security," EPIP-EOF-12.
- 5.1.12 Establish Communications with the Technical Support Center and Control Room through the Darome Conference System.
- 5.1.13 Through the Emergency Response Facility Communicator - EOF, verify the status of off-site agency communications that have taken place from the Control Room.

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Note

The EOF can be activated for individual functions, i.e., off-site notifications prior to full activation of the facility.

- 5.1.14 **WHEN** confirmed with the Off-Site Communicator that the EOF is capable to assume off-site notification,
- a. Assume the responsibility for off-site notifications.
 - b. Inform the ED of the transfer of this responsibility.
 - c. Instruct the Off-Site Communicator to contact the State and County EOCs (if active) and notify them that the EOF has the responsibility for off-site communications.
- 5.1.15 Contact and notify the JPIC Manager of the EOF activation status.
- 5.1.16 Ensure the KPB Nuclear Emergency Public Information Plan is being implemented for the declared emergency.
- 5.1.17 Ensure the EPD is taking steps to perform dose projections and provide assistance in making protective action recommendations.
- 5.1.18 Determine the emergency status by obtaining the following information from the emergency response organization in the EOF:
- a. Engineering/Licensing Support
 - Significant plant evolutions
 - NRC response team status and issues
 - b. Environmental Protection Director
 - Status of Radiological Effluent Releases (potential off-site dose consequences)
 - Off-Site Dose Assessment Evaluation
 - Status of Environmental Monitoring Teams
 - Potassium Iodide Distribution
 - Adequacy of the Protective Action Recommendations
 - c. Administrative Logistics Director
 - EOF Activation and Operational Status (EPIP-EOF-02)
 - EOF/JPIC Security Status (EPIP-EOF-12)
 - Status of ERO response

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- Status of Information flow in the EOF
- Continuity of resources for long term operation of the emergency response organization
- d. State Radiological Coordinator Liaison
 - Status of communications with the State of Wisconsin, State Radiological Coordinator
- e. Off-Site Communicator
 - Off-Site Communications status
 - Significant State and County concerns, priorities, and actions
 - PAR implementation status
 - State or County requests for "Plant Emergency Status Report," Form EPIPF-EOF-08-05, or other information update

!! Caution !! To Prevent Injury or Death
<p><i>It is <u>NOT</u> required to de-escalate from an Emergency Action Level. Termination or direct entry into recovery is preferable. However, there may be occasions when it is more appropriate to de-escalate.</i></p> <p><i>EPIP-AD-02, "Emergency Class Determination," and other EPIPs are <u>NOT</u> written to facilitate de-escalation. Therefore, any decision to de-escalate instead of entering recovery must be based on a thorough review of EPIP-AD-02 and careful use of appropriate procedures.</i></p>

- 5.1.19 Review requirements for escalation and de-escalation situations with the Emergency Director (EPIP-AD-02).
- 5.1.20 As required, review the EALs and plant status to ensure the event classification is appropriate (EPIP-AD-02).
- Note**
Off-site protective actions for the public are NOT required for events classified less than a general emergency.
- 5.1.21 As required, instruct the Environmental Protection Director to review off-site dose measurements and projections to ensure the event classification is appropriate.
- 5.1.22 Review current and potential protective action recommendations (EPIP-AD-19).

REFERENCE USE

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5.1.23 IF time permits, THEN contact Off-Site Authorities via the Dial Select to discuss potential changes in classification and/or appropriate PAR.

5.1.24 IF notified by the ED of any change in EALs, OR if there is a change in PARs, THEN:

- a. Ensure, with the assistance of the Engineering/Licensing Support Coordinator, an "Event Notice," Form EPIPF-AD-07-01, is complete.
- b. Review and sign all "Event Notice," Form EPIPF-AD-07-01, generated from the EOF.
- c. Direct the Off-Site Communicator to initiate notifications using the "Event Notice," Form EPIPF-AD-07-01.
- d. Verify that required notifications are made by the Off-Site Communicator (EPIP-AD-07, "Initial Emergency Notification," or EPIP-EOF-08, "Continuing Emergency Notifications").

Note

The appropriate Government Agency contacts for the ERM are:

- *State of Wisconsin - Officer in Charge (OIC) @ Dial Select 83 or 608-242-3260/3261*
- *Kewaunee County - Emergency Government (Director) @ Dial Select 43 or 920-487-5257*
- *Manitowoc County - Emergency Management Director @ Dial Select 53 or 920-683-4916/4918*

5.1.25 WHEN contacted, or periodically, provide Off-Site Authorities with the following (Dial Select is the preferred communication link):

- a. Available information on the event status using "Plant Emergency Status Report," Form EPIPF-EOF-08-05, as a guide. This data can be provided by the Engineering/Licensing Coordinator.
- b. IF a hard copy of "Plant Emergency Status Report" is specifically requested by State or County Officials, THEN:
 - Direct the Engineering/Licensing Coordinator to provide written plant event summaries using "Plant Emergency Status Report," Form EPIPF-EOF-08-05.
 - Review and approve "Plant Emergency Status Report," Form EPIPF-EOF-08-05.
 - Forward the approved "Plant Emergency Status Report," Form EPIPF-EOF-08-05, to the Off-Site Communicator with direction to fax them to the State and County EOCs.

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5.1.26 WHEN a completed "Radiological Status Report," Form EPIPF-EOF-08-06, is received:

- a. Review,
- b. Approve, AND
- c. Return to the SRCL.

5.1.27 Contact the ED periodically to receive an update on:

- Status of the plant
- Material and Personnel support requirements
- On-site or off-site radiological releases or potential releases and release paths
- Priorities of tasks to minimize the impact of the accident on the public
- Incidents of public interest (i.e., fires, spills, personnel contaminations/injuries)

5.1.28 Periodically inform the ED of:

- State and County priorities
- State and County actions (i.e., protective actions, evacuations, traffic control, etc.)
- State and County areas of concern
- Media areas of interest and any misinterpretations of the plant situation

5.1.29 Determine EOF priorities, evaluate activities in the following areas:

- Logistical requirements to mitigate significant plant evolutions
- Off-site dose consequences
- Protective action recommendations
- Protective actions implemented by the Counties

5.1.30 Periodically conduct briefings for the EOF Emergency Response Organization:

- Status of the plant
- Material and Personnel support requirements
- On-site or off-site radiological releases or potential releases and release paths
- Incidents of public interest (i.e., fires, spills, personnel contaminations/injuries)
- State and County priorities

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- State and County actions (i.e., protective actions, evacuations, traffic control, etc.)
- State and County areas of concern
- Media areas of interest and any misinterpretations of the plant situation
- EOF priorities

5.1.31 Ensure that the Spokesperson is informed. Forward plant status and public interest information to the Spokesperson for appropriate use in briefings to the:

- Public
- Media
- WPSR Senior Management
- Partners
- Other financial stakeholders in KNPP or WPSR

5.1.32 If appropriate, plan for a shift relief per EPIP-AD-05.

5.1.33 IF plant conditions meet the requirements of Section 5.1 of EPIP-AD-15, "Recovery Planning and Termination," THEN recovery activities or termination can be implemented in accordance with EPIP-AD-15.

5.1.34 IF Final Conditions are NOT met (Section 6.0), THEN return to Step 5.1.15.

5.1.35 WHEN Final Conditions are met (Section 6.0),

- a. Ensure that termination or plant recovery Event Notifications have been initiated by the Off-Site Communicator.
- b. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
- c. Collect all completed forms, notes, and other documentation and give them to the ALD.
- d. Schedule a self-critique with all event participants in the EOF (all shifts) as soon as practical. The procedure "Drill and Exercise Critiques," EPMP-02.04, should be used as a guide.

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5.2 **Administrative Logistics Director (ALD) shall:**

- 5.2.1 **WHEN** notified that an Emergency has been declared,
- a. Report to the Emergency Operations Facility immediately.
 - b. **IF** an Administrative Logistics Director has been designated, until released, **THEN**:
 1. If appropriate, plan a shift relief per EPIP-AD-05.
 2. Assist the designated Administrative Logistics Director.
 - c. **IF** an Administrative Logistics Director has **NOT** been designated, **THEN** assume the responsibilities of the Administrative Logistics Director and continue implementation of this procedure.
- 5.2.2 Notify the Emergency Response Manager of your assumption of the responsibilities of the Administrative Logistics Director.
- 5.2.3 As directed by the ERM,
- a. Contact EOF administrative support personnel or others.
 - b. Instruct them to report to the EOF immediately or to remain on standby for further instructions.
- 5.2.4 Support or implement the EOF activation process (EPIP-EOF-02).
- 5.2.5 Arrange for security support at the EOF, JPIC, and MC by implementing procedure EPIP-EOF-12.
- 5.2.6 As needed, assign EOF support personnel to provide administrative support as defined in EPIP-EOF-11, "Internal Communications and Documentation Flow," to:
- a. Maintain status boards and event sheets (Step 5.1).
 - b. Ensure communications are properly distributed (Step 5.2).
 - c. Ensure that a "Master Log" is established and maintained (Step 5.3).
- 5.2.7 Establish procedures for the long term storage of the documents, records, and logs generated by the event.

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- 5.2.8 Ensure that appropriate logs, records, and documents are maintained for the duration of the event. Those logs, records, and documents shall include as a minimum:
- Ongoing plant status and conditions
 - Date and time of significant accident events
 - Chronology of plant accident mitigation and repair priorities
 - All calculated, measured, or State provided radiological release data and information
 - All event notification and status update documents generated
 - Any messages generated or recorded
 - All Honeywell computer printouts generated for status board maintenance or general information
 - All logs maintained by EOF staff
 - All news statements from the JPIC
- 5.2.9 Monitor the flow of information in the EOF and correct any problems.
- 5.2.10 If required, arrange for communication system service repair (see EPIP-EOF-02, Step 5.1.3).
- 5.2.11 If required, develop a shift schedule to provide for 24-hour operation of the EOF and security staff per EPIP-AD-05.
- 5.2.12 Obtain purchasing support (see KPB Emergency Telephone Directory, ETD 04 for NMC contact) for assistance in the following:
- Material purchase and control contract negotiations, expense accounts
- 5.2.13 If needed, provide for the following manpower needs:
- Technical and craft disciplines through organizations such as Westinghouse Electric Corporation, Fluor Engineering, or INPO
 - Labor relations' assistance
- 5.2.14 If needed, obtain the following logistical assistance for:
- Transportation of emergency response personnel
 - Airline and hotel accommodations
 - Office supplies and furniture
 - Document reproduction
 - Food deliveries
 - Sanitation

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5.2.15 IF Final Conditions are not met (Section 6.0), THEN return to Step 5.2.6.

5.2.16 WHEN Final Conditions are met (Section 6.0),

- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
- b. Collect all records and logs as described in procedure "Declared Emergency Evaluation and Documentation," EPMP-02.01.
- c. Ensure "EOF Deactivation Checklist," Form EPIPF-EOF-02-02, is completed per EPIP-EOF-02.

5.3 Environmental Protection Director (EPD) shall:

5.3.1 WHEN notified that an Emergency has been declared,

- a. Report to the Emergency Operations Facility.
- b. IF an Environmental Protection Director has been designated, until released, THEN:
 1. If appropriate, plan a shift relief per EPIP-AD-05.
 2. Assist the designated Environmental Protection Director.
- c. IF an Environmental Protection Director has NOT been designated, THEN assume the responsibilities of the Environmental Protection Director and continue implementation of this procedure.

5.3.2 Notify the Emergency Response Manager of your assumption of the responsibilities of the Environmental Protection Director.

5.3.3 If necessary, establish the environmental team organization in accordance with EPIP-ENV-01, "Environmental Monitoring Group Organization and Responsibilities."

5.3.4 Ensure status boards are maintained along with a record of significant events, data reported, and directives given.

5.3.5 Provide overall direction to the Environmental Monitoring Group.

5.3.6 Prepare plant status updates for transmission to the Environmental Monitoring (EM) Teams.

5.3.7 Direct the State Radiological Coordinator Liaison to provide available information to the State Radiological Coordinator using Form EPIPF-EOF-08-06 as a guide.

5.3.8 Inform the RPD when an EM Team member approaches administrative or legal radiological exposure limits.

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- 5.3.9 Maintain an overall awareness of environmental conditions and the contributing factors for development of protective action recommendations in accordance with EPIP-AD-19.
- 5.3.10 Evaluate dose projections and field data.
- 5.3.11 Assist the Emergency Response Manager (ERM), the Emergency Director (ED), and the Radiological Protection Director (RPD) in determining protective action recommendations.
- 5.3.12 Communicate frequently with the Radiological Protection Director to confirm the accuracy of input data to the dose projection process.
- 5.3.13 As necessary, establish and maintain communication with other Emergency Response Organization Directors and Off-Site Authorities.
- 5.3.14 IF a radiological release has occurred or is imminent, THEN contact Environmental Inc. (Midwest Lab.) (see KPB Emergency Telephone Directory for phone number) and make arrangements for conducting soil/vegetation/water/snow deposition sampling and analysis.
 - a. Identify locations where deposition sampling and analysis is needed using EMT field data and dose projection results.
 - b. Perform sampling and analysis using the methodology described in the KNPP "Radiological Environmental Monitoring Manual (REMM)."
 - c. Provide sample analysis results to the State Radiological Coordinator.
- 5.3.15 If appropriate, plan for a shift relief per EPIP-AD-05.
- 5.3.16 IF Final Conditions are NOT met (Section 6.0), THEN return to Step 5.3.4.
- 5.3.17 WHEN Final Conditions are met (Section 6.0),
 - a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
 - b. Collect all completed records, logs, forms, notes, and other documentation and give them to the ALD.
 - c. Schedule a self-critique with all event participants in the environmental group (all shifts) as soon as possible. The procedure "Drill and Exercise Critiques," EPMP-02.04, should be used as a guide.

