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Kewaunee Nuclear Power Plant
Operated by Nuclear Management Company, LLC

February 09, 2004

NRC-04-014
10 CFR 50, App. E

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

KEWAUNEE NUCLEAR POWER PLANT
DOCKET 50-305
LICENSE No. DPR-43

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURES

Pursuant to 10 CFR 50 Appendix E, attached are 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.

for

Thomas Coutu
Site Vice President, Kewaunee Nuclear Power Plant
Nuclear Management Company, LLC

JAM

Enclosure

cc: Senior Resident Inspector, Kewaunee, w/enc.
Administrator Region III (2 copies), w/enc.
Public Service Commission of Wisconsin, w/o enc.
QA Vault, w/o enc.

A045

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KEWAUNEE NUCLEAR POWER PLANT

FROM: DIANE FENCL - KNPP TRANSMITTAL DATE 01-28-2004

EMERGENCY PLAN IMPLEMENTING PROCEDURES TRANSMITTAL FORM

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

J. Bennett (33) R. Johnson (24) P. Sunderland (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.

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C. Sternitzky - ATF-2 (44)
M. Daron - Security Building (46)
C. Grant - EOF (81)
C. Grant - OSF (52, 96)
LOREB - STF (62, 66, 67, 68, 70, 72, 73, 74)
STF Library (43)
D. Bradley - CR/SS Office (51, 56)
C. Grant - TSC (50, 95)
W. Galarneau - RAF (53)
W. Galarneau - SBF/EMT (54)
W. Galarneau - RPO (55)
STF (86, 87, 88)

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

W. Galarneau - RAF/RPO (106, 107)(Partial Distribution)
W. Galarneau - SBF/ENV (108, 109)(Partial Distribution)
W. Galarneau - SBF/EM Team (110, 111, 111A)(Partial Distribution)
W. Flint - Cold Chem/HR Sample Room (113)
S. Zutz - SBF/SEC (114)
E. Gilson - Security (121)
S. Zutz - Security Building (120)
Ops Admin. (126)
C. Grant (Liaison Manuals)(EPIP-AD-02 and EOF-04 & APPX-A-06 Figures only)
C. Grant - TSC Response Blue Binder (Partial Distribution)
C. Grant - TSC Response Red Binder (Partial Distribution)
~~C. Grant - TSC (Partial Distribution - FORMS ONLY)~~
C. Grant - EOF Response Binder (Partial Distribution)
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D. Bradley - CR Tag Desk (Partial Distribution)
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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
January 28, 2004

Please follow the directions listed below.

EPIP Index, dated 01-28-2004.

REMOVE		INSERT	
PROCEDURE	REV.	PROCEDURE	REV.
EPIP-AD-02	AI	EPIP-AD-02	AJ

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 Jerrie Coleman at 8719.

I CERTIFY Copy No._____ (WPSC No.) of the Kewaunee Nuclear Power Plant's EPIPs has been updated.

_____

SIGNATURE **DATE**

Please return this sheet to *DIANE FENCL.*

EMERGENCY PLAN IMPLEMENTING PROCEDURES

INDEX

DATE: 01-28-2004

PROC. NO.	TITLE	REV.	DATE
	EP-AD		
EPIP-AD-01	Personnel Response to the Plant Emergency Siren	L	09-09-2003
EPIP-AD-02	Emergency Class Determination	AJ	01-28-2004
EPIP-AD-03	KNPP Response to an Unusual Event	AJ	09-09-2003
EPIP-AD-04	KNPP Response to Alert or Higher	AO	09-09-2003
EP-AD-5	Site Emergency	**Deleted**	04-27-87
EPIP-AD-05	Emergency Response Organization Shift Relief Guideline	E	02-18-2003
EP-AD-6	General Emergency	**Deleted**	04-24-87
EPIP-AD-07	Initial Emergency Notifications	AV	09-09-2003
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	T	01-27-2004
EP-AD-12	Personnel Assembly and Accountability	**Deleted**	03-26-94
EP-AD-13	Personnel Evacuation	**Deleted**	04-25-94
EP-AD-13A	Limited Area Evacuation	**Deleted**	03-01-83
EP-AD-13B	Emergency Assembly/Evacuation	**Deleted**	03-01-83
EP-AD-13C	Site Evacuation	**Deleted**	03-01-83
EP-AD-14	Search and Rescue	**Deleted**	05-25-94
EPIP-AD-15	Recovery Planning and Termination	P	09-12-2002
EP-AD-16	Occupational Injuries or Vehicle Accidents During Emergencies	**Deleted**	03-14-97
EP-AD-17	Communications	**Deleted**	03-05-84
EPIP-AD-18	Potassium Iodide Distribution	P	02-27-2002
EPIP-AD-19	Determining Protective Action Recommendations	T	09-19-2003

INDEX

DATE: 01-28-2004

PROC. NO.	TITLE	REV.	DATE
EPIP-AD-20	KNPP Response to a Security Threat	E	09-30-2003
	EP-ENV		
EPIP-ENV-01	Environmental Monitoring Group Organization and Responsibilities	X	07-31-2003
EPIP-ENV-02	Environmental Monitoring Team Activation	Y	07-31-2003
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 Software	X	09-19-2003
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	U	07-31-2003
EPIP-ENV-04B	Air Sampling and Analysis	Y	07-31-2003
EP-ENV-4C	Environmental Monitoring Teams	**Deleted**	04-13-90
EPIP-ENV-04C	Ground Deposition Sampling and Analysis	Y	07-31-2003
EPIP-ENV-04D	Plume Tracking for Environmental Monitoring Teams	P	07-31-2003
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

INDEX

DATE: 01-28-2004

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	AB	07-31-2003
EPIP-EOF-03	EOF Staff Action for Unusual Event	AE	07-31-2003
EPIP-EOF-04	EOF Staff Action for Alert or Higher	AL	07-31-2003
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	AA	07-31-2003
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	W	07-31-2003
EPIP-EOF-12	Media Center/Emergency Operation Facility/Joint Public Information Center/Security	R	06-19-2003

INDEX

DATE: 01-28-2004

PROC. NO.	TITLE	REV.	DATE
	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	W	11-04-2003
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	X	07-31-2003
EPIP-RET-02A	Radiation Protection Office/Radiological Analysis Facility (RPO/RAF) Activation	V	11-04-2003
EPIP-RET-02B	Gaseous Effluent Release Path, Radioactivity, and Release Rate Determination	T	09-19-2003
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	P	02-18-2003
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

PROC. NO.	TITLE	REV.	DATE
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	U	06-19-2003
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	I	07-31-2003
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	**Deleted**	09-19-2003
EP-SEC			
EP-SEC-1	Security Organization	**Deleted**	04-24-87
EPIP-SEC-02	Security Force Response to Emergencies	Z	07-31-2003
EP-SEC-2A	Manual Activation of Emergency Sirens	**Deleted**	04-16-82
EPIP-SEC-03	Personnel Assembly and Accountability	AG	05-20-2003
EPIP-SEC-04	Security Force Actions for Dosimetry Issue	P	10-02-2001