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5.4 State Radiological Coordinator Liaison (SRCL) shall:

5.4.1 WHEN notified that an Emergency has been declared:

- a. Report to the Emergency Operations Facility.
- b. IF a State Radiological Coordinator Liaison has been designated, until released, THEN
 1. Assist in the activation of the EOF per EPIP-EOF-02.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated State Radiological Coordinator Liaison.
- c. IF a State Radiological Coordinator Liaison has NOT been designated, THEN assume the responsibilities of the State Radiological Coordinator Liaison and continue implementation of this procedure.

5.4.2 Notify the Environmental Protection Director of your assumption of the responsibilities of the State Radiological Coordinator Liaison.

5.4.3 Obtain and complete "SRCL Initial Action Checklist," Form EPIPF-EOF-04-01.

Note

Assistance may be obtained from other environmental organization members or by requesting the ALD to provide EOF support staff.

5.4.4 Ensure radiological information provided by the State Radiological Coordinator is passed to the EPD.

5.4.5 Perform an initial core damage assessment.

5.4.5.1 Collect the following values from the plant process computer using Attachment A.

- Core exit thermocouple reading - PPCS Graphic Display #4
- Containment radiation monitor readings R-40 & R-41 - PPCS Point ID G0040G & G0041G

Note

It is not necessary to proceed to Step 5.2 or Step 5.3 of EPIP-TSC-09A. Only the high level core damage assessment is required.

5.4.5.2 Go to Step 5.1.4 of EPIP-TSC-09A, "Core Damage Assessment," and determine the appropriate classification of fuel damage using all of the parameters collected in Step 5.4.5.1.

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5.4.5.3 Provide fuel damage assessment results to the following positions:

- Technical Support Center Director
- Environmental Protection Director
- Dose Projection Calculator

5.4.6 On a continual basis, collect available information using the following forms as a guideline:

- "Plant Emergency Status Report," Form EPIPF-EOF-08-05 (from the Engineering/Licensing Coordinator)
- "Radiological Status Report," Form EPIPF-EOF-08-06 (from the ENV Dose Calculator)
- Other sources that would provide information to assist the SRC in making decisions concerning public health and safety

5.4.7 Transmit information to the SRC by phone as promptly as possible.

5.4.8 IF specifically requested by State or County Officials, THEN provide written radiological event summaries using Form EPIPF-EOF-08-06 for transmission to those officials by facsimile.

- a. Complete "Radiological Status Report," Form EPIPF-EOF-08-06.
- b. Forward the completed Form to the ERM for approval.
- c. Inform the EPD that you have completed "Radiological Status Report," Form EPIPF-EOF-08-06, to be transmitted by facsimile to State and County Officials.

Note

If needed, use an extra SRCL to cover the HPN phone.

5.4.9 Respond to incoming calls from the NRC over the HPN phone.

5.4.10 Support the completion of "Event Notice," Form EPIPF-AD-07-01, and the development of protective action recommendations.

5.4.11 If appropriate, plan for shift relief per EPIP-AD-05.

5.4.12 IF Final Conditions are NOT met (Section 6.0), THEN return to Step 5.4.4.

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5.4.13 WHEN Final Conditions are met (Section 6.0),

- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
- b. Collect all completed records, logs, notes, and other documentation and give them to the ALD.

5.5 Engineering/Licensing Support Coordinator shall:

5.5.1 WHEN notified that an Emergency has been declared,

- a. Report to the Emergency Operations Facility.
- b. IF an Engineering/Licensing Support Coordinator has been designated, until released, THEN
 1. Assist in the activation of the EOF per EPIP-EOF-02.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated Engineering/Licensing Support Coordinator.
- c. IF an Engineering/Licensing Support Coordinator has NOT been designated, THEN assume the responsibilities of the Engineering/Licensing Support Coordinator and continue implementation of this procedure.

5.5.2 Notify the Emergency Response Manager that you have assumed the responsibilities of the Engineering/Licensing Support Coordinator.

5.5.3 Monitor engineering, operational, and licensing events related to the event for the ERM.

Note

Assistance may be obtained by requesting the ALD to provide EOF support staff.

5.5.4 Ensure status boards are maintained.

5.5.5 Review messages in the "IN" box and:

- a. Brief the ERM on significant changes, events, and information.
- b. IF the message should be placed on the status board or flip chart, THEN mark them as "POST location."
 - Operations Status Board
 - Environmental Status Board
 - Flip Chart
- c. Place the reviewed messages in the "OUT" box.

REFERENCE USE

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5.5.6 WHEN required, provide the ERM:

- a. Review of the event classification (EPIP-AD-02).
- b. When directed by the ERM, complete "Event Notice," Form EPIPF-AD-07-01, for approval and transmittal to off-site agencies.
- c. Updated "Plant Emergency Status Report," Form EPIPF-EOF-08-05.

5.5.7 Perform liaison duties between the ERM and the NRC event response team in the EOF.

5.5.8 Coordinate the activities of the Emergency Response Facility Communicator - EOF for communications with other emergency facilities as appropriate.

5.5.9 If appropriate, plan for a shift relief, per EPIP-AD-05.

5.5.10 IF Final Conditions are not met (Section 6.0), THEN return to Step 5.5.3.

5.5.11 WHEN Final Conditions are met (Section 6.0),

- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
- b. Collect all completed records, logs, forms, notes, and other documentation and give them to the ALD.

5.6 **Off-Site Communicator shall:**

5.6.1 WHEN notified that an Emergency has been declared during off-hours, THEN

- a. Report to the Emergency Operations Facility.
- b. IF an Off-Site Communicator has been designated, until released, THEN
 1. Assist in the activation of the EOF.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated Off-Site Communicator.
- c. IF an Off-Site Communicator has NOT been designated, THEN assume the responsibilities of the Off-Site Communicator and continue implementation of this procedure.

5.6.2 Verify the phones needed for the Off-Site Communicator are properly located and functional.

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Note

Verbally inform the ERM that you have accepted the Off-Site Communicator responsibilities.

- 5.6.3 Notify the Emergency Response Manager of your arrival and availability to perform off-site communications.
- 5.6.4 When directed by the ERM, accept formal turnover of responsibilities for off-site communications from the TSC or Control Room.
- 5.6.5 When completed, notify the Emergency Response Manager that off-site communication responsibility has been accepted in the EOF.
- 5.6.6 Enter date and time in the EOF log for turnover of responsibilities for off-site communications from the TSC or Control Room.

Note

Until turnover of off-site communications is complete, the Control Room or TSC has primary responsibility of the government verification lines. These lines should not be answered unless it is obvious that they are not being answered at the other facilities. IF the line is answered in the EOF prior to official turnover, THEN every effort should be made to reconnect the party on this line with the facility with primary responsibility and in the interim provide the best information available.

- 5.6.7 When directed by the ERM, start the transfer of off-site communications from the Control Room or TSC to the EOF.
 - a. Contact the Event Operations Director (EOD in CR) or Off-Site Communicator (TSC), and obtain a briefing on the status of off-site notification.

Note

Remind the EOD and/or Off-Site Communicator (TSC) to turn the bell switch on the Government Verification phone to the OFF position.

- b. WHEN mutually agreed upon, relieve the Control Room or TSC of off-site notification responsibilities.
 - c. Ask the EOD or Off-Site Communicator (TSC) to fax a copy of all "Event Notice," Form EPIPF-AD-07-01, issued from the Control Room to the EOF at their earliest convenience.
- 5.6.8 Inform the ERM that the EOF now has responsibility for off-site notifications.

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5.6.9 Enter the time and date in the log that responsibilities for off-site communications was accepted by the EOF from the TSC or CR.

5.6.10 Contact off-site EOC's and determine the status of their activation.

5.6.11 When activated, obtain the following information from the off-site EOCs:

- Significant State or County concerns, priorities, and actions
- If appropriate, PAR implementation status
- Required reports or other information from KNPP

5.6.12 Review current status board and chronological event sheet entries.

5.6.13 WHEN directed by the ERM, perform off-site notifications.

- a. IF off-site EOCs HAVE been activated, THEN Go To EPIP-EOF-08 and perform notifications.
- b. IF off-site EOCs have NOT been activated, THEN Go To EPIP-AD-07, Step 5.3 and perform notifications.

5.6.14 If requested by the ERM, fax hard copy status reports (Forms EPIPF-EOF-08-05 or EPIPF-EOF-08-06) to the State and County EOCs.

Note

Assistance may be obtained by requesting the ALD to provide EOF support staff.

5.6.15 Ensure the EOF status board for off-site conditions is updated on a regular basis. Assistance by the EOF support staff may be requested from the ALD.

5.6.16 If directed by the ERM, activate ERO pagers using EPIP-EOF-08 Step 5.3.

5.6.17 Record incoming and outgoing *ad hoc* telephone messages on "Telephone Communications Log Sheet," Form EPIPF-EOF-04-02.

5.6.18 WHEN requested, brief the ERM on off-site communications, include the following items:

- Off-site Communications status
- Significant State and County concerns, priorities, and actions
- PAR implementation status
- State or County requests for status reports (Form EPIPF-EOF-08-05) or other information updates

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- 5.6.19 Provide communication support as directed by the ERM.
- 5.6.20 If appropriate, plan for shift relief per EPIP-AD-05.
- 5.6.21 IF Final Conditions are not met (Section 6.0), THEN return to Step 5.6.6.
- 5.6.22 WHEN Final Conditions are met (Section 6.0),
- a. Ensure that termination or recovery communications are made as directed by the ERM in accordance with Step 5.6.6.
 - b. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
 - c. Collect all completed records, logs, forms, notes, and other documentation and give them to the ALD.
- 5.7 **Emergency Response Facility (ERF) Communicator - Emergency Operations Facility (EOF) shall:**
- 5.7.1 WHEN notified that an Emergency has been declared,
- a. Report to the Emergency Operations Facility.
 - b. IF an ERF Communicator - EOF has been designated, until released, THEN
 1. Assist in the activation of the EOF.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated ERF Communicator - EOF.
 - c. IF an ERF Communicator - EOF has NOT been designated, THEN assume the responsibilities of the ERF Communicator - EOF and continue implementation of this procedure.
- 5.7.2 Notify the Engineering/Licensing Support Coordinator of your assumption of the responsibilities of the ERF Communicator - EOF.
- 5.7.3 Review the following items:
- Master Log Sheets
 - Current Status Board listings
 - Current Chronological Event Sheet listing
 - Any News Statement that may have been generated
- 5.7.4 As directed by the Engineering/Licensing Support Coordinator, monitor the data presented on the Honeywell obtaining clarification from the plant, as necessary.

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- 5.7.5 Record incoming and outgoing *ad hoc* telephone messages on "Telephone Communications Log Sheet," Form EPIPF-EOF-04-02.
- 5.7.6 Enter the 4-Way Communication Link. The "dial in number" and "access number" are listed in the KPB Emergency Telephone Directory, ETD 03, "Emergency Response Facilities Telephone List."
- 5.7.7 Confer with the ERM and Engineering/Licensing Support Coordinator on key issues and events.
- 5.7.8 Ensure the ERM and Engineering/Licensing Support Coordinator are kept informed of all key issues/events at the plant. The items listed below are key topics the ERF Communicator - EOF should be listening for:
- Emergency Classification level declared
 - Events that caused the classification to be declared
 - Actions being taken by WPSC to mitigate the event
 - All incidents relating to personnel injury, contamination, or overexposure to radiation
 - Events happening outside the protected area of the plant (i.e., crashes, fires, tower or substation damage)
 - Outside assistance called in (i.e., ambulance, fire department, or Point Beach Nuclear Plant personnel or equipment)
- 5.7.9 If appropriate, plan for shift relief per EPIP-AD-05.
- 5.7.10 IF Final Conditions are not met (Section 6.0), THEN return to Step 5.7.3.
- 5.7.11 WHEN Final Conditions are met (Section 6.0),
- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
 - b. Collect all completed records, logs, forms, notes, and other documentation and give them to the ALD.

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5.8 EOF Support Staff shall:

- 5.8.1 WHEN notified that an Emergency has been declared,
 - a. Report to the Emergency Operations Facility.
 - b. Notify the Administrative Logistics Director of your availability to assume responsibilities of support staff and continue implementation of this procedure as directed by the Administrative Logistics Director.
- 5.8.2 Ensure the Honeywell terminal and printer are operating properly. Report problems to ALD.
- 5.8.3 Assist in activating the EOF in accordance with EPIP-EOF-02.
- 5.8.4 Perform the tasks described in EPIP-EOF-11.
- 5.8.5 WHEN directed by the ALD, provide general EOF support.
- 5.8.6 If appropriate, assist the ALD in plans for shift relief per EPIP-AD-05.
- 5.8.7 IF Final Conditions are not met (Section 6.0), THEN return to Step 5.8.4.
- 5.8.8 WHEN Final Conditions are met (Section 6.0),
 - a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
 - b. Collect all completed records, logs, forms, notes, and other documentation and give them to the ALD.

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 EPIPs.

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7.0 References

- 7.1 EPIP-AD-02, Emergency Class Determination
- 7.2 EPIP-AD-05, Emergency Response Organization Shift Relief Guideline
- 7.3 EPIP-AD-07, Initial Emergency Notifications
- 7.4 EPIP-AD-15, Recovery Planning and Termination
- 7.5 EPIP-AD-19, Protective Action Guidelines
- 7.6 EPIP-ENV-01, Environmental Monitoring Group Organization and Responsibilities
- 7.7 EPIP-EOF-02, Emergency Operations Facility (EOF) Activation
- 7.8 EPIP-EOF-03, EOF Staff Action for Unusual Event
- 7.9 EPIP-EOF-08, Continuing Emergency Notifications
- 7.10 EPIP-EOF-11, Internal Communication and Documentation Flow
- 7.11 EPIP-EOF-12, Media Center/Emergency Operation Facility/Joint Public Information Center Security
- 7.12 EPIP-APPX-A-1, Communication System Description
- 7.13 KPB Emergency Telephone Directory
- 7.14 EPMP-02.01, Declared Emergency Evaluation and Documentation
- 7.15 EPMP-02.04, Drill/Exercise Critique and Assessment
- 7.16 WPSC Nuclear Emergency Public Information Plan
- 7.17 Kewaunee Nuclear Power Plant Emergency Plan
- 7.18 NRC Inspection Report K-87-195
- 7.19 COMTRAK 91-187, Item 10
- 7.20 COMTRAK 96-163

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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

- Event Notice, Form EPIPF-AD-07-01
- EOF Activation Checklist, Form EPIPF-EOF-02-01
- Plant Emergency Status Report, Form EPIPF-EOF-08-05
- Radiological Status Report, Form EPIPF-EOF-08-06
- SRCL Initial Action Checklist, Form EPIPF-EOF-04-01
- Telephone Communications Log Sheet, Form EPIPF-EOF-04-02

8.1.2 Non-QA Records

None

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Reviewed By		Tom Schmidli		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 identifying the release path of radioactive gaseous effluents, to ensure that appropriate effluent samples are taken and appropriate monitor readouts are recorded, in order to quantify the release and provide input data for plume projection calculations.

2.0 General Notes

- 2.1 This procedure is used whenever radiological data is required to perform computerized dose projections per EPIP-ENV-03C, "Dose Projection Using Rascal Version 2.2 Software."
- 2.2 The reference by HP effluent procedures to a four digit numeric value representing the SPING address and channel, directly relates to the address/channel numbers on the SPING CT unit. The first two digits refers to the address and the last two digits refer to the channel.
- 2.3 DNA (Distributed Network Architecture) is the name of the software used by RADSERV.

3.0 Precautions and Limitations

- 3.1 An Emergency Radiation Work Permit (ERWP) may be required as per EPIP-AD-11, "Emergency Radiation Controls" Step 4.1, for sampling within the Zone SV due to high airborne concentrations or other radiological concerns.

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.

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5.0 Procedure

Note

Table 4 is a flow chart of the steps in this procedure.

5.1 IDENTIFY THE RELEASE PATH by monitoring the following indications:

5.1.1 Auxiliary Building Stack Release

- a. R-13 cpm
- b. R-14 cpm
- c. R-22 cpm
- d. R-35 mR/hr
- e. R-36 R/hr
- f. SPING 01
 1. 01-05 $\mu\text{Ci/cc}$
 2. 01-07 cpm
 3. 01-09 cpm

5.1.2 Containment Stack Release

- a. R-11 cpm
- b. R-12 cpm
- c. R-21 cpm
- d. R-37 mR/hr
- e. R-38 R/hr
- f. SPING 02
 1. 02-05 $\mu\text{Ci/cc}$
 2. 02-07 cpm
 3. 02-09 cpm

5.1.3 Steam Line Release

- a. R-15 cpm
- b. R-19 cpm
- c. 1A Steam Line
 1. R-31 mR/hr
 2. R-32 R/hr
- d. 1B Steam Line
 1. R-33 mR/hr
 2. R-34 R/hr

REFERENCE USE

WISCONSIN PUBLIC SERVICE CORP. Kewaunee Nuclear Power Plant <i>Emergency Plan Implementing Procedure</i>	No.	EPIP-RET-02B	Rev.	S
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5.2 DETERMINE THE APPROPRIATE SAMPLE POINT for the release path identified.

Note

IF it is NOT possible to obtain in-plant grab samples for any reason, THEN go directly to Step 5.7.

5.2.1 Auxiliary Building Stack Release

- a. R-13 or R-14 (657') - Step 5.4
- b. Auxiliary SPING (642') - Step 5.5

5.2.2 Containment Stack Release

- a. R-11/12 (657') - Step 5.4
- b. R-21 (657') - Step 5.4
- c. Cont. SPING (642') - Step 5.5

5.2.3 Steam Relief's Release - go to Step 5.6

5.3 PRESAMPLE PREPARATION

5.3.1 Follow the instructions in Procedure EPIP-RET-02D, "Emergency Radiation Entry Controls and Implementation" for entries into the controlled area.

5.3.2 Obtain the following equipment:

- a. Marinelli Beaker
- b. Particulate Filter Papers
- c. Silver Zeolite Cartridges
- d. Gas Syringes (10 cc, 1 cc, 0.1 cc)

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!! Caution !!

To Prevent Injury or Death

IF radiation monitor R-35 reads greater than 1000mR/hr, THEN discontinue sampling both the containment stack at R-11/12 or R-21 and the Auxiliary Building stack at the R-13 or R-14 sample locations on the 657' elevation of the Auxiliary Building.

Note

Use Silver Zeolite filters for sampling for iodine radioisotopes.

5.4 OBTAIN AUXILIARY BUILDING OR CONTAINMENT STACK RELEASE DATA BY GRAB SAMPLE

5.4.1 Containment Stack Release

- a. If required, obtain grab sample from R-21 or R-11/12 for the determination of the effluent isotopic mixture.
- b. Record the sample analysis conditions and results on Form EPIPF-RET-02B-01.
- c. Calculate the total flow rate (cc/sec) by adding the operating fan flow rates at the top of Form EPIPF-RET-02B-01.
- d. Calculate the release rate (Ci/sec) for each isotope by multiplying the release concentration ($\mu\text{Ci}/\text{cc}$) by total fan flow rate (cc/sec) and by 10^{-6} (Ci/ μCi). Record the results on Form EPIPF-RET-02B-01.
- e. Transmit completed Form EPIPF-RET-02B-01 to the Radiological Protection Director (RPD) or Environmental Protection Director (EPD) for review and/or input to dose projection using EPIP-ENV-03C.

5.4.2 *IF grab samples are required from the Auxiliary Building stack for determination of the effluent isotopic mixture, THEN collect the samples at either the R-13 or R-14 sampler located on the 657' elevation of the Auxiliary Building. Use normal sampling procedures HP-05.004, "Radiation/Contamination Survey and Airborne Radioactivity Sampling Schedules," and HP-05.020, "Counting of High Activity Samples," for sampling the Auxiliary Building stack.*

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5.4.3 Calculate a Radiological Release Rate for an Auxiliary Building Stack Release.

- a. Record the sampling analysis on Form EPIPF-RET-02B-02.
- b. Calculate the total flow (cc/sec) by adding the operating fan flow rates at the top of Form EPIPF-RET-02B-02.

Note

Use back of form for alternate methods of calculating the total fan flow rate for the Auxiliary Building.

- c. Calculate the release rate (Ci/sec) for each isotope by multiplying the release concentration ($\mu\text{Ci}/\text{cc}$) by the total fan flow rate (cc/sec) and by 10^{-6} (Ci/ μCi). Record the results on Form EPIPF-RET-02B-02.

5.4.4 Transmit completed Form EPIPF-RET-02B-02 to RPD or EPD for review and/or input to dose projection using EPIP-ENV-03C.

5.5 OBTAIN AUXILIARY BUILDING or CONTAINMENT STACK RELEASE DATA FROM SPING (if required).

Note

*SPING 01 designates Auxiliary Building Stack (See Form EPIPF-RET-02B-03).
 SPING 02 designates Containment Stack (See Form EPIPF-RET-02B-04).*

5.5.1 Calculate the Total Stack Flow Rate using Form EPIPF-RET-02B-03 and/or Form EPIPF-RET-02B-04.

5.5.2 Noble Gas Release

- a. View the current value of the Low, Medium, and High Range Gas channels (0105 or 0107 or 0109 for Auxiliary Building). Gas channels (0205 or 0207 or 0209 for Containment).
- b. Select which channel to use based on the channel status information. Do **NOT** use a channel in the "FAIL HI" condition.
- c. The Low Range Gas Channel (0105 or 0205) reads in $\mu\text{Ci}/\text{cc}$. **IF** this channel is used to determine the release, **THEN** go to Step 5.5.2.e to calculate the noble gas release rate.
- d. The mid (0107 or 0207) and high (0109 or 0209) range channels read out in cpm.

Convert the cpm reading obtained in "a" above to $\mu\text{Ci}/\text{cc}$ soup using the conversion tables attached to the SPING-4 consoles (See Table 3).

- e. Multiply the concentration in $\mu\text{Ci}/\text{cc}$ by the stack flow rate in cc/sec and by 10^{-6} Ci/ μCi to determine the NOBLE GAS RELEASE RATE (Ci/sec).

REFERENCE USE

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5.5.3 Iodine Release Data

- a. Identify the start of the release from the DNA history plot from the RADSERV control terminal.

Calculate the sample volume $(X) \times (Y) = Z$

X = Time from start of release to either present time or to knee of plateau (maximum printout value) in minutes.

Y = Flow of the sample pump (4.5E + 4 cc/min)

Z = Total volume in (cc)

- b. Enter this on Form EPIPF-RET-02B-03 or EPIPF-RET-02B-04.
c. Determine iodine release concentration ($\mu\text{Ci}/\text{cc}$) by dividing the maximum value from the history printout (μCi) by the sample volume in Step 5.5.3.a.
d. Enter this on Form EPIPF-RET-02B-03 or EPIPF-RET-02B-04.
e. Determine the iodine release rate (Ci/sec) by multiplying the iodine release concentration ($\mu\text{Ci}/\text{cc}$) by the total flow rate (cc/sec) and by $10^{-6} \text{ Ci}/\mu\text{Ci}$.

5.5.4 Calculate and record the total (gross) release rate (Ci/sec) by adding the Noble Gas Release Rate (5.5.2.e) and the Iodine Release Rate (5.5.3.e) on Form EPIPF-RET-02B-03 for Auxiliary Building and/or Form EPIPF-RET-02B-04 for containment.

5.5.5 Calculate and record the % Noble Gas and/or % Iodine by following equation:

$$\frac{\text{Noble Gas or Iodine Release Rate}}{\text{Total Release Rate}} \times 100 = \% \text{ NG or \% I}$$

5.5.6 Transmit completed Form EPIPF-RET-02B-02 to the RPD or EPD for review and/or input to dose projection using EPIP-ENV-03C.

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5.6 OBTAIN STEAM LINE RELIEF VALVE RELEASE DATA

- 5.6.1 Contact the Technical Support Center for the release path (valves open). Determine the Steam Line Monitor readings. Record reading on Form EPIPF-RET-02B-05 (X value).
- 5.6.2 Select the proper calibration factor from Table 2, based on T=0 being the time of the reactor trip, to calculate the gross release concentration. Record calibration factor on Form EPIPF-RET-02B-05 (Y value).
- 5.6.3 Contact the Technical Support Center for steam release flow rate calculation results in cc/sec, per Form EPIPF-TSC-08A-04. Record steam flow rate on Form EPIPF-RET-02B-05 (Z value).
- 5.6.4 Refer to EPIP-RET-05, "Site Boundary Dose Rates During Controlled Plant Shutdown" for additional information when the power operated relief valves are used for plant cooldown.
- 5.6.5 Calculate release rate (Ci/sec) using equation on Form EPIPF-RET-02B-05.
- 5.6.6 Transmit completed Form EPIPF-RET-02B-05 to RPD or EPD for review and/or input to dose projection using EPIP-ENV-03C.

5.7 OBTAIN FIELD SAMPLES (if required)

- 5.7.1 IF it is impossible or impractical to obtain in-plant grab samples as previously described, THEN actual grab samples in the field taken in the downwind plume will be required.
- 5.7.2 Inform the EPD of the need for field grab samples and to coordinate this task.
- 5.7.3 Field samples collected by the Environmental Monitoring (EM) Teams are ultimately delivered to the plant for counting and isotopic analysis.
- 5.7.4 Record field sample analysis results on Form EPIPF-RET-02B-06, and attach all sample results.
- 5.7.5 Transmit completed Form EPIPF-RET-02B-06 and attachments to RPD or EPD for review and/or input to dose projection using EPIP-ENV-03C.