INDEX

DATE: 01-28-2004

PROC. NO.	TITLE	REV.	DATE
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	S	01-28-2003
EPIP-TSC-02	Technical Support Center Activation	U	01-20-2003
EPIP-TSC-03	Plant Status Procedure	W	05-05-2003
EPIP-TSC-04	Emergency Modifications	O	04-29-2003
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	P	09-02-2003
EPIP-TSC-08B*	STMRLS Computer Program	H	07-31-2003
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	K	05-05-2003
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	L	07-31-2003

INDEX

DATE: 01-28-2004

FIGURES					
EPIP	FIG #	Figure EPIPFG	DESCRIPTION	REV.	DATE
EPIP-SEC-05 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	C	06-19-2003
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	D	04-29-2003
EPIP-EOF-12	EP-FIG-024	EOF-12-02	Location of JPIC and Media Briefing Center Map	D	06-19-2003
EPIP-SEC-05	EP-FIG-026	SEC-05-01	KNP Site Map & Evacuation Routes	E	09-19-2003
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	Media Briefing Center	D	04-29-2003
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-039b	OSF-02-01	High Priority Work	B	07-31-2003
EPIP-OSF-02	EP-FIG-039a	OSF-02-02	Lower Priority Work	B	07-31-2003
EPIP-APPX-A-06	EP-FIG-043	APPX-A-06-10	JPIC - Federal Work Area - WPSC D2-9	C	04-29-2003
EPIP-APPX-A-06	EP-FIG-044	APPX-A-06-07	JPIC - State and County Work Area - WPSC D2-8	D	04-29-2003
EPIP-APPX-A-06	EP-FIG-045	APPX-A-06-05	JPIC - Utility Work Area - WPSC D2-7	D	04-29-2003
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

INDEX

DATE: 01-28-2004

NUMBER	TITLE	REVISION	DATE
	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 Figures	AB	04-29-2003

INDEX

DATE: 01-28-2004

FORM EPIPF	TITLE	REV.	DATE
	APPENDIX B		
	EP-AD		
AD-07-01	Event Notice - Nuclear Accident Reporting System Form (NARS)	V	05-05-2003
AD-07-02	State Call-Back - Question Guideline	C	11-15-2001
AD-07-03	Fax Event Notice	C	09-19-2003
AD-07-04	ERO Event Notification	**Deleted**	07-31-2003
AD-11-01	Emergency Radiation Work Permit	H	12-19-2002
AD-18-01	Airborne Radioiodine Dose Accountability and Potassium Iodide Distribution	B	08-06-2002
AD-18-02	Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide	A	02-27-2002
	EP-ENV		
ENV-01-01	Environmental Dispatch Area Activation Checklist	E	07-31-2003
ENV-01-02	EMT Status	C	07-31-2003
ENV-01-03	Meteorological and Plant Status Data	C	12-14-2001
ENV-01-04	EMT Orders/Field Data	C	07-31-2003
ENV-02-01	EMT Activation Checklist	O	07-31-2003
	EP-EOF		
EOF-02-01	EOF Activation Checklist	V	09-19-2003
EOF-02-02	EOF Deactivation Checklist	N	01-28-2003
EOF-04-01	SRCL Initial Action Checklist	D	01-20-2003
EOF-04-02	Telephone Communications Log Sheet	A	12-14-2001
EOF-08-03	Fax for Emergency Declaration or Status Updates	H	01-20-2003
EOF-08-05	Plant Emergency Status Report	A	11-27-2001
EOF-08-06	Radiological Status Report	E	01-20-2003
EOF-11-02	Operating Status	G	11-07-2002

INDEX

DATE: 01-28-2004

FORM EPIPF	TITLE	REV.	DATE
EOF-11-03	Environmental Status Board	G	11-07-2002
EOF-12-01	I.D. Badge Registration Form	G	10-24-2000
	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)	E	09-19-2003
RET-02B-02	Auxiliary Building Stack Release (Grab Sample)	E	09-19-2003
RET-02B-03	Auxiliary Building Stack Release (Sping Reading)	E	09-19-2003
RET-02B-04	Containment Stack Release (Sping Reading)	D	09-19-2003
RET-02B-05	Steam Release	E	09-19-2003
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	**Deleted**	01-27-2004
	EP-SEC		
SEC-03.01	Emergency Accountability Log	A	03-28-2000
SEC-04-01	Emergency Dosimeter Log	H	11-04-2003
	EP-TSC		
TSC-01.01	Plant Status Summary for SAM Implementation	C	01-28-2003
TSC-01.02	Severe Accident Management Summary and Strategy Recommendation	B	02-06-2002

INDEX

DATE: 01-28-2004

FORM EPIPF	TITLE	REV.	DATE
TSC-01-03	Severe Accident Management - Status	C	07-31-2003
TSC-02-01	TSC and OSF Activation Checklist	P	01-20-2003
TSC-02-02	TSC Ventilation Checklist	J	09-19-2003
TSC-02-03	Emergency Response Data System (ERDS) Link Initiation Checklist	H	01-20-2003
TSC-02-04	TSC Chart Recorder Operation Checklist	E	01-20-2003
TSC-02-05	TSC and OSF De-Activation Checklist	C	01-28-2003
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 Modification Request	H	04-29-2003
TSC-04-02	Emergency Physical Change Safety Review	**Deleted**	05-09-2002
TSC-04-03	Emergency Modification Index	G	04-29-2003
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)	H	09-02-2003
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	F	11-04-2003
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
TSC-09A-07	Core Damage Assessment Results	A	05-05-2003

WISCONSIN PUBLIC SERVICE CORP. Kewaunee Nuclear Power Plant *Emergency Plan Implementing Procedure*	No. EPIP-AD-02	Rev. AJ
	Title Emergency Class Determination	
	Date JAN 28 2004	Page 1 of 22
Reviewed By Paul Sunderland	Approved By Kevin Davison	

Nuclear Safety Related	☑ Yes ☐ No	PORC Review Required	☑ Yes ☐ No	SRO Approval Of Temporary Changes Required	☑ Yes ☐ No

1.0 Purpose

1.1 This procedure provides instruction for determining proper emergency classification listed in order to activate the appropriate level of response from the Kewaunee Nuclear Power Plant (KNPP) emergency response organization and off-site response organization.

2.0 General Notes

2.1 None

3.0 Precautions and Limitations

3.1 Plant monitors used to determine whether emergency classification levels are being exceeded should be checked for accuracy prior to declaring an emergency class (e.g., compare against redundant channels, determine if consistent with system status, or verification by sample analysis when required by Chart A(1).

3.2 This procedure is not written to facilitate de-escalation. Therefore, any decision to de-escalate must be based on a thorough review of procedures and plant conditions. If appropriate, it is preferable to terminate or enter recovery. However, there may be occasions where it is appropriate to de-escalate.

3.3 Once indication is available that an emergency action level has been met, classification must be made as soon as possible and must not exceed 15 minutes. A classification should not be made before an emergency action level has been met. Once a classification has been declared, notification must be initiated and in progress to the State and County agencies within 15 minutes of event classification using "Event Notice," Form EPIPF-AD-07-01. During the initial 15-minute classification assessment, there may be rapidly changing conditions. Classification during this initial period should be based on currently available plant status.

4.0 Initial Conditions

4.1 This procedure applies during any plant evolution that may result in an emergency declaration.

5.0 Procedure

5.1 Determine if a plant emergency exists during abnormal plant conditions by referring to Table 2-1, Emergency Action Level Charts.

5.2 IF a plant emergency exists, THEN perform the required actions of the appropriate emergency procedure listed below:

5.2.1 EPIP-AD-03, "KNPP Response to an Unusual Event"

5.2.2 EPIP-AD-04, "KNPP Response to Alert or Higher"

5.3 As plant conditions change, continue referring to the Emergency Action Level Charts.

5.4 Determine if the emergency should be reclassified.

5.5 IF the event is reclassified, THEN return to Step 5.2.

5.6 IF Final Conditions (Section 6.0) are not met, THEN return to Step 5.3.

5.7 IF Final Conditions (Section 6.0) are met, THEN use of this procedure may be suspended.

6.0 Final Conditions

6.1 Plant Emergency has been Terminated or Recovery actions have begun and the Responsible Director has suspended the use of EPIPs.

7.0 References

7.1 Kewaunee Nuclear Power Plant Emergency Plan

7.2 EPIP-AD-01, Personnel Response to the Plant Emergency Siren

7.3 EPIP-AD-03, KNPP Response to an Unusual Event

7.4 EPIP-AD-04, KNPP Response to Alert or Higher

7.5 COMTRAK 89-001, NRC Inspection Report 88-11, Improve Guidance for Fires Chart G

7.6 OEA 87-246, Report OE 2265, Improve Description of Unusual Aircraft Activity Chart P

7.7 NRC Letter 07-11-94, Branch Position on Acceptable Deviations to NUREG-0654

7.8 OEA 96-083, NRC IN 1997-045 Chart A(2)

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

None

8.1.2 Non-QA Records

None

EMERGENCY ACTION LEVEL CHARTS

The following charts are separated into different abnormal operating conditions which may, depending upon their severity, be classified as an Unusual Event, Alert, Site Emergency, or General Emergency.

CHART A(1)
ABNORMAL RADIOLOGICAL EFFLUENT

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
SEE CHART A(2)	Effluent monitors detect levels corresponding to greater than 1 rem/hr whole body or 5 rem/hr thyroid at the site boundary under "actual meteorological" conditions.	GENERAL EMERGENCY
Projected or measured dose rates to be provided by the Radiological Protection Director or Environmental Monitoring Teams.	Projected or measured in the environs dose rates greater than 1 rem/hr whole body or 5 rem/hr thyroid at the site boundary.	GENERAL EMERGENCY
SEE CHART A(2)	Effluent monitors detect levels corresponding to greater than 50 mr/hr for ½ hour OR greater than 500 mr/hr for two minutes (or five times these levels to the thyroid) OR for "adverse meteorology."	SITE EMERGENCY
Projected or measured dose rates to be provided by the Radiological Protection Director or Environmental Monitoring Teams.	At the site boundary, projected or measured dose rates greater than 50 mr/hr for ½ hours OR greater than 500 mr/hr for two minutes (or five times these levels to the thyroid) or EPA Protective Action Guidelines are projected to be exceeded outside the site boundary.	SITE EMERGENCY
SEE CHART A(2)	Radiological effluents greater than 10 times ODCM instantaneous limits.	ALERT
a. Containment R-2 OR R-7 ≥ 1,000 times baseline established in the Control Room, OR b. Charging Area R-4 ≥ 1,000 times baseline established in the Control Room, OR c. SFP Area R-5 ≥ 1,000 times baseline established in the Control Room, OR d. Plant area air sample indicates airborne contamination > 1,000 times the occupational DAC values.	Radiation levels or airborne contamination which indicate a severe degradation in the control of radioactive materials (e.g., radiation levels suddenly increase by a factor of 1,000).	ALERT
(1) Gaseous Releases: See Chart A(2) (2) Liquid Releases: Notification by the Rad-Chem Group of violating ODCM 3.3.1 limits.	Offsite Dose Calculation Manual limits exceeded.	UNUSUAL EVENT

CHART A(2)
GASEOUS EFFLUENT ACTION LEVELS

1. AUX BUILDING VENT RELEASES - *WITH SIGNIFICANT CORE DAMAGE*

Instrument readings assuming a post accident gas release AND Containment High Range Radiation Monitors 42599 (R-40) and 42600 (R-41) reads 1000 R/hr for > 2 minutes within one-half hour of the accident.

NOTE: Use adverse meteorology conditions (ADV MET) only when, 10m and 60m wind speed < 5mph AND Delta-T > +2.4 degrees F or Sigma Theta is < 3.01 degrees. All other cases are average meteorology (AVG MET).

NOTE: R-13 and R-14 are expected to be off scale high during all events on this page.

SV & SFP FANS	AUX BLDG SPING MONITORS				AUX BLDG STACK MONITORS				EMERG. CLASS.
	MID RANGE CPM (01-07) PPCS PT G9086G		HIGH RANGE CPM (01-09) PPCS PT G9088G		R-35 MR/HR		R-36 R/HR		
TOTAL NUMBER RUNNING	AVG MET	ADV MET	AVG MET	ADV MET	AVG MET	ADV MET	AVG MET	ADV MET	
1	**	1.1E+4	6.5E+1	*	**	7.9E+2	1.27E+2	7.9E-1	GENERAL EMERG.
2	8.8E+5	5.5E+3	3.25E+1	*	**	3.9E+2	6.35E+1	4.0E-1	
3	5.9E+5	3.7E+3	2.16E+1	*	**	2.6E+2	4.2E+1	2.6E-1	
4	4.4E+5	2.7E+3	1.62E+1	*	**	2.0E+2	3.175E+1	2.0E-1	
1	8.8E+4	5.5E+2	3.0E+0	*	6.3E+3	3.9E+1	6.3E+0	*	SITE EMERG.
2	4.4E+4	2.7E+2	1.5E+0	*	3.1E+3	1.9E+1	3.1E+0	*	
3	2.9E+4	1.8E+2	1.0E+0	*	2.1E+3	1.3E+1	2.1E+0	*	
4	2.2E+4	1.3E+2	*	*	1.5E+3	9.5E+0	1.5E+0	*	
1	1.0E+3	6.2E+0	*	*	7.0E+1	*	*	*	ALERT
2	5.0E+2	3.1E+0	*	*	3.5E+1	*	*	*	
3	3.3E+2	2.0E+0	*	*	2.3E+1	*	*	*	
4	2.5E+2	1.5E+0	*	*	1.75E+1	*	*	*	
1	1.0E+2	6.2E-1	*	*	7.0E+0	*	*	*	UNUSUAL EVENT
2	5.0E+1	3.1E-1	*	*	3.5E+0	*	*	*	
3	3.3E+1	2.0E-1	*	*	2.3E+0	*	*	*	
4	2.5E+1	1.5E-1	*	*	1.7E+0	*	*	*	

* Offscale Low
** Offscale High (Confirmation Only)

CHART A(2)
GASEOUS EFFLUENT ACTION LEVELS continued

2. AUX BUILDING VENT RELEASES *WITHOUT CORE DAMAGE*

NOTE: Use adverse meteorology conditions (ADV MET) only when, 10m and 60m wind speed < 5mph AND Delta-T > +2.4 degrees F or Sigma Theta is < 3.01 degrees. All other cases are average meteorology (AVG MET).