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 EPIPs.

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7.0 References

- 7.1 COMTRAKS 89-028, 89-207, 89-208, and PLS 84-005
- 7.2 EPIP-AD-11, Emergency Radiation Controls
- 7.3 EPIP-AD-18, Potassium Iodide Distribution
- 7.4 EPIP-ENV-03C, Dose Projection Using RASCAL Version 2.2 Software
- 7.5 EPIP-RET-02D, Emergency Radiation Entry Controls and Implementation
- 7.6 EPIP-RET-05, Site Boundary Dose Rates During Controlled Plant Cooldown
- 7.7 HP-05.004, Radiation/Contamination Survey and Airborne Radioactivity Sampling Schedules
- 7.8 HP-05.018, SPING-4 Filter Change-Post-Accident
- 7.9 HP-05.020, Counting of High Activity Samples
- 7.10 HP-05.017, RADSERV Control Terminal

WISCONSIN PUBLIC SERVICE CORP Kewaunee Nuclear Power Plant <i>Emergency Plan Implementing Procedure</i>	No. EPIP-RET-02B	Rev. S
	Title Gaseous Effluent Release Path, Radioactivity, and Release Rate Determination	
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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

- Steam Release Data/Calculation Sheet (STMRLS Program), Form EPIP-TSC-08A-04
- Containment Stack Release (Grab Sample), Form EPIPF-RET-02B-01
- Auxiliary Building Stack (Grab Sample), Form EPIPF-RET-02B-02
- Auxiliary Building Stack (Sping Reading), Form EPIPF-RET-02B-03
- Containment Stack (Sping Reading), Form EPIPF-RET-02B-04
- Steam Release, Form EPIPF-RET-02B-05
- Field Reading (Grab Sample), Form EPIPF-RET-02B-06

8.1.2 Non-QA Records

None

ISOTOPE NORMALIZATION FACTOR

f_i

ISOTOPE	TIME SINCE REACTOR TRIP							
	0.0 HOUR	0.5 HOUR	1.0 HOUR	2.0 HOURS	8.0 HOURS	1 DAY	1 WEEK	1 MONTH
1. KR-83M	0.0171	0.02340	0.02470	0.02130	0.00643	0.00010	-0-	-0-
2. KR-85	0.0010	0.00148	0.00167	0.00148	0.00231	0.00280	0.00690	0.1230
3. KR-85M	0.0383	0.05460	0.05730	0.05330	0.02670	0.02650	-0-	-0-
4. KR-87	0.0705	0.08580	0.07140	0.04550	0.00218	-0-	-0-	-0-
5. KR-88	0.1010	0.13300	0.13200	0.11600	0.03280	0.00077	-0-	-0-
6. KR-89	0.1210	0.00027	-0-	-0-	-0-	-0-	-0-	-0-
7. XE-131M	0.0010	0.00156	0.00167	0.00184	0.00231	0.00280	0.00545	0.0350
8. XE-133	0.2670	0.41300	0.46700	0.51400	0.64300	0.75200	0.94400	0.8410
9. XE-133M	0.0408	0.06320	0.07140	0.07750	0.09350	0.09810	0.04360	0.0065
10. XE-135	0.0605	0.09360	0.11500	0.13600	0.17000	0.11200	-0-	-0-
11. XE-135M	0.0554	0.04450	0.03610	0.03200	0.02060	0.00471	-0-	-0-
12. XE-138	0.2270	0.08580	0.02200	0.00126	-0-	-0-	-0-	-0-
$\sum_{I=1}^{12} f_i (DF) I$	7.2400	4.26800	3.54200	2.93000	1.26800	0.57730	0.33040	0.2887

GROSS RELEASE RATE DETERMINATION FOR STEAM RELEASES

GROSS RELEASE RATE

$$X \times Y \times Z \times 10^{-6} \frac{Ci}{\mu Ci} = \text{_____} Ci/sec$$

WHERE: X = Steam Header Monitor Reading $\left(\frac{R}{hr}\right)$

Y = Calibration Factor $\left(\frac{\mu Ci/cc}{R/hr}\right)$

Z = Flow Rate $\left(\frac{cc}{sec}\right)$

CALIBRATION FACTOR TABLE

TIME (SINCE REACTOR TRIP)	$\frac{\mu Ci/cc}{R/hr}$
-0-	14.5
1 HOUR	16.7
2 HOURS	20.3
4 HOURS	30.4
8 HOURS	67.9
1 DAY	887
1 WEEK	3.08×10^4
1 MONTH	1.93×10^4

MID RANGE

SPING MID-RANGE CPM TO $\mu\text{Ci/cc}$ SOUP

TIME AFTER RX TRIP	0.0 HOUR	0.5 HOUR	1.0 HOUR	2.0 HOURS	8.0 HOURS	24 HOURS	1 WEEK	1 MONTH
MID-RANGE CPM	$\mu\text{Ci/cc}$							
1 00E + 01	7.40E - 04	1.30E - 03	1.50E - 03	1.80E - 03	4.20E - 03	9.30E - 03	1.60E - 02	1.90E - 02
2.00E + 01	1.48E - 03	2.60E - 03	3 00E - 03	3 60E - 03	8.40E - 03	1.86E - 02	3.20E - 02	3.80E - 02
3 00E + 01	2.22E - 03	3 90E - 03	4 50E - 03	5 40E - 03	1.26E - 02	2.79E - 02	4 80E - 02	5.70E - 02
4 00E + 01	2.96E - 03	5.20E - 03	6 00E - 03	7.20E - 03	1.68E - 02	3.72E - 02	6.40E - 02	7.60E - 02
5.00E + 01	3 70E - 03	6 50E - 03	7.50E - 03	9.00E - 03	2.10E - 02	4 65E - 02	8 00E - 02	9 50E - 02
6 00E + 01	4 44E - 03	7.80E - 03	9.00E - 03	1.08E - 02	2.25E - 02	5.58E - 02	9 60E - 02	1.14E - 01
7 00E + 01	5.18E - 03	9.10E - 03	1.05E - 02	1.26E - 02	2.94E - 02	6.51E - 02	1.12E - 01	1.33E - 01
8 00E + 01	5 92E - 03	1.04E - 02	1.20E - 02	1.44E - 02	3.36E - 02	7.44E - 02	1 28E - 01	1.52E - 01
9 00E + 01	6 66E - 03	1.17E - 02	1.35E - 02	1.62E - 02	3 78E - 02	8.37E - 02	1 44E - 01	1.71E - 01
1 00E + 02	7.40E - 03	1.30E - 02	1 50E - 02	1.80E - 02	4.20E - 02	9 30E - 02	1 60E - 01	1.90E - 01
2.00E + 02	1.48E - 02	2.60E - 02	3 00E - 02	3.60E - 02	8 40E - 02	1 86E - 01	3 20E - 01	3 80E - 01
3 00E + 02	2.22E - 02	3.90E - 02	4 50E - 02	5 40E - 02	1.26E - 01	2 79E - 01	4 80E - 01	5 70E - 01
4 00E + 02	2 96E - 02	5 20E - 02	6 00E - 02	7.20E - 02	1.68E - 01	3.72E - 01	6 40E - 01	7.60E - 01
5 00E + 02	3.70E - 02	6 50E - 02	7.50E - 02	9.00E - 02	2.10E - 01	4 65E - 01	8 00E - 01	9.50E - 01
6 00E + 02	4 44E - 02	7.80E - 02	9 00E - 02	1.08E - 01	2.25E - 01	5.58E - 01	9.60E - 01	1.14E + 00
7 00E + 02	5 18E - 02	9.10E - 02	1.05E - 01	1.26E - 01	2.94E - 01	6.51E - 01	1.12E + 00	1 33E + 00
8 00E + 02	5.92E - 02	1.04E - 01	1.20E - 01	1.44E - 01	3 36E - 01	7.44E - 01	1.28E + 00	1.52E + 00
9 00E + 02	6 66E - 02	1.17E - 01	1.35E - 01	1.62E - 01	3.78E - 01	8.37E - 01	1.44E + 00	1.71E + 00
1 00E + 03	7.40E - 02	1.30E - 01	1.50E - 01	1.80E - 01	4.20E - 01	9.30E - 01	1 60E + 00	1.90E + 00
2 00E + 03	1 48E - 01	2 60E - 01	3 00E - 01	3 60E - 01	8 40E - 01	1.86E + 00	3.20E + 00	3.80E + 00
3 00E + 03	2.22E - 01	3 90E - 01	4 50E - 01	5.40E - 01	1.26E + 00	2.79E + 00	4 80E + 00	5.70E + 00
4 00E + 03	2 96E - 01	5 20E - 01	6 00E - 01	7.20E - 01	1.68E + 00	3.72E + 00	6 40E + 00	7.60E + 00
5.00E + 03	3 70E - 01	6.50E - 01	7.50E - 01	9.00E - 01	2.10E + 00	4 65E + 00	8 00E + 00	9.50E + 00
6 00E + 03	4 44E - 01	7.80E - 01	9.00E - 01	1.08E + 00	2.25E + 00	5 58E + 00	9 60E + 00	1.14E + 01
7 00E + 03	5.18E - 01	9.10E - 01	1.05E + 00	1.26E + 00	2.94E + 00	6 51E + 00	1.12E + 01	1 33E + 01
8 00E + 03	5.92E - 01	1 04E + 00	1.20E + 00	1.44E + 00	3.36E + 00	7.44E + 00	1.28E + 01	1.52E + 01
9 00E + 03	6 66E - 01	1.17E + 00	1.35E + 00	1.62E + 00	3.78E + 00	8 37E + 00	1.44E + 01	1.71E + 01
1 00E + 04	7.40E - 01	1.30E + 00	1.50E + 00	1.80E + 00	4.20E + 00	9.30E + 00	1.60E + 01	1.90E + 01
2 00E + 04	1.48E + 00	2.60E + 00	3 00E + 00	3.60E + 00	8 40E + 00	1.86E + 01	3.20E + 01	3 80E + 01
3 00E + 04	2.22E + 00	3 90E + 00	4 50E + 00	5.40E + 00	1.26E + 01	2.79E + 01	4.80E + 01	5.70E + 01
4 00E + 04	2.96E + 00	5.20E + 00	6 00E + 00	7.20E + 00	1.68E + 01	3.72E + 01	6.40E + 01	7 60E + 01
5 00E + 04	3.70E + 00	6 50E + 00	7.50E + 00	9.00E + 00	2.10E + 01	4.65E + 01	8.00E + 01	9 50E + 01
6 00E + 04	4 44E + 00	7.80E + 00	9 00E + 00	1.08E + 01	2.25E + 01	5.58E + 01	9 60E + 01	1.14E + 02
7 00E + 04	5.18E + 00	9.10E + 00	1.05E + 01	1.26E + 01	2.94E + 01	6 51E + 01	1.12E + 02	1.33E + 02
8 00E + 04	5.92E + 00	1.04E + 01	1.20E + 01	1.44E + 01	3.36E + 01	7.44E + 01	1.28E + 02	1.52E + 02
9 00E + 04	6.66E + 00	1.17E + 01	1.35E + 01	1.62E + 01	3.78E + 01	8.37E + 01	1.44E + 02	1.71E + 02
1 00E + 05	7.40E + 00	1.30E + 01	1.50E + 01	1.80E + 01	4.20E + 01	9 30E + 01	1.60E + 02	1.90E + 02
2 00E + 05	1.48E + 01	2.60E + 01	3.00E + 01	3.60E + 01	8 40E + 01	1.86E + 02	3 20E + 02	3 80E + 02
3 00E + 05	2 22E + 01	3 90E + 01	4 50E + 01	5.40E + 01	1.26E + 02	2.79E + 02	4 80E + 02	5.70E + 02
4 00E + 05	2.96E + 01	5 20E + 01	6 00E + 01	7 20E + 01	1 68E + 02	3.72E + 02	6.40E + 02	7 60E + 02
5.00E + 05	3.70E + 01	6 50E + 01	7.50E + 01	9.00E + 01	2 10E + 02	4.65E + 02	8.00E + 02	9 50E + 02
6 00E + 05	4.44E + 01	7 80E + 01	9.00E + 01	1.08E + 02	2.25E + 02	5.58E + 02	9.60E + 02	1.14E + 03
7 00E + 05	5 19E + 01	9.10E + 01	1.05E + 02	1.26E + 02	2.94E + 02	6.51E + 02	1.12E + 03	1.33E + 03
8 00E + 05	5 92E + 01	1.04E + 02	1.20E + 02	1.44E + 02	3.36E + 02	7.44E + 02	1.28E + 03	1.52E + 03
9 00E + 05	6.66E + 01	1.17E + 02	1.35E + 02	1.62E + 02	3.78E + 02	8.37E + 02	1.44E + 03	1.71E + 03
1 00E + 06	7.40E + 01	1.30E + 02	1.50E + 02	1.80E + 02	4.20E + 02	9 30E + 02	1.60E + 03	1.90E + 03