NOTE: R-13 and R-14 are expected to be off scale high during all events on this page.

SV & SFP FANS	AUX BLDG SPING MONITORS				EMERG. CLASS.
TOTAL NUMBER RUNNING	MID RANGE CPM (01-07) PPCS PT G9086G		HIGH RANGE CPM (01-09) PPCS PT G9088G		
	AVG MET	ADV MET	AVG MET	ADV MET	
1	**	9.4E+4	1.6E+4	1.0E+2	GENERAL EMERG.
2	**	4.7E+4	8.0E+3	5.0E+1	
3	**	3.1E+4	5.3E+3	3.3E+1	
4	**	2.3E+4	4.0E+3	2.5+1	
1	7.5E+5	4.6E+3	8.0E+2	5.0E+0	SITE EMERG.
2	3.7E+5	2.3E+3	4.0E+2	2.5E+0	
3	2.5E+5	1.5+3	2.6E+2	1.6E+0	
4	1.8E+5	1.1E+3	2.0E+2	1.2E+0	

SV & SFP FANS TOTAL NUMBER RUNNING	AUX BLDG SPING MONITORS		EMERG. CLASS.
	LOW RANGE Ci/cc (01-05) PPCS PT G9084G	MID RANGE CPM (01-07) PPCS PT 9086G	
1	**	8.6E+3	ALERT
2	**	4.3E+3	
3	**	2.8E+3	
4	**	2.1E+3	
1	6.3E-2	8.6E+2	UNUSUAL EVENT
2	3.1E-2	4.3E+2	
3	2.1E-2	2.8E+2	
4	1.5E-2	2.1E+2	

** Offscale High (Confirmation Only)

CHART A(2)
GASEOUS EFFLUENT ACTION LEVELS continued

3. STEAM LINE RELEASE *WITH SIGNIFICANT CORE DAMAGE*

Instrument readings assuming radioactive steam is releasing at a total of 1.4E+5 pounds per hour to the atmosphere AND Containment High Range Radiation Monitor 42599 (R-40) or 42600 (R-41) reads 1000 R/hr for > 2 minutes within one-half hour of the accident.

	"A" Steam Line Monitors		"B" Steam Line Monitors		Emergency Classification
R-15 (cpm)	R-31 (mR/hr)	R-32 (R/hr)	R-33 (mR/hr)	R-34 (R/hr)	
**	1.3E+3	1.3E+0	1.3E+03	1.3E+0	General Emergency
**	6.0E+1	--	6.0E+1	--	Site Emergency
**	1.5E-1	--	1.5E-1	--	Alert
2.0E+05	--	--	--	--	Unusual Event

** Offscale High (Confirmation Only)

4. SHIELD BUILDING STACK RELEASE

Instrument readings assuming SBV System is operating in the recirculation mode.

Reactor Bldg. Discharge Vent SPING		Emergency Classification
PPCS PT G9077G (02-07) Mid Range (cpm)	PPCS PT G9079G (02-09) High Range (cpm)	
1.3E+05	1.5E+2	General Emergency
6.7E+03	7.0E+0	Site Emergency
1.5E+1	--	Alert
--	--	Unusual Event

CHART B
FUEL DAMAGE INDICATION

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) CET > 1,200 Degrees for greater than 15 minutes, OR (2) R40 or R41 > 1,000 R/hr, OR (3) SACRG-1, Severe Accident Control Room Guideline Initial Response has been implemented.	Plant conditions exist that make the release of large amounts of radioactivity in a short time period possible.	GENERAL EMERGENCY
(Major damage is more than one spent fuel element damaged.) (1) Fuel Handling accident in Containment a. Alarm on R-11 OR R-12, AND b. Dropped spent fuel assembly, OR c. Report of a large object dropped in Rx core, OR (2) Fuel Handling Accident in Auxiliary Bldg. a. Alarm on R-13 or R-14, AND b. A large object dropped in spent fuel pool, OR c. A dropped spent fuel assembly, OR d. A loss of water level below spent fuel.	Major damage to spent fuel in containment or auxiliary building.	SITE EMERGENCY
(1) R-9 indication is offscale high, AND (2) Laboratory analysis confirms RCS activity levels comparable to USAR Appendix D, Table D.4-1.	Severe loss of fuel cladding a. Very high coolant activity sample b. Failed fuel monitor indicates greater than 1% fuel failures within 30 minutes or 5% total fuel failures.	ALERT
(1) Fuel Handling Accident in Containment a. A confirming report, AND b. Alarm on R-11 OR R-12, OR (2) Fuel Handling Accident in Auxiliary Bldg. a. A confirming report, AND b. Alarm on R-13 OR R-14.	Fuel damage accident with release of radioactivity to containment or auxiliary building.	ALERT
(1) With RCS Temperature > 500°F, a. > 1.0 µCi/gram DOSE Equivalent I-131 for 48 hours, OR b. Exceeding 60 µCi/gram for Dose Equivalent I-131, OR c. > 91/$\bar{E}$ µCi/cc As determined by SP-37-065 (from T.S. 3.1.c)	High reactor coolant activity sample.	UNUSUAL EVENT
(1) R-9 is greater than 5.0 R/hr, AND (2) Verified by RCS chemistry sample analysis.	Failed fuel monitor indicates greater than 0.1% equivalent fuel failures within 30 minutes.	UNUSUAL EVENT

CHART C
PRIMARY LEAK TO LOCA

NOTE: This chart does not apply when leakage from the Reactor Coolant System is caused by a Steam Generator tube rupture.

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) LOCA is verified per IPEOP E-1, "Loss of Reactor or Secondary Coolant," AND (2) ECCS failure is indicated by: a. SI and RHR pumps not running, OR b. Verification of no flow to the reactor vessel, OR c. Core exit thermocouples indicate greater than 1,200°F, AND (3) Failure or potential failure of containment is indicated by: a. Physical evidence of containment structure damage, OR b. Containment Pressure is > 23 PSIG and loss of all containment fan coil units and both trains of ICS, OR c. Containment hydrogen monitor indicates ≥ 10% hydrogen concentration, OR d. Containment pressure exceeds 46 psig.	(1) Loss of coolant accident, AND (2) Initial or subsequent failure of ECCS, AND (3) Containment failure or potential failure exists (loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier).	GENERAL EMERGENCY
(1) SI System is activated and RCS leakage exceeds charging system capacity as verified by Control Room indications or IPEOPs.	Reactor Coolant System leakage greater than make-up pump capacity.	SITE EMERGENCY
(1) Charging flow verses letdown flow indicates an unisolable RCS leak > 50 gpm.	Reactor Coolant System leak rate greater than 50 GPM.	ALERT
(1) Initiation of reactor shutdown required by Technical Specification, Section T.S. 3.1.d. Indicated leakage may be determined using Reactor Coolant System mass balance calculations performed by SP-36-082.	Exceeding Reactor Coolant System leak rate, Technical Specifications, requiring reactor shutdown.	UNUSUAL EVENT

CHART D
PRIMARY TO SECONDARY LEAK

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Entry into IPEOP E-3, "Steam Generator Tube Rupture," is expected or has occurred, AND (2) Primary-to-secondary flow > 800 GPM OR RCS pressure decreasing uncontrollably, AND (3) All three transformers Main Aux., Reserve Aux., and Tertiary Aux., are de-energized.	Rapid failure of steam generator tubes with loss of off-site power.	SITE EMERGENCY
(1) Entry into IPEOP E-3, "Steam Generator Tube Rupture," is expected or has occurred, AND (2) All three transformers: Main Aux., Reserve Aux., and Tertiary Aux., are de-energized.	Rapid gross failure of one steam generator tube with loss of off-site power.	ALERT
(1) Entry into IPEOP E-3, "Steam Generator Tube Rupture," is expected or has occurred, AND (2) Primary-to-secondary leak rate greater than 800 GPM indicated by SI flow OR RWST level change.	Rapid failure of multiple steam generator tubes.	ALERT
(1) Primary-to-secondary leakage > 150 gallons per day for more than 4 hours (TS 3.1.d.2). **(Do not delay declaration** if leakage suddenly increases above 150 gallons per day AND plant shutdown actions are initiated.)	Exceeding Primary-to-Secondary leak rate Technical Specification.	UNUSUAL EVENT

CHART E
LOSS OF POWER

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Buses 1 through 6 are de-energized including the D/G supplies to buses 5 and 6, AND (2) Loss of the turbine driven AFW pump, AND (3) Conditions exist for greater than 2 hours.	Failure of off-site and on-site AC power, AND Total loss of auxiliary feedwater makeup capability for greater than 2 hours. (Loss of power plus loss of all AFW would lead to clad failure and potential containment failure.)	GENERAL EMERGENCY
(1) Buses 1 through 6 are de-energized including the D/G supplies to buses 5 and 6 for longer than 15 minutes.	Loss of off-site power, AND Loss of on-site AC power (for more than 15 minutes).	SITE EMERGENCY
(1) Low voltage lockout OR de-energized condition on all safeguards DC distribution cabinets for greater than 15 minutes. a. BRA 102 and BRB 102, OR b. BRA 104 and BRB 104, OR c. BRA 102 and BRB 104, OR d. BRB 102 and BRA 104	Loss of all vital on-site DC power (for more than 15 minutes).	SITE EMERGENCY
(1) Low voltage lockout OR de-energized condition on all safeguards DC distribution cabinets for less than 15 minutes. a. BRA 102 and BRB 102, OR b. BRA 104 and BRB 104, OR c. BRA 102 and BRB 104, OR d. BRB 102 and BRA 104	Loss of all vital on-site DC power (for less than 15 minutes).	ALERT
(1) Buses 1 through 6 are de-energized, AND (2) The D/G supplies to buses 5 and 6 do not respond as designed. AC power is restored to bus 5 or 6 within 15 minutes.	Loss of off-site power, AND Loss of on-site AC power (for less than 15 minutes.)	ALERT
(1) All three transformers: Main Aux., Reserve Aux., and Tertiary are de-energized, OR (2) Both D/Gs unavailable (unable to supply bus 5 or 6 by any means).	Loss of off-site power, OR Loss of on-site power capability.	UNUSUAL EVENT
(1) Core is unloaded or reactor cavity is flooded with internals removed, AND (2) Buses 1 through 6 are de-energized including the D/G supplies to buses 5 and 6 for longer than 15 minutes.	Loss of off-site power, AND Loss of on-site AC power (for more than 15 minutes).	UNUSUAL EVENT

CHART F
ENGINEERED SAFETY FEATURE ANOMALY

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) RCS > 200°F with a loss of cooling capability or inventory control: a. Sustained loss of negative reactivity control, OR b. Steam dump, S/G safeties, and power operating reliefs not operable (> 350°F), OR c. Inability to feed S/Gs (No AFW or Main Feedwater/Condensate Flow), OR d. Sustained loss of RCS inventory control, OR e. Sustained loss of both trains of RHR, AND the inability to sustain either natural OR forced circulation with the steam generators (≤ 350°F). (A Site Emergency should be declared upon the initiation of bleed and feed per FR H.1, "Response to Loss of Secondary Heat Sink.")	Complete loss of any function needed when RCS > 200°F.	SITE EMERGENCY
(Apply this criteria when the RCS is ≤ 200°F.) (1) Loss of both trains of RHR (Does not apply when core is unloaded OR cavity is flooded with internals removed.)	Complete loss of any function needed when RCS ≤ 200°F.	ALERT
(1) Failure of both Rx trip breakers to open upon receipt of a valid signal. Applies even if IPEOP FR S.1 is not entered.	Failure of the Reactor Protection System to initiate and complete a reactor trip which brings the reactor subcritical.	ALERT
(1) Loss of ESF function, required support function or required Tech Spec instruments OR Exceeding Tech Spec Safety Limits, AND (2) upon discovery, inability or failure to take required shutdown or mode change actions within the required time. (Total loss of AFW system when required (FR-H.1 implemented) should be declared a UE regardless of Tech Spec action compliance.)	Inability to reach required shutdown within Tech Spec limits	UNUSUAL EVENT

CHART G
LOSS OF INDICATION

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Total loss of Annunciator System computer alarms, and sequence of events recorder, AND (2) Uncontrolled plant transient in progress or initiated during the loss.	Most or all alarms (annunciators) lost and a plant transient initiated or in progress.	SITE EMERGENCY
(1) Total loss of Annunciator System, computer alarms, and sequence of events recorder.	Most or all alarms (annunciators) lost.	ALERT
(1) Significant loss of ESF or Rx Protection instrumentation. An Unusual Event should NOT be declared for a non-emergency Tech Spec backdown, when the affected parameter remains monitorable.	Indications or alarms on process or effluent parameters not functional in control room to an extent requiring plant shutdown or other significant loss of assessment capability.	UNUSUAL EVENT

CHART H

(DELETED)

CHART I
SECONDARY SIDE ANOMALY

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Main steam line break that results in a SI actuation, AND (2) a. R-15 or R-19 reads offscale high with confirmation by chemistry analysis, OR b. Primary-to-secondary leakage > 50 gpm, AND (3) a. R-9 or CNTMT high range rad monitors (42599, 42600) indicate > 10 R/hr, OR b. CNTMT hydrogen monitor indicates > 1% hydrogen concentration.	Steam line break, AND Primary-to-secondary leak > 50 GPM, AND Indication of Fuel Damage.	SITE EMERGENCY
(1) Main steam line break that results in a SI actuation, AND a. R-15 OR R-19 reads a factor of 1000 above normal, OR b. Primary-to-secondary leakage > 10 gpm.	Steam line break with significant (greater than 10 GPM) primary-to-secondary leakage. (Applies even if events occur in opposite steam generators.)	ALERT
(1) Turbine trip and observation of penetration of casing.	Turbine rotating component failure causing rapid plant shutdown.	UNUSUAL EVENT
(1) The uncontrolled depressurization of the secondary system that results in an SI actuation. (Unusual Event should be declared even if transient was mitigated by closure of the Main Steam Isolation Valves.	Rapid depressurization of the secondary side.	UNUSUAL EVENT

CHART J
MISCELLANEOUS ABNORMAL PLANT CONDITIONS

Note

Chart J is now a two page chart.