HIGH RANGE

SPING MID RANGE CPM TO $\mu\text{Ci/cc}$ SOUP

TIME AFTER RX TRIP	0.0 HOUR	0.5 HOUR	1.0 HOUR	2.0 HOURS	8.0 HOURS	24 HOURS	1 WEEK	1 MONTH
MID-RANGE CPM	$\mu\text{Ci/cc}$							
1.00E+01	7.00E-01	1.18E+00	1.43E+00	1.72E+00	3.98E+00	8.70E+00	1.54E+01	1.75E+01
2.00E+01	1.40E+00	2.36E+00	2.86E+00	3.44E+00	7.96E+00	1.74E+01	3.08E+01	3.50E+01
3.00E+01	2.10E+00	3.54E+00	4.29E+00	5.16E+00	1.19E+01	2.61E+01	4.62E+01	5.25E+01
4.00E+01	2.80E+00	4.72E+00	5.72E+00	6.88E+00	1.59E+01	3.48E+01	6.16E+01	7.00E+01
5.00E+01	3.50E+00	5.90E+00	7.15E+00	8.60E+00	1.99E+01	4.35E+01	7.70E+01	8.75E+01
6.00E+01	4.20E+00	7.08E+00	8.58E+00	1.03E+01	2.39E+01	5.22E+01	9.24E+01	1.05E+02
7.00E+01	4.90E+00	8.26E+00	1.00E+01	1.20E+01	2.79E+01	6.09E+01	1.08E+02	1.23E+02
8.00E+01	5.60E+00	9.44E+00	1.14E+01	1.38E+01	3.18E+01	6.96E+01	1.23E+02	1.40E+02
9.00E+01	6.30E+00	1.06E+01	1.29E+01	1.55E+01	3.58E+01	7.83E+01	1.39E+02	1.58E+02
1.00E+02	7.00E+00	1.18E+01	1.43E+01	1.72E+01	3.98E+01	8.70E+01	1.54E+02	1.75E+02
2.00E+02	1.40E+01	2.36E+01	2.86E+01	3.44E+01	7.96E+01	1.74E+02	3.08E+02	3.50E+02
3.00E+02	2.10E+01	3.54E+01	4.29E+01	5.16E+01	1.19E+02	2.61E+02	4.62E+02	5.25E+02
4.00E+02	2.80E+01	4.72E+01	5.72E+01	6.88E+01	1.59E+02	3.48E+02	6.16E+02	7.00E+02
5.00E+02	3.50E+01	5.90E+01	7.15E+01	8.60E+01	1.99E+02	4.35E+02	7.70E+02	8.75E+02
6.00E+02	4.20E+01	7.08E+01	8.58E+01	1.03E+02	2.39E+02	5.22E+02	9.24E+02	1.05E+03
7.00E+02	4.90E+01	8.26E+01	1.00E+02	1.20E+02	2.79E+02	6.09E+02	1.08E+03	1.23E+03
8.00E+02	5.60E+01	9.44E+01	1.14E+02	1.38E+02	3.18E+02	6.96E+02	1.23E+03	1.40E+03
9.00E+02	6.30E+01	1.06E+02	1.29E+02	1.55E+02	3.58E+02	7.83E+02	1.39E+03	1.58E+03
1.00E+03	7.00E+01	1.18E+02	1.43E+02	1.72E+02	3.98E+02	8.70E+02	1.54E+03	1.75E+03
2.00E+03	1.40E+02	2.36E+02	2.86E+02	3.44E+02	7.96E+02	1.74E+03	3.08E+03	3.50E+03
3.00E+03	2.10E+02	3.54E+02	4.29E+02	5.16E+02	1.19E+03	2.61E+03	4.62E+03	5.25E+03
4.00E+03	2.80E+02	4.72E+02	5.72E+02	6.88E+02	1.59E+03	3.48E+03	6.16E+03	7.00E+03
5.00E+03	3.50E+02	5.90E+02	7.15E+02	8.60E+02	1.99E+03	4.35E+03	7.70E+03	8.75E+03
6.00E+03	4.20E+02	7.08E+02	8.58E+02	1.03E+03	2.39E+03	5.22E+03	9.24E+03	1.05E+04
7.00E+03	4.90E+02	8.26E+02	1.00E+03	1.20E+03	2.79E+03	6.09E+03	1.08E+04	1.23E+04
8.00E+03	5.60E+02	9.44E+02	1.14E+03	1.38E+03	3.18E+03	6.96E+03	1.23E+04	1.40E+04
9.00E+03	6.30E+02	1.06E+03	1.29E+03	1.55E+03	3.58E+03	7.83E+03	1.39E+04	1.58E+04
1.00E+04	7.00E+02	1.18E+03	1.43E+03	1.72E+03	3.98E+03	8.70E+03	1.54E+04	1.75E+04
2.00E+04	1.40E+03	2.36E+03	2.86E+03	3.44E+03	7.96E+03	1.74E+04	3.08E+04	3.50E+04
3.00E+04	2.10E+03	3.54E+03	4.29E+03	5.16E+03	1.19E+04	2.61E+04	4.62E+04	5.25E+04
4.00E+04	2.80E+03	4.72E+03	5.72E+03	6.88E+03	1.59E+04	3.48E+04	6.16E+04	7.00E+04
5.00E+04	3.50E+03	5.90E+03	7.15E+03	8.60E+03	1.99E+04	4.35E+04	7.70E+04	8.75E+04
6.00E+04	4.20E+03	7.08E+03	8.58E+03	1.03E+04	2.39E+04	5.22E+04	9.24E+04	1.05E+05
7.00E+04	4.90E+03	8.26E+03	1.00E+04	1.20E+04	2.79E+04	6.09E+04	1.08E+05	1.23E+05
8.00E+04	5.60E+03	9.44E+03	1.14E+04	1.38E+04	3.18E+04	6.96E+04	1.23E+05	1.40E+05
9.00E+04	6.30E+03	1.06E+04	1.29E+04	1.55E+04	3.58E+04	7.83E+04	1.39E+05	1.58E+05
1.00E+05	7.00E+03	1.18E+04	1.43E+04	1.72E+04	3.98E+04	8.70E+04	1.54E+05	1.75E+05
2.00E+05	1.40E+04	2.36E+04	2.86E+04	3.44E+04	7.96E+04	1.74E+05	3.08E+05	3.50E+05
3.00E+05	2.10E+04	3.54E+04	4.29E+04	5.16E+04	1.19E+05	2.61E+05	4.62E+05	5.25E+05
4.00E+05	2.80E+04	4.72E+04	5.72E+04	6.88E+04	1.59E+05	3.48E+05	6.16E+05	7.00E+05
5.00E+05	3.50E+04	5.90E+04	7.15E+04	8.60E+04	1.99E+05	4.35E+05	7.70E+05	8.75E+05
6.00E+05	4.20E+04	7.08E+04	8.58E+04	1.03E+05	2.39E+05	5.22E+05	9.24E+05	1.05E+06
7.00E+05	4.90E+04	8.26E+04	1.00E+05	1.20E+05	2.79E+05	6.09E+05	1.08E+06	1.23E+06
8.00E+05	5.60E+04	9.44E+04	1.14E+05	1.38E+05	3.18E+05	6.96E+05	1.23E+06	1.40E+06
9.00E+05	6.30E+04	1.06E+05	1.29E+05	1.55E+05	3.58E+05	7.83E+05	1.39E+06	1.58E+06
1.00E+06	7.00E+04	1.18E+05	1.43E+05	1.72E+05	3.98E+05	8.70E+05	1.54E+06	1.75E+06

PROCEDURAL FLOW CHART

	Auxiliary Building Stack	Containment Stack	Steam Reliefs
Identify Release Path:			
Verify By Monitoring These Indications	R-13 cpm R-14 cpm R-22 cpm R-35 mR/hr R-36 R/hr SPING 01-05 μ Ci/cc 01-07 cpm 01-09 cpm	R-11 cpm R-12 cpm R-21 cpm R-37 mR/hr R-38 R/hr SPING 02-05 μ Ci/cc 02-07 cpm 02-09 cpm	R-15 cpm R-19 cpm 1A Steam Line R-31 mR/hr R-32 R/hr 1B Steam Line R-33 mR/hr R-34 R/hr
Get Grab Samples At	Auxiliary SPING (642') Field Samples R-13 (657') R-14 (657')	R-11/12 (657') R-21 (657') Cont. SPING (642') Coordinate Field Sampling with EPD	Coordinate Field Sampling with EPD
Determine Effluent Release Rate (cc/sec)	1A Auxiliary Exh. 1B Auxiliary Exh. 1A Zone SV 1B Zone SV 1A SFP 1B SFP	RBV 1A SBV 1B SBV	Get From TSC, per Form TSC-08-02
Transmit Obtained Data OR Perform Dose Projection	EPD or EOF/RAF Liaison EPIP-ENV-03C	EPD or EOF/RAF Liaison EPIP-ENV-03C	EPD or EOF/RAF Liaison EPIP-ENV-03C

FOR EASE OF DATA RETRIEVAL, SEE:

- a) Honeywell Graphic Output 12 - For All SPING Data
- b) Honeywell Graphic Output 17 and 18 - For Selected Non-SPING Data

HONEYWELL POINT NO.	MONITOR NO.	UNITS	DESCRIPTION / LOCATION
G0001G	R-1	mR/hr	Control Room
G0002G	R-2	mR/hr	Containment, 649'
G0004G	R-4	mR/hr	Charging Pump
G0005G	R-5	mR/hr	Spent Fuel Pools, 649'
G0006G	R-6	mR/hr	Sampling Room
G0007G	R-7	mR/hr	Seal Table
G0009G	R-9	R/hr	Letdown Line
G0010G	R-10	mR/hr	New Fuel Pit
G0011G	R-11	cpm	Containment Air Particulate
G0012G	R-12	cpm	Containment Gas
G0013G	R-13	cpm	Auxiliary Building Vent
G0014G	R-14	cpm	Auxiliary Building Vent Stack
G0015G	R-15	cpm	Air Ejector
G0016G	R-16	cpm	Containment Fan Coil Southwest Return
G0017G	R-17	cpm	Component Cooling Southwest Return
G0018G	R-18	cpm	Liquid Waste Disposal Line
G0019G	R-19	cpm	S/G Blowdown
G0020G	R-20	cpm	Service Water Standpipe
G0031G	R-31	mR/hr	1A Steam Line - LO
G0102G	R-32	R/hr	1A Steam Line - HI
G0105G	R-33	mR/hr	1B Steam Line - LO
G0104G	R-34	R/hr	1B Steam Line - HI
G0101G	R-35	mR/hr	Auxiliary Building Vent Duct - LO
G0100G	R-36	R/hr	Auxiliary Building Vent Duct - HI
G0113G	R-37	mR/hr	Containment Vent Duct - LO
G0112G	R-38	R/hr	Containment Vent Duct - HI
G0114G	R-40	R/hr	1A Containment HI-Range Monitor
G0115G	R-41	R/hr	1B Containment HI-Range Monitor
EBERLINE SPING AREA MONITORS			
G9041G	08-01	mR/hr	586' Sulfuric Acid Tank
G9042G	08-02	R/hr	586' Containment Spray Pumps
G9043G	03-01	R/hr	586' Waste Disposal Panel
G9044G	03-02	mR/hr	586' Hi-Rad Sample Room
G9045G	05-01	R/hr	586' RHR Pump Pit Area
G9046G	05-02	mR/hr	586' Waste Compactor
G9048G	08-03	mR/hr	606' Heating Boiler
G9049G	04-01	mR/hr	606' Machine Shop
G9050G	04-02	mR/hr	606' RPO/Laundry Room
EBERLINE SPING AREA MONITORS (Continued on Page 2 of 2)			

HONEYWELL POINT NO.	MONITOR NO.	UNITS	DESCRIPTION / LOCATION
EBERLINE SPING AREA MONITORS (Continued)			
G9051G	03-03	R/hr	606' Elevator/CC Heat Exchanger
G9052G	05-03	mR/hr	606' Loading Dock
G9053G	04-03	mR/hr	626' Makeup Demineralizer Area
G9055G	04-04	mR/hr	626' I&C Shop - South
G9056G	06-01	mR/hr	626' I&C Shop - North
G9057G	06-02	R/hr	642' Shield Building Filter Area
G9058G	06-03	mR/hr	642' Control Room A/C Room
G9059G	06-04	R/hr	657' Containment Vent Filter Area
G9060G	06-05	R/hr	657' Zone SV Filter Area
G9061G	07-03	mR/hr	606' TSC Building Stairwell
G9062G	07-01	mR/hr	586' RAF Count Room
G9063G	07-02	mR/hr	586' Technical Support Center
G9066G	07-04	cpm	586' Technical Support Center
G9067G	03-04	cpm	586' Hi-Rad Sample Room
G9069G	03-06	cpm	586' Charging Pump Area
G9070G	03-08	cpm	606' VCT Area
CONTAINMENT STACK SPING			
G9071G	02-01	μCi	Beta Particle
G9072G	02-02	cpm	Alpha Particulate
G9073G	02-03	μCi	Iodine
G9074G	02-04	cpm	Iodine Background
G9075G	02-05	μCi/cc	Low-Range Noble Gas
G9076G	02-06	mR/hr	Area Monitor - Gamma
G9077G	02-07	cpm	Mid-Range Noble Gas
G9078G	02-08	cpm	Background - Gas Channels
G9079G	02-09	cpm	Hi-Range Noble Gas
AUXILIARY BUILDING STACK FLOW			
F7001G	N/A	cfm	Auxiliary Building Stack Flow
N/A	06-10	milli-amps	Auxiliary Building Stack Flow (Form EPIPF-RET-02B-02)
AUXILIARY BUILDING STACK SPING			
G9080G	01-01	μCi	Beta Particulate
G9081G	01-02	cpm	Alpha Particulate
G9082G	01-03	μCi	Iodine
G9083G	01-04	cpm	Iodine Background
G9084G	01-05	μCi/cc	Low-Range Noble Gas
G9085G	01-06	mR/hr	Area Monitor - Gamma
G9086G	01-07	cpm	Mid-Range Noble Gas
G9087G	01-08	cpm	Background - Gas Channels
G9088G	01-09	cpm	Hi-Range Noble Gas

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Reviewed By			Approved By			
William Bartelme			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 establishing the emergency response organization for the Technical Support Center (TSC) and describes the responsibilities of the organizations members.