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Containment boundary failure or potential failure: a. Containment pressure > 46 psig, OR b. Loss of all containment fan coil units and both trains of ICS, OR c. Containment hydrogen monitor ≥ 10% hydrogen concentration, AND (2) Loss of core cooling capability: a. Loss of SI and RHR flow, AND (3) Failure of shutdown system when required: a. Entry into IPEOP FR-S.1, "Response to Nuclear Power Generation/ATWS," OR b. Loss of AFW for greater than 30 minutes with loss of main FW and condensate.	Other plant conditions that make a release of large amounts of radioactivity in a short time period possible; e.g., any core melt situation. Examples: - Failure of main FW and AFW systems for greater than 30 minutes without Safety Injection and Residual Heat Removal flow. Plus a containment failure is imminent. - Transient requiring the operation of shutdown systems with a failure of these shutdown systems. In addition, failure of SI and RHR and containment failure is imminent.	GENERAL EMERGENCY
Two fission product barriers are lost with the potential or probability of losing the third barrier. (At least one verified indication in each category below.) Indications: (1) Containment boundary potential failure: a. Containment pressure > 46 psig, OR b. Loss of all containment fan coil units and both trains of ICS, OR c. Containment hydrogen monitor ≥ 10% hydrogen concentration. (2) RCS Boundary: a. Loss of RHR and SI flow, OR b. LOCA is verified per IPEOP E-1. (3) Fuel Cladding: a. R-9 > 10 R/hr, OR b. RCS Chemistry Analysis	Other plant conditions that make a release of large amounts of radioactivity in a short time period possible; e.g., any core melt situation. Examples: - Failure of main FW and AFW systems for greater than 30 minutes without Safety Injection and Residual Heat Removal flow. Plus a containment failure is imminent. - Transient requiring the operation of shutdown systems with a failure of these shutdown systems. In addition, failure of SI and RHR and containment failure is imminent.	GENERAL EMERGENCY

CHART J
MISCELLANEOUS ABNORMAL PLANT CONDITIONS

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Evacuation of Control Room (E-O-06 event).	Evacuation of control room and control of shutdown systems required from local stations.	SITE EMERGENCY
(1) Conditions that warrant increased awareness on part of the plant staff will be evaluated by the Plant Manager or his designate. This is to determine if conditions are applicable for activating the E.P. Example: Loss of AFW system when required, validated upon implementation of FR H.1 "Response to Loss of Secondary Heat Sink."	Other plant conditions that warrant increased awareness on the part of plant staff or state and/or local authorities.	UNUSUAL EVENT

CHART K
FIRE AND FIRE PROTECTION

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) A fire within the Auxiliary Building, Technical Support Center, safeguards alley, D/G rooms, Battery Rooms, or screenhouse that defeats redundant safety trains of ESF equipment causing the required ESF system to be inoperable.	A fire compromising the functions of safety systems.	SITE EMERGENCY
(1) A fire within the Auxiliary Building, Technical Support Center, safeguards alley, D/G rooms, Battery Rooms, or screenhouse that lasts more than 10 minutes OR causes a single train of required ESF equipment to be inoperable.	A fire potentially affecting safety systems.	ALERT
(1) Any fire within the protected area lasting more than 10 minutes.	A fire within the plant lasting more than 10 minutes.	UNUSUAL EVENT

CHART L

(DELETED)

CHART M
EARTHQUAKE

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Activation of seismic recorder with TRIGGER, OBE, and DBE lights lit in relay room on RR159, AND (2) Verification of a seismic event by physical experience or from U. of W. - Milwaukee Seismic Center.	An earthquake greater than Design Basis Earthquake (DBE).	SITE EMERGENCY
(1) Activation of seismic recorder with TRIGGER, and OBE lights lit in relay room on RR159, AND (2) Verification of a seismic event by physical experience or from U. of W. - Milwaukee Seismic Center.	An earthquake greater than Operational Basis Earthquake (OBE).	ALERT
(1) Activation of seismic recorder with TRIGGER light lit in relay room on RR159, OR (2) An earthquake felt in the Plant*. (*Should be confirmed by evidence of physical damage or verification from University of Wisconsin Seismic Center.)	An earthquake felt in plant or detected on station seismic instrumentation.	UNUSUAL EVENT

NOTE: 1.) Telephone numbers for U of W - Milwaukee Seismic Center are in the KPB Emergency Telephone Directory, ETD 02.

2.) The Point Beach Seismic Monitor may be used if the KNPP Monitor is out of service.

CHART N
HIGH WINDS OR TORNADO

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Winds in excess of 100 mph for greater than 1 hour, AND (2) Plant above cold shutdown condition.	Sustained winds in excess of design levels with plant not in cold shutdown.	SITE EMERGENCY
(1) A tornado which strikes the facility, AND (2) Causes damage that affects the continued safe operation of the plant.	Any tornado striking facility.	ALERT
(1) A tornado within sight of the plant which has caused the loss of at least one of the off-site transmission lines, OR (2) A tornado observed on-site.	Any tornado on-site.	UNUSUAL EVENT

CHART O
FLOOD, LOW WATER, OR SEICHE

<table>
<tr><th colspan="4">KNPP INDICATION</th><th>EMERGENCY CLASSIFICATION CRITERIA</th><th>CLASSIFICATION</th></tr>
<tr><td colspan="3">FOREBAY LEVEL
Indicated for > 15 minutes</td><td></td><td rowspan="4">Flood, low water, or seiche near design levels.</td><td rowspan="4">ALERT</td></tr>
<tr><td>0 PUMPS</td><td>1 PUMP</td><td>2 PUMPS</td><td>CORRESPOND TO LAKE LEVEL</td></tr>
<tr><td>NOTE 3</td><td>NOTE 1</td><td>≥ 94% *</td><td>≥ 588 ft.</td></tr>
<tr><td>< 50% *</td><td>NOTE 5</td><td>NOTE 5</td><td>< 568.5 ft.</td></tr>
<tr><td colspan="4">OR Deep water Wave ≥ 22.5 ft.</td><td colspan="2"></td></tr>
<tr><td colspan="3">FOREBAY LEVEL
Indicated for > 15 minutes</td><td></td><td rowspan="4">50-year flood, low water level or seiche</td><td rowspan="4">UNUSUAL EVENT</td></tr>
<tr><td>0 PUMPS</td><td>1 PUMP</td><td>2 PUMPS</td><td>CORRESPOND TO LAKE LEVEL</td></tr>
<tr><td>NOTE 2</td><td>≥ 98% *</td><td>≥ 88% *</td><td>≥ 586 ft.</td></tr>
<tr><td>< 53.1% *</td><td>< 46.9% *
NOTE 4</td><td>NOTE 5</td><td>< 569.5 ft.</td></tr>
<tr><td colspan="4">OR Deep water wave ≥ 18 ft. (as confirmed by the U.S. Coast Guard, Two Rivers)</td><td colspan="2"></td></tr>
</table>

NOTE 1: Above the bottom of bar No. 1 painted on the south wall of the forebay.

NOTE 2: Above the bottom of bar No. 2 painted on the south wall of the forebay.

NOTE 3: Above the bottom of bar No. 3 painted on the south wall of the forebay.

NOTE 4: Applies to an uncontrollable decrease (cannot be restored by operator action. If the water box inlet valves are throttled, use other means to determine lake level per E-CW-04, "Loss of Circulating Water.")

NOTE 5: The corresponding forebay level for the associated lake level is below the circulating water pump trip setpoint of 42%. Therefore, this criterion will not be reached.

* Computer point for forebay level is L09075A and should be used because of its greater accuracy. Plant elevations and lake elevations are referenced to International Great Lakes Datum (IGLD), 1955

(IGLD 1955 = IGLD 1985 - 0.7 FEET)

CHART P
EXTERNAL EVENTS AND CHEMICAL SPILLS

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) An aircraft crash into plant buildings which causes a complete loss of an ESF function.	Aircraft crash affecting vital structures by impact OR fire.	SITE EMERGENCY
(1) A missile strikes plant buildings, OR (2) An explosion occurs within a plant building, which causes a complete loss of an ESF function.	Severe damage to safe shutdown equipment from missiles or explosion.	SITE EMERGENCY
(1) Release of flammable or toxic gas from a ruptured container which enters a vital area. Portable H_2 monitor detects explosive concentration of H_2 in vital area.	Uncontrolled release of toxic or flammable gas is confirmed within vital area.	SITE EMERGENCY
(1) An aircraft crashes into plant buildings OR switchyard which affects plant operation.	Aircraft crash on facility.	ALERT
(1) A missile strikes the facility which affects plant operation.	Missile impact from whatever source on facility.	ALERT
(1) Release of toxic or flammable gas from a ruptured container such that the gases enter the plant protected area or buildings.	Uncontrolled release of toxic or flammable gas is confirmed within the protected area.	ALERT
(1) Self-explanatory.	Known explosion damage to facility affecting plant operation.	ALERT
(1) An aircraft crash within the site boundary, OR (2) Unusual aircraft activity such as erratic flying, dropped unidentified object, or other hostile acts, which threaten the plant or plant personnel. (Any other persistent aircraft activity for which identification attempts through the FAA or other agencies have been unsuccessful.)	Aircraft crash on-site or unusual aircraft activity over facility.	UNUSUAL EVENT
(1) Release of toxic or flammable gas on site, AND (2) Portable monitors indicate toxic or explosive concentrations at life threatening levels of the gas near the spill area.	Uncontrolled release of toxic or flammable gas is confirmed on site.	UNUSUAL EVENT

CHART Q
SECURITY CONTINGENCY

KNPP INDICATION	EMERGENCY CLASSIFICATION CRITERIA	CLASSIFICATION
(1) Physical attack on the plant that has resulted in unauthorized personnel occupying the control room or any other vital areas as described in the Security Plan.	Loss of physical control of the plant.	GENERAL EMERGENCY
(1) Physical attack on the plant involving imminent occupancy of the control room, auxiliary shutdown panels, or other vital areas as defined by the Security Plan.	Imminent loss of physical control of the plant.	SITE EMERGENCY
(1) Security safeguards contingency event that results in a hostile force entering the protected area of the plant, but not gaining control over shutdown capability or of any vital areas as defined in the Security Plan, OR (2) Security safeguards contingency event that results in a site specific HI level CREDIBLE threat as defined in the Security Plan.	Ongoing security compromise.	ALERT
(1) Security safeguards contingency event that results in a site specific LO level CREDIBLE threat as defined in the Security Plan, OR (2) Security safeguards contingency event that results in a Bomb threat accompanied by interception of bomb materials, OR (3) Security safeguards contingency event that results in an attempted entry into the protected area of the plant by a hostile force, OR (4) Security safeguards contingency event that results in undetonated bomb found within the protected area.	Security threat or attempted entry or attempted sabotage.	UNUSUAL EVENT

NOTE: Security staff will NOT act as notifier during **security events**. Utilize Control Room staff for notifications.

DOCUMENT TRANSMITTAL

KEWAUNEE NUCLEAR POWER PLANT

FROM: DIANE FENCL - KNPP TRANSMITTAL DATE 01-27-2004

EMERGENCY PLAN IMPLEMENTING PROCEDURES TRANSMITTAL FORM

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~~C. Grant (Liaison Manuals)(EPIP-AD-02 and EOF-04 & APPX-A-06 Figures only)~~
C. Grant - TSC Response Blue Binder (Partial Distribution)
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~~C. Grant - TSC (Partial Distribution - FORMS ONLY)~~
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K. Stangel - SCR Tag Desk (Partial Distribution)

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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.

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EMERGENCY PLAN IMPLEMENTING PROCEDURES

INDEX

DATE: 01-27-2004

PROC. NO.	TITLE	REV.	DATE
	EP-AD		
EPIP-AD-01	Personnel Response to the Plant Emergency Siren	L	09-09-2003
EPIP-AD-02	Emergency Class Determination	AI	12-04-2003
EPIP-AD-03	KNPP Response to an Unusual Event	AJ	09-09-2003
EPIP-AD-04	KNPP Response to Alert or Higher	AO	09-09-2003
EP-AD-5	Site Emergency	**Deleted**	04-27-87
EPIP-AD-05	Emergency Response Organization Shift Relief Guideline	E	02-18-2003
EP-AD-6	General Emergency	**Deleted**	04-24-87
EPIP-AD-07	Initial Emergency Notifications	AV	09-09-2003
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	T	01-27-2004
EP-AD-12	Personnel Assembly and Accountability	**Deleted**	03-26-94
EP-AD-13	Personnel Evacuation	**Deleted**	04-25-94
EP-AD-13A	Limited Area Evacuation	**Deleted**	03-01-83
EP-AD-13B	Emergency Assembly/Evacuation	**Deleted**	03-01-83
EP-AD-13C	Site Evacuation	**Deleted**	03-01-83
EP-AD-14	Search and Rescue	**Deleted**	05-25-94
EPIP-AD-15	Recovery Planning and Termination	P	09-12-2002
EP-AD-16	Occupational Injuries or Vehicle Accidents During Emergencies	**Deleted**	03-14-97
EP-AD-17	Communications	**Deleted**	03-05-84
EPIP-AD-18	Potassium Iodide Distribution	P	02-27-2002
EPIP-AD-19	Determining Protective Action Recommendations	T	09-19-2003