2.0 General Notes

- 2.1 None

3.0 Precautions and Limitations

- 3.1 If a declared emergency is initiated due to a low or high security threat, core damage assessment and severe accident management assessment may be performed in the Emergency Operating Facility (per revision 25 of the Emergency Plan, Section 6.2.5).

4.0 Initial Conditions

- 4.1 This procedure shall be implemented and the TSC staff formed during a Declared Emergency of Alert, Site Emergency, General Emergency, or whenever the need arises to activate the TSC.

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5.0 Procedure

5.1 Technical Support Center Director (TSCD) shall:

5.1.1 Supervise and coordinate the TSC staff actions as stated in EPIP-AD-04, "KNPP Response to Alert or Higher," Step 5.9.

5.2 Severe Accident Management Team Leader (SAMTL) shall:

5.2.1 WHEN notified that an Emergency has been declared:

- a. Report to the Technical Support Center.
- b. IF a SAMTL has been designated, THEN until released,
 - 1. Assist in the activation of the TSC.
 - 2. If appropriate, plan a shift relief per EPIP-AD-05, "Emergency Response Organization Shift Relief Guideline."
 - 3. Assist the designated SAM Operations person.
- c. IF a SAMTL has NOT been designated, THEN notify the Technical Support Center Director (TSCD) of your intent to assume the responsibilities of the SAMTL and continue implementation of this procedure.

5.2.2 Obtain the SAMTL Response Binder from the TSC Material Locker.

<p>!! Caution !!</p> <p>To Prevent Injury or Death</p>
<p><i>Implementation of SAMGs from the TSC prior to full activation of the TSC is NOT recommended without careful analysis. Information flow into the TSC must be adequate to support the SAM Teams ability to develop recommendations and the Emergency Director should be available in the TSC to support the decision making process on SAM Team recommendations.</i></p>

5.2.3 Ensure the following actions are completed prior to implementation of the SAM guidelines from the TSC:

- a. _____ The SAM Operations and SAM Core Hydraulics positions are filled.
- b. _____ The computers in the SAM Room are energized and signed on to the SAM data screens in accordance with Step 5.2.4 of this procedure.

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Note

Obtain information needed in the next step from TSC status boards, Honeywell terminal, the Data Coordinator, and/or the Operations Communicator:

- c. _____ Using Form EPIPF-TSC-01-01, "Plant Status Summary for SAM Implementation," obtain as complete a picture of plant status as possible.

5.2.4 SAM data screen access method:

- a. Log into the KNPP Network using one of the 2 terminals in the SAM Room.
- b. When the following message appears on the computer screen, "You have not logged on at this computer before. Would you like this computer to retain your individual settings for use when you log on here in the future," ALWAYS CLICK "NO".

Note

The SAM DATA Icon (shortcut) opens the Excel file "N:\Group\Ep(242)\Sam\Hnwltopc\Sam.xls."

- c. Select the SAM DATA Icon from the Program Menu.

5.2.5 Determine if the Control Room staff is implementing SAM guidelines:

- a. IF NO, THEN
 1. Maintain plant status awareness using Form EPIPF-TSC-01-01, "Plant Status Summary for SAM Implementation," current with plant conditions.
 2. Periodically check with the SAM Core Hydraulics and SAM Operations person to obtain knowledge of their individual activities.
 3. Using Form EPIPF-TSC-01-03, "Severe Accident Management - Status," to determine potential SAM guideline application.
 4. Offer assistance to the TSCD with tasks that will allow you to keep abreast of plant conditions.
- b. IF YES, THEN
 1. Inform the SAM Core Hydraulics and SAM Operations person that they should go to the SAM Room and initiate a review of the Diagnostic Flow Chart (DFC) based on current plant conditions.
 2. Inform the Emergency Director (ED) that the SAM Team has begun monitoring the DFC.

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Note

Form EPIPF-TSC-01-03 may be used as a tool during the analysis process.

3. Facilitate a review of appropriate SAGs and SCGs with the SAM Team.
4. Obtain and complete Form EPIPF-TSC-01-02, "Severe Accident Management Summary and Strategy Recommendation," for each SAM guideline analyzed that results in a needed strategy recommendation to the ED.
5. Interact with the TSC Directors to obtain information or alert them to pending anticipatory tasks.
6. Provide any or all strategy recommendation(s) to the ED using completed Form EPIPF-TSC-01-02 as soon as possible.
7. Ensure that the Severe Accident Management status board is maintained.
8. Ensure that the DFC is continuously monitored.
9. Ensure the Severe Challenge Status Tree (SCST) is monitored as appropriate for accident conditions.
10. Ensure Long Term Concerns are monitored per SAEG-1.

5.2.6 Review staffing requirements, AND

- a. Request additional assistance from the TSCD, OR
- b. Release any assistance no longer required back to the TSCD.

5.2.7 If appropriate, plan a shift relief for SAM Team Leader per EPIP-AD-05.

5.2.8 IF Final Conditions (Section 6.0) have NOT been met, THEN return to Step 5.2.5.

5.2.9 WHEN Final Conditions (Section 6.0) are met:

- a. Verify the SAM Room is returned to normal status and emergency procedures, forms, etc. are returned to their proper place.
- b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

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5.3 Severe Accident Management Operations (SAMOP) shall:

5.3.1 WHEN notified that an Emergency has been declared:

- a. Report to the Technical Support Center.
- b. IF a SAMOP person has been designated, THEN until released,
 1. Assist in the activation of the TSC.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated SAMOP person.
- c. IF a SAMOP person has NOT been designated, THEN notify the Technical Support Center Director of your intent to assume the responsibilities of the SAMOP person and continue implementation of this procedure.

Note

Pre-SAM activities should be performed from the TSC Directors table at SAM Team Leader locations.

- 5.3.2 Initiate EPIP-TSC-10, "Technical Support for IPEOPs," and review against existing plant conditions, Control Room actions, and operating procedure implementation.
- 5.3.3 Advise the ED on the potential TSC actions and activities needed in support of operational situations and actions.
- 5.3.4 Inform the ED of any significant events.
- 5.3.5 Review staffing requirements with the SAM Team Leader, AND
 - a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.3.6 If appropriate, plan a shift relief for the SAMOP person per EPIP-AD-05.
- 5.3.7 IF informed by the SAM Team Leader that SAM guidelines need to be implemented:
 - a. Secure use of procedure EPIP-TSC-10.
 - b. Move to the SAM Room and initiate a review of the Diagnostic Flow Chart.
- 5.3.8 IF Final Conditions (Section 6.0) have NOT been met or SAM Guidelines have NOT been implemented, THEN return to Step 5.3.2.

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5.3.9 WHEN Final Conditions are met (Section 6.0):

- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc. are returned to their proper place.
- b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

5.4 **Severe Accident Management Core Hydraulics (SAMCH) shall:**

5.4.1 WHEN notified that an Emergency has been declared:

- a. IF on-site at the time of declaration, THEN report to the TSC and go to step e.
- b. Report to the Emergency Operations Facility.
- c. IF an SRCL person has NOT been designated, THEN notify the Emergency Protection Director and Technical Support Center Director of your intent to provide Core Damage Assessment until relieved by an SRCL.
- d. IF an SRCL has been designated, THEN report to the Technical Support Center.
- e. IF a SAMCH person has been designated, THEN until released,
 1. Assist in the activation of the TSC.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated SAMCH person.
- f. IF a SAMCH person has NOT been designated, THEN notify the Technical Support Center Director of your intent to assume the responsibilities of the SAMCH person and continue implementation of this procedure.

5.4.2 Based on plant conditions, implement the following procedures:

- a. EPIP-TSC-07, "RV Head Venting Time Calculation"
- b. EPIP-TSC-08A, "Calculations for Steam Release from Steam Generators"
- c. EPIP-TSC-09A, "Core Damage Assessment"

5.4.3 Monitor core and reactor coolant parameters for indications of inadequate core cooling.

5.4.4 Assess for actual or potential reactor core damage.

5.4.5 Inform the TSCD of significant changes in core and reactor coolant parameters.

5.4.6 In conjunction with the SAM Team Leader, provide recommendations to the ED on mitigating actions that may be taken.

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- 5.4.7 Review staffing requirements with the SAM Team Leader, AND
- a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.4.8 If appropriate, plan a shift relief for the SAMCH person per EPIP-AD-05.
- 5.4.9 IF informed by the SAM Team Leader that SAM guidelines need to be implemented:

!! Caution !!

To Prevent Injury or Death

It may be necessary to continue implementation of Procedures EPIP-TSC-07, EPIP-TSC-08A, and/or EPIP-TSC-09A as well as the SAGs and SCGs.

- a. Move to the SAM Room and initiate a review of the Diagnostic Flow Chart.
- 5.4.10 IF Final Conditions (Section 6.0) have NOT been met, THEN return to Step 5.4.2.
- 5.4.11 WHEN Final Conditions are met (Section 6.0):
- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc. are returned to their proper place.
 - b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

5.5 Engineering Coordinator shall:

- 5.5.1 WHEN notified that an Emergency has been declared:
- a. Report to the Technical Support Center.
 - b. IF an Engineering Coordinator has been designated, THEN until released,
 1. Assist in the activation of the TSC.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated Engineering Coordinator.
 - c. IF an Engineering Coordinator has NOT been designated, THEN notify the Technical Support Center Director of your intent to assume the responsibilities of the Engineering Coordinator and continue implementation of this procedure.
- 5.5.2 Implement procedure EPIP-TSC-04, "Emergency Physical Changes, Major Equipment Repair."

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- 5.5.3 When required, develop and issue work requests.
- 5.5.4 When required, provide plant groups with revised and updated prints.
- 5.5.5 When requested, present emergency physical change information to the Plant Operations Review Committee (PORC).
- 5.5.6 When requested by the TSCD, coordinate engineering support.
- 5.5.7 When requested, provide engineering and technical assistance to the Support Activity Director.
- 5.5.8 Inform the TSCD of any significant events.
- 5.5.9 Review staffing requirements, AND
 - a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.5.10 If appropriate, plan a shift relief for Engineering Coordinator per EPIP-AD-05.
- 5.5.11 IF Final Conditions (Section 6.0) have NOT been met, THEN return to Step 5.5.2.
- 5.5.12 WHEN Final Conditions are met (Section 6.0):
 - a. Verify all work areas are returned to normal status and emergency procedures, forms, etc. are returned to their proper place.
 - b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

5.6 Quality Programs Coordinator shall:

- 5.6.1 WHEN notified that an Emergency has been declared:
 - a. Report to the Technical Support Center.
 - b. IF a Quality Programs Coordinator has been designated, THEN until released,
 - 1. Assist in the activation of the TSC.
 - 2. If appropriate, plan a shift relief per EPIP-AD-05.
 - 3. Assist the designated Quality Programs Coordinator.
 - c. IF a Quality Programs Coordinator has NOT been designated, THEN notify the Technical Support Center Director of your intent to assume the responsibilities of the Quality Programs Coordinator and continue implementation of this procedure.

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- 5.6.2 Alert the TSCD of any Quality Programs (QP) concerns which may impact any activity.
- 5.6.3 When appropriate, provide recommendations to the TSCD.
- 5.6.4 Maintain QP activities as close to normal as practical.
- 5.6.5 Coordinate necessary Warehouse activities for procurement and/or relative shipment of material.
- 5.6.6 Inform the TSCD of any significant events.
- 5.6.7 Review staffing requirements, AND
 - a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.6.8 If appropriate, plan a shift relief for Quality Programs Coordinator per EPIP-AD-05.
- 5.6.9 IF Final Conditions (Section 6.0) have NOT been met, THEN return to Step 5.6.2.
- 5.6.10 WHEN Final Conditions are met (Section 6.0):
 - a. Verify all work areas are returned to normal status and emergency procedures, forms, etc. are returned to their proper place.
 - b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

5.7 Data Coordinator shall:

- 5.7.1 WHEN notified that an Emergency has been declared:
 - a. Report to the Technical Support Center.
 - b. IF a Data Coordinator has been designated, THEN until released,
 - 1. Assist in the activation of the TSC.
 - 2. If appropriate, plan a shift relief per EPIP-AD-05.
 - 3. Assist the designated Data Coordinator.
 - c. IF a Data Coordinator has NOT been designated, THEN notify the Technical Support Center Director of your intent to assume the responsibilities of the Data Coordinator and continue implementation of this procedure.
- 5.7.2 Implement procedure EPIP-TSC-03, "Plant Status Procedure."

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- 5.7.3 Obtain information not available on the Honeywell from the ERF Communicator – TSC.
- 5.7.4 Alert the TSCD or ED of significant changes in plant parameters or system status changes.
- 5.7.5 Assist TSC staff members obtain plant data and information.
- 5.7.6 Ensures that data forms or messages are maintained for use in event analyses.
- 5.7.7 Inform the TSCD of any significant events.
- 5.7.8 Review staffing requirements, AND
 - a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.7.9 If appropriate, plan a shift relief for Data Coordinator per EPIP-AD-05.
- 5.7.10 IF Final Conditions (Section 6.0) have NOT been met, THEN return to Step 5.7.2.
- 5.7.11 WHEN Final Conditions are met (Section 6.0):
 - a. Verify all work areas are returned to normal status and emergency procedures, forms, etc. are returned to there proper place.
 - b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

5.8 Off-Site Communicator shall:

- 5.8.1 IF notified that an emergency has been declared during work-hours, THEN
 - a. Report to the TSC and ask for head-of-the-line privileges for accountability.
 - b. IF more than one off-site communicator arrives at the TSC, THEN promptly select one to stay in the TSC, others are to go to the EOF.
- 5.8.2 Verbally inform the TSCD or ED of your arrival and availability to perform off-site notifications.
- 5.8.3 If directed by the Emergency Director, accept formal turnover of responsibilities for off-site notifications from the Control Room.
- 5.8.4 When completed, verbally inform Emergency Director that off-site communication responsibility has been accepted in the TSC.

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5.8.5 Direct TSC Support Personnel to enter date and time in the TSC log for turnover of responsibilities for off-site notifications from the Control Room.

5.8.6 Perform off-site notifications as directed by the ED in accordance with EPIP-AD-07.

Note

Before contacting the Engineering/Licensing Coordinator, become familiar with off-site PAR and evacuation restrictions.

5.8.7 WHEN the EOF requests turnover of responsibility for off-site communication, THEN

- a. Update the Off-Site Communicator in the EOF on status of off-site communications.
- b. Formally release responsibility for off-site communications to the Off-Site Communicator in the EOF and note time.
- c. Verbally inform the ED that off-site communication has been transferred to the EOF.
- d. Direct the TSC support person to enter the date and time in the TSC log for turnover of responsibility for off-site notifications to the EOF.
- e. Contact the Eng/Lic. Coordinator and ask how you can best support the EOF.

5.8.8 IF the EOF requests you to leave the site and PARs allow it, THEN inform the TSCD or ED you are leaving the site to follow EOF instructions.

5.8.9 WHEN Final Conditions are met (Step 6.0):

- a. IF off-site communications are being performed from the TSC, ensure that termination communications have been completed in accordance with EPIP-EOF-08.
- b. Verify that the bell switch on the emergency government verification line is in the ON position.
- c. Verify all work areas are returned to normal status and Emergency Procedures, Forms, etc., are returned to their proper place.
- d. Collect all completed Forms, Notes and Other Documentation and give them to the TSCD.

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5.9 NRC Communicator (NRCCM) shall:

5.9.1 WHEN notified that an Emergency has been declared:

- a. Report to the Control Room.
- b. IF a NRCCM has been designated, THEN until released,
 1. Provide assistance to the designated NRCCM as required.
 2. When appropriate, relocate to the TSC and monitor the communications of the NRCCM in the Control Room.
 3. When the TSC is capable of supporting NRC communications, transfer NRC communications from the Control Room to the TSC.
- c. IF a NRC Communicator has NOT been designated, THEN notify the Shift Technical Advisor (STA) or Event Operations Director of your intent to assume the responsibilities of the NRCCM and continue implementation of this procedure.

Note

The Emergency Response Data System shall be activated within one hour of declaration of an Alert or higher.

1. Ensure the Emergency Response Data System has been activated per Form EPIPF-TSC-02-03.
2. Relieve the STA of NRC Communications responsibility.
3. Maintain a continuous line of communication with NRC headquarters.
4. WHEN the TSC is considered ready for activation, turn over NRC communications or relocate to the Technical Support Center.

5.9.2 Notify the TSCD that you have assumed responsibility for the NRC Communicator position.

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5.9.3 The following issues are of interest to the NRC:

- a. _____ Is there any change to the classification of the event? If so, what is the reason?
- b. _____ What is the ongoing/imminent damage to the facility, including affected equipment and safety features?
- c. _____ Have toxic or radiological releases occurred or been projected, including changes in the release rate? If so, what is the projected on-site and off-site releases, and what is the basis of assessment?
- d. _____ What are the health effect/consequences to on-site/off-site people? How many on-site/off-site people are/will be affected and to what extent?
- e. _____ Is the event under control? When was control established, or what is the planned action to bring the event under control? What is the mitigative action underway or planned?
- f. _____ What on-site protective measures have been taken or planned?
- g. _____ What off-site protective actions have been recommended to State/Local officials?
- h. _____ What is the status of State/Local/other Federal agencies' responses, if known?
- i. _____ If applicable, what is the status of public information activities, such as alarm, broadcast, or press releases (regulatee/State/Local/other Federal agencies)? Has a Joint Information Center been activated?

5.9.4 Continue to maintain a continuous line of communication with NRC headquarters.

5.9.5 Record all incoming and outgoing information on the Telephone Communications Log Sheet located in the TSC reference shelf.

5.9.6 Provide notifications and status updates to the NRC.

5.9.7 Notify the ED or TSCD of NRC concerns.

5.9.8 Inform the TSCD of any significant events.

5.9.9 Review staffing requirements, AND

- a. Request additional assistance from the TSCD, OR
- b. Release any assistance no longer required back to the TSCD.

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- 5.9.10 If appropriate, plan a shift relief for NRC Communicator per EPIP-AD-05.
- 5.9.11 IF Final Conditions (Step 6.0) have NOT been met, THEN return to Step 5.9.3.
- 5.9.12 WHEN Final Conditions are met (Step 6.0):
 - a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to there proper place.
 - b. Collect all completed Forms, Notes and Other Documentation and give them to the TSCD.

5.10 Emergency Response Facility (ERF) Communicator - Technical Support Center (TSC) shall:

- 5.10.1 WHEN notified that an Emergency has been declared:
 - a. Report to the Technical Support Center.
 - b. IF an ERF Communicator - TSC has been designated, THEN until released,
 - 1. Assist in the activation of the TSC.
 - 2. If appropriate, plan a shift relief per EPIP-AD-05.
 - 3. Assist the designated ERF Communicator - TSC.
 - c. IF an ERF Communicator - TSC has NOT been designated, THEN notify the TSCD or ED of your intent to assume the responsibilities of the ERF Communicator - TSC and continue implementation of this procedure.
- 5.10.2 Enter the 4-Way Communication Link. The "dial in number" and "access number" are listed in the KPB Emergency Telephone Directory, ETD 03, "Emergency Facility Telephone List."
- 5.10.3 Record all incoming and outgoing *ad hoc* information on the Telephone Communications Log Sheet.
- 5.10.4 Obtain information and data from the Control Room that cannot be obtained from the Honeywell terminals.
- 5.10.5 Maintain Plant System Status, Form EPIPF-TSC-03-02. Use copies of Form EPIPF-TSC-03-01, "Plant System Status" and EPIP-TSC-03-02, "Plant Equipment Status," to keep track of changing plant conditions.
- 5.10.6 Inform the TSCD of any significant events.

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- 5.10.7 Review staffing requirements, AND
- a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.10.8 If appropriate, plan a shift relief for Operations Communicator per EPIP-AD-05.
- 5.10.9 IF Final Conditions (Step 6.0) have NOT been met, THEN return to Step 5.10.3.
- 5.10.10 WHEN Final Conditions are met (Step 6.0):
- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
 - b. Collect all completed forms, notes, and other documentation and give them to the TSCD.

5.11 TSC Support Person shall:

- 5.11.1 WHEN notified that an Emergency has been declared:
- a. Report to the Technical Support Center.
 - b. IF a TSC Support person has been designated, THEN until released,
 1. Assist in the activation of the TSC.
 2. If appropriate, plan a shift relief per EPIP-AD-05.
 3. Assist the designated TSC Support person.
 - c. IF a Recorder has NOT been designated, THEN notify the Technical Support Center Director of your intent to assume the responsibilities of the TSC Support person and continue implementation of this procedure.
- 5.11.2 Maintain a "Chronological TSC Log" of significant events, announcements, and TSCD priorities.
- 5.11.3 When requested, make document copies.
- 5.11.4 Inform the TSCD of any significant events.
- 5.11.5 Review staffing requirements, AND
- a. Request additional assistance from the TSCD, OR
 - b. Release any assistance no longer required back to the TSCD.
- 5.11.6 If appropriate, plan a shift relief for the TSC Support person per EPIP-AD-05.
- 5.11.7 IF final conditions (Step 6.0) have NOT been met, THEN return to Step 5.11.2.

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5.11.8 WHEN Final Conditions are met (Step 6.0):

- a. Verify all work areas are returned to normal status and emergency procedures, forms, etc., are returned to their proper place.
- b. Collect all completed forms, notes, and other documentation and give them to the TSCD.
- c. Ensure documents and forms generated in the TSC during the event are retained according to the KNPP Records Retention Schedule.

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 EPIP-AD-04, KNPP Response to Alert or Higher
- 7.2 EPIP-AD-05, Emergency Response Organization Shift Relief Guideline
- 7.3 EPIP-AD-07, Initial Emergency Notifications
- 7.4 Kewaunee Nuclear Power Plant Emergency Plan
- 7.5 EPIP-EOF-08, Continuing Emergency Notifications
- 7.6 EPIP-TSC-03, Plant Status Procedure
- 7.7 EPIP-TSC-04, Emergency Physical Change, Major Equipment Repair
- 7.8 EPIP-TSC-07, RV Head Venting Time Calculation
- 7.9 EPIP-TSC-08A, Calculations for Steam Release from Steam Generators
- 7.10 EPIP-TSC-09A, Core Damage Assessment
- 7.11 EPIP-TSC-10, Technical Support for IPEOPs

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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

- Telephone Communications Log Sheet, Form EPIPF-EOF-04-02
- Chronological TSC Log
- Severe Accident Management Summary and Strategy Recommendation, Form EPIPF-TSC-01-02

8.1.2 Non-QA Records

- Plant Status Summary for SAM Implementation, Form EPIPF-TSC-01-01
- Severe Accident Management - Status, Form EPIPF-TSC-01-03

EOF ACTIVATION CHECKLIST

ITEM	ACTION	INITIAL WHEN COMPLETED
1	<p>Position furniture and communications equipment in accordance with the floor plans attached to the containers listed below:</p> <p>NOTE: (1) <i>Equipment boxes listed in order of priority.</i></p> <p style="padding-left: 40px;">(2) <i>A dial tone should be heard each time a telephone is connected to the appropriate wall jack.</i></p> <p style="padding-left: 40px;">(3) <i>Title markers (name tents) should be placed in front of the chair where the individual with that title sits.</i></p> <p>a. Box - A (SRCL/EPD Area)</p> <p>b. Box - B (ALD Area)</p> <p>c. Box - C (ENV Work Area)</p> <p>d. Box - D (NRC Conference Room)</p> <p>e. Box - E (State/County Conference Room)</p> <p>f. Set out clipboards, name tags, baskets, and "Telephone Communication Log" pads.</p> <p>g. <u>IF</u> full NRC response is anticipated, <u>THEN</u> clear <u>AND</u> set up Conference Room G1-4 (See: Figure EPIPFG-APPX-06-06).</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
2	<p>Establish security for the EOF/JPIC work area using Figure EPIPFG-EOF-12-01 attached to this checklist:</p> <p>a. Station a person at Station 5 with the appropriate instructions and materials from procedure EPIP-EOF-12.</p> <p>b. At all Figure locations marked "P" (Post), hang the "This Area Is Secured" signs.</p> <p>NOTE: <i>IF unauthorized personnel become a problem, THEN the doors marked "L" (Lockable) can be locked. Keys to those doors are hung inside the EOF storage closet door to be issued to EOF personnel as needed.</i></p> <p>c. Ensure that all EOF/JPIC staff in the facility at the time are logged in on Form EPIPFG-EOF-12-01 and issued an EOF/JPIC badge.</p>	<p>_____</p> <p>_____</p> <p>_____</p>
3	<p>Communication System Checks:</p> <p>a. <u>EOF Telecopier</u>: Send a test page of text to the Nuclear Telecopier at 5544 to verify the fax transmission capability.</p> <p>b. <u>Dial-Select</u>: (Sta. 10) contact the TSC (ext. 33).</p> <p>c. <u>Env. Monitoring Group Communications Systems</u>: Contact at least one EMT using radio or telephone.</p> <p>d. <u>Honeywell Computer</u>: Call up graphic display screen #53.</p> <p>e. Verify wall clocks in EOF have the same time as the Honeywell Computer.</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

EOF ACTIVATION CHECKLIST

ITEM	ACTION	INITIAL WHEN COMPLETED
4	<p>ERM Activation Actions</p> <p>a. Verify capability for EOF to assume the following responsibilities:</p> <p style="margin-left: 20px;">(1) Off-site notification</p> <p style="margin-left: 20px;">(2) Dose Assessment</p> <p style="margin-left: 20px;">(3) PAR Determination</p> <p>b. Announce EOF activation and scope of responsibilities assumed.</p> <p>c. Notify the ED <u>AND</u> inform him of the scope of EOF activation.</p>	<p>(ERM) _____</p> <p>(ERM) _____</p> <p>(ERM) _____</p>

ERM SIGNATURE _____

DATE _____

TIME _____

EOF DEACTIVATION CHECKLIST

ITEM	ACTION	INITIAL WHEN COMPLETED
1	Termination notifications have been completed in accordance with EPIP-EOF-08 as appropriate.	_____
2	<p>Ensure the designated* emergency telephones are unplugged and returned to the blue storage containers in the EOF.</p> <p>* Remove ONLY the following phones <u>AND</u> store them in the EP storage closet in the storage box listed. All other phones shall remain permanently installed.</p> <ul style="list-style-type: none"> • SRCL/EPD Area (Storage Box A) - Phones 15, 16, 17, 18, and 22 (Fig. EPIPFG-APPX-A-06-04) • ALD/NRC Area (Storage Box B) - Phones 5 and 6 (Fig. EPIPFG-APPX-A-06-04) • ENV Work Area (Storage Box C) - Phones 19, 20, 21, and 23 (Fig. EPIPFG-APPX-A-06-04) • NRC Conference Room (Storage Box D) - Phones 26, 27, 28, 29, and 30 (Fig. EPIPFG-APPX-A-06-09) • State/County Conference Room (Storage Box E) - Phones 32 and 33 (Fig. EPIPFG-APPX-A-06-08) 	_____
3	Ensure all work spaces are returned to their As-Found office configuration.	_____
4	Ensure deactivation of security measures in accordance with EPIP-EOF-12.	_____
5	Ensure EOF Inventory is performed per Form EPMPF-10.01-02, "EOF Inventory Checklist."	_____
6	Notify Emergency Director that deactivation of the EOF is complete.	(ERM) _____

ERM SIGNATURE _____

DATE _____

TIME _____

CONTAINMENT STACK RELEASE (GRAB SAMPLE)

Sample Date / Time: _____

OPERATING FANS		cc/sec
Reactor Building Vent	ON / OFF	1.71E + 7
Shield Building Vent "A"	ON / OFF	3.11E + 6
Shield Building Vent "B"	ON / OFF	3.11E + 6
Total (Cont. Stack) Flow Rate		(sum of fans on)

$$\text{Isotopic Release Rate} = \frac{\text{Isotopic Release Conc} \left(\frac{\mu\text{Ci}}{\text{cc}} \right) \times \text{Total Flow Rate} \left(\frac{\text{cc}}{\text{sec}} \right) \times 10^{-6} \left(\frac{\text{Ci}}{\mu\text{Ci}} \right)}{\text{Ci/sec}}$$

ISOTOPE	μCi/cc	Ci/sec	ISOTOPE	μCi/cc	Ci/sec	ISOTOPE	μCi/cc	Ci/sec
H-3			Ru-106			Cs-134		
P-32			Sb-127			Cs-136		
S-35			Sb-129			Cs-137		
Mn-54			Te-129m			Ba-140		
Co-58			Te-131m			La-140		
Co-60			Te-132			Ce-144		
Kr-85			I-125			Pm-147		
Kr-85m			I-131			Eu-155		
Kr-87			I-132			Pu-210		
Kr-88			I-133			Np-239		
Sr-89			I-134			Pu-238		
Sr-90			I-135			Pu-239		
Sr-91			Xe-131m			Am-241		
Y-91			Xe-133			Cm-242		
Mo-99			Xe-133m			Cm-243		
Tc-99m			Xe-135			Cm-244		
Ru-103			Xe-138					

EPD or RPD _____

AUXILIARY BUILDING STACK (GRAB SAMPLE)

Sample Date / Time: _____

OPERATING FANS		cc/sec
Auxiliary Building Vent "A"	ON / OFF	1.87E + 7
Auxiliary Building Vent "B"	ON / OFF	1.87E + 7
SV "A"	ON / OFF	4.67E + 6
SV "B"	ON / OFF	4.67E + 6
Spent Fuel Pool "A"	ON / OFF	4.67E + 6
Spent Fuel Pool "B"	ON / OFF	4.67E + 6
Total (Aux. Bldg. Stack) Flow Rate		

OR

Auxiliary Building Stack Flow from Sping Channel 06-10 _____ milliamps (= X)

$$\frac{(X - 4) (7187.5) (2.83E + 4)}{60} = \text{_____ cc/sec}$$

OR

* Auxiliary Building Stack Flow from the Plant Process Computer Point

F7001G _____ CFM (= X)

$$\frac{(X) (2.83E + 4)}{60} = \text{cc/sec}$$

$$\text{Isotopic Release Rate} = \frac{\text{Isotopic Release Conc} \left(\frac{\mu\text{Ci}}{\text{cc}} \right)}{\text{Total Flow Rate} \left(\frac{\text{cc}}{\text{sec}} \right)} \times 10^{-6} \left(\frac{\text{Ci}}{\mu\text{Ci}} \right) = \text{_____ Ci/sec}$$

ISOTOPES	μCi/cc	Ci/sec	ISOTOPES	μCi/cc	Ci/sec	ISOTOPES	μCi/cc	Ci/sec
H-3			Ru-106			Cs-134		
P-32			Sb-127			Cs-136		
S-35			Sb-129			Cs-137		
Mn-54			Te-129m			Ba-140		
Co-58			Te-131m			La-140		
Co-60			Te-132			Ce-144		
Kr-85			I-125			Pm-147		
Kr-85m			I-131			Eu-155		
Kr-87			I-132			Pu-210		
Kr-88			I-133			Np-239		
Sr-89			I-134			Pu-238		
Sr-90			I-135			Pu-239		
Sr-91			Xe-131m			Am-241		
Y-91			Xe-133			Cm-242		
Mo-99			Xe-133m			Cm-243		
Tc-99m			Xe-135			Cm-244		
Ru-103			Xe-138					

EPD or RPD _____

* Preferred method for determining Aux. Bldg. Stack Flow Rate.

AUXILIARY BUILDING STACK (SPING READING)

Sping Reading Date / Time: _____

OPERATING FANS		cc/sec
Aux. Building Vent "A"	ON / OFF	1.87E + 7
Aux. Building Vent "B"	ON / OFF	1.87E + 7
SV "A"	ON / OFF	4.67E + 6
SV "B"	ON / OFF	4.67E + 6
Spent Fuel Pool "A"	ON / OFF	4.67E + 6
Spent Fuel Pool "B"	ON / OFF	4.67E + 6
Total (Aux. Bldg. Stack) Flow Rate		

OR

Auxiliary Building Stack Flow from Sping Channel 06-10 _____ milliamps (= X)

$$\frac{(X - 4) (7187.5) (2.83E + 4)}{60} = \text{_____ cc/sec}$$

OR

* Auxiliary Building Stack Flow From the Plant Process Computer Point

F7001G _____ CFM (= X)

$$\frac{(X) (2.83E + 4)}{60} = \text{cc/sec}$$

$$\% \text{ I (Iodine)} = \frac{\text{I Release Rate}}{\text{Total (Gross) Release Rate}} \times 100$$

$$\% \text{ NG (Noble Gas)} = \frac{\text{NG Release Rate}}{\text{Total (Gross) Release Rate}} \times 100$$

$$\text{Release Rate} = \frac{\text{Release Conc } \left(\frac{\mu\text{Ci}}{\text{cc}} \right)}{\text{Total Flow Rate } \left(\frac{\text{cc}}{\text{sec}} \right)} \times 10^{-6} \left(\frac{\text{Ci}}{\mu\text{Ci}} \right) = \text{_____ } \frac{\text{Ci}}{\text{sec}}$$

SPING READINGS (Analysts Mix)				
SPING CHANNEL		RELEASE CONCEN. μCi/cc	RELEASE RATE Ci/cc	%
01-05	Low-range gas			
01-07 (use if 01-05 is off scale high)	Mid-range gas = _____ cpm, convert cpm reading to μCi/cc using conversion Table 3, EPIP-RET-02B			
01-09 (use if 01-07 is off scale high)	High-range gas = _____ cpm, convert cpm reading to μCi/cc using conversion Table 3, EPIP-RET-02B			
01-03 (See: EPIP-RET-02B, 5.5.3)	Iodine (_____ μCi) ÷ (_____ cc) =			

EPD or RPD _____ Total (gross) Release Rate

* Preferred method for determining Aux. Building Stack Flow Rate.

CONTAINMENT STACK (SPING READING)

Sping Reading Date / Time: _____

OPERATING FANS		cc/sec
Reactor Building Vent	ON / OFF	1.71E + 7
Shield Building Vent "A"	ON / OFF	3.11E + 6
Shield Building Vent "B"	ON / OFF	3.11E + 6
Total (Cont. Stack) Flow Rate:		(sum of fans on)

$$\% \text{ I (Iodine)} = \frac{\text{I Release Rate}}{\text{Total (Gross) Release Rate}} \times 100$$

$$\% \text{ NG (Noble Gas)} = \frac{\text{NG Release Rate}}{\text{Total (Gross) Release Rate}} \times 100$$

$$\text{Release Rate} = \text{Release Conc} \left(\frac{\mu\text{Ci}}{\text{cc}} \right) \times \text{Total Flow Rate} \left(\frac{\text{cc}}{\text{sec}} \right) \times 10^{-6} \left(\frac{\text{Ci}}{\mu\text{Ci}} \right) = \frac{\text{Ci}}{\text{sec}}$$

SPING READINGS				
SPING CHANNEL		RELEASE CONCEN. $\mu\text{Ci}/\text{cc}$	RELEASE RATE Ci/cc	%
02-05	Low-range gas			
02-07 (use if 02-05 is off scale high)	Mid-range gas = _____ cpm, convert cpm reading to $\mu\text{Ci}/\text{cc}$ using conversion Table 3, EPIP-RET-02B			
02-09 (use if 02-07 is off scale high)	High-range gas = _____ cpm, convert cpm reading to $\mu\text{Ci}/\text{cc}$ using conversion Table 3, EPIP-RET-02B			
02-03 (See: EPIP-RET-02B, 5.5.3)	Iodine (_____ μCi) \div (_____ cc) =			
Total (gross) Release Rate				

EPD or RPD: _____

STEAM RELEASE

Time/Date of Reading: _____

Steam Line Monitor Reading(s):

Note

HONEYWELL POINT NUMBERS			
R-31	G0103G	R-33	G0105G
R-32	G0102G	R-34	G0104G

1A Steam Line
(Use R-32 when R-31 is offscale high)

1B Steam Line
(Use R-34 when R-33 is offscale high)

R-31 (_____ mR/hr) (10^{-3}) = _____ R/hr (= X)

R-33 (_____ mR/hr) (10^{-3}) = _____ R/hr (= X)

OR

OR

R-32 _____ R/hr (= X)

R-34 _____ R/hr (= X)

Steam Flow Rate
(From EPIP-TSC-08B) _____ cc/sec (= Z)

Steam Flow Rate
(From EPIP-TSC-08B) _____ cc/sec (= Z)

CALIBRATION FACTOR TABLE

TIME (SINCE REACTOR TRIP)	$\frac{\mu\text{Ci/cc}}{\text{R/hr}}$ (= Y)	TIME (SINCE REACTOR TRIP)	$\frac{\mu\text{Ci/cc}}{\text{R/hr}}$ (= Y)
0	14.5	8 HR	67.9
1 HR	16.7	1 DAY	887.0
2 HR	20.3	1 WEEK	3.08×10^4
4 HR	30.4	1 MONTH	1.93×10^4

_____ $\frac{\mu\text{Ci/cc}}{\text{R/hr}}$ (= Y)

$$X \times Y \times Z \times \left(10^{-6} \frac{\text{Ci}}{\mu\text{Ci}} \right) = \text{_____} \frac{\text{Ci}}{\text{sec}} \text{ Gross Release Rate}$$

Note

The results of the above equation may be entered as an analysts' mix in KRDOSE with 98% NG and 2% I, or 100% NG if no Iodine release is present.

EPD or RPD: _____

FIELD READING (GRAB SAMPLE)

Sample Date/Time: _____

Sample Location: _____

ISOTOPES	$\mu\text{Ci/cc}$	ISOTOPES	$\mu\text{Ci/cc}$
Kr 83m		Xe 135m	
Kr 85		Xe 138	
Kr 85m		Ar 41	
Kr 87		I 130	
Kr 88		I 131	
Kr 89		I 132	
Xe 131m		I 133	
Xe 133		I 134	
Xe 133m		I 135	
Xe 135			

EPD or RPD: _____