INDEX

DATE: 01-27-2004

PROC. NO.	TITLE	REV.	DATE
EPIP-AD-20	KNPP Response to a Security Threat	E	09-30-2003
	EP-ENV		
EPIP-ENV-01	Environmental Monitoring Group Organization and Responsibilities	X	07-31-2003
EPIP-ENV-02	Environmental Monitoring Team Activation	Y	07-31-2003
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 Software	X	09-19-2003
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	U	07-31-2003
EPIP-ENV-04B	Air Sampling and Analysis	Y	07-31-2003
EP-ENV-4C	Environmental Monitoring Teams	**Deleted**	04-13-90
EPIP-ENV-04C	Ground Deposition Sampling and Analysis	Y	07-31-2003
EPIP-ENV-04D	Plume Tracking for Environmental Monitoring Teams	P	07-31-2003
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

INDEX

DATE: 01-27-2004

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	AB	07-31-2003
EPIP-EOF-03	EOF Staff Action for Unusual Event	AE	07-31-2003
EPIP-EOF-04	EOF Staff Action for Alert or Higher	AL	07-31-2003
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	AA	07-31-2003
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	W	07-31-2003
EPIP-EOF-12	Media Center/Emergency Operation Facility/Joint Public Information Center/Security	R	06-19-2003

INDEX

DATE: 01-27-2004

PROC. NO.	TITLE	REV.	DATE
	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	W	11-04-2003
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	X	07-31-2003
EPIP-RET-02A	Radiation Protection Office/Radiological Analysis Facility (RPO/RAF) Activation	V	11-04-2003
EPIP-RET-02B	Gaseous Effluent Release Path, Radioactivity, and Release Rate Determination	T	09-19-2003
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	P	02-18-2003
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

INDEX

DATE: 01-27-2004

PROC. NO.	TITLE	REV.	DATE
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	U	06-19-2003
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	I	07-31-2003
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	**Deleted**	09-19-2003
EP-SEC			
EP-SEC-1	Security Organization	**Deleted**	04-24-87
EPIP-SEC-02	Security Force Response to Emergencies	Z	07-31-2003
EP-SEC-2A	Manual Activation of Emergency Sirens	**Deleted**	04-16-82
EPIP-SEC-03	Personnel Assembly and Accountability	AG	05-20-2003
EPIP-SEC-04	Security Force Actions for Dosimetry Issue	P	10-02-2001

INDEX

DATE: 01-27-2004

PROC. NO.	TITLE	REV.	DATE
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	S	01-28-2003
EPIP-TSC-02	Technical Support Center Activation	U	01-20-2003
EPIP-TSC-03	Plant Status Procedure	W	05-05-2003
EPIP-TSC-04	Emergency Modifications	O	04-29-2003
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	P	09-02-2003
EPIP-TSC-08B*	STMRLS Computer Program	H	07-31-2003
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	K	05-05-2003
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	L	07-31-2003

INDEX

DATE: 01-27-2004

FIGURES					
EPIP	FIG #	Figure EPIPFG	DESCRIPTION	REV.	DATE
EPIP-SEC-05 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	C	06-19-2003
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	D	04-29-2003
EPIP-EOF-12	EP-FIG-024	EOF-12-02	Location of JPIC and Media Briefing Center Map	D	06-19-2003
EPIP-SEC-05	EP-FIG-026	SEC-05-01	KNP Site Map & Evacuation Routes	E	09-19-2003
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	Media Briefing Center	D	04-29-2003
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-039b	OSF-02-01	High Priority Work	B	07-31-2003
EPIP-OSF-02	EP-FIG-039a	OSF-02-02	Lower Priority Work	B	07-31-2003
EPIP-APPX-A-06	EP-FIG-043	APPX-A-06-10	JPIC - Federal Work Area - WPSC D2-9	C	04-29-2003
EPIP-APPX-A-06	EP-FIG-044	APPX-A-06-07	JPIC - State and County Work Area - WPSC D2-8	D	04-29-2003
EPIP-APPX-A-06	EP-FIG-045	APPX-A-06-05	JPIC - Utility Work Area - WPSC D2-7	D	04-29-2003
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

INDEX

DATE: 01-27-2004

NUMBER	TITLE	REVISION	DATE
	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 Figures	AB	04-29-2003

INDEX

DATE: 01-27-2004

FORM EPIPF	TITLE	REV.	DATE
	APPENDIX B		
	EP-AD		
AD-07-01	Event Notice - Nuclear Accident Reporting System Form (NARS)	V	05-05-2003
AD-07-02	State Call-Back - Question Guideline	C	11-15-2001
AD-07-03	Fax Event Notice	C	09-19-2003
AD-07-04	ERO Event Notification	Deleted	07-31-2003
AD-11-01	Emergency Radiation Work Permit	H	12-19-2002
AD-18-01	Airborne Radioiodine Dose Accountability and Potassium Iodide Distribution	B	08-06-2002
AD-18-02	Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide	A	02-27-2002
	EP-ENV		
ENV-01-01	Environmental Dispatch Area Activation Checklist	E	07-31-2003
ENV-01-02	EMT Status	C	07-31-2003
ENV-01-03	Meteorological and Plant Status Data	C	12-14-2001
ENV-01-04	EMT Orders/Field Data	C	07-31-2003
ENV-02-01	EMT Activation Checklist	O	07-31-2003
	EP-EOF		
EOF-02-01	EOF Activation Checklist	V	09-19-2003
EOF-02-02	EOF Deactivation Checklist	N	01-28-2003
EOF-04-01	SRCL Initial Action Checklist	D	01-20-2003
EOF-04-02	Telephone Communications Log Sheet	A	12-14-2001
EOF-08-03	Fax for Emergency Declaration or Status Updates	H	01-20-2003
EOF-08-05	Plant Emergency Status Report	A	11-27-2001
EOF-08-06	Radiological Status Report	E	01-20-2003
EOF-11-02	Operating Status	G	11-07-2002

INDEX

DATE: 01-27-2004

FORM EPIPF	TITLE	REV.	DATE
EOF-11-03	Environmental Status Board	G	11-07-2002
EOF-12-01	I.D. Badge Registration Form	G	10-24-2000
	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)	E	09-19-2003
RET-02B-02	Auxiliary Building Stack Release (Grab Sample)	E	09-19-2003
RET-02B-03	Auxiliary Building Stack Release (Sping Reading)	E	09-19-2003
RET-02B-04	Containment Stack Release (Sping Reading)	D	09-19-2003
RET-02B-05	Steam Release	E	09-19-2003
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	**Deleted**	01-27-2004
	EP-SEC		
SEC-03.01	Emergency Accountability Log	A	03-28-2000
SEC-04-01	Emergency Dosimeter Log	H	11-04-2003
	EP-TSC		
TSC-01.01	Plant Status Summary for SAM Implementation	C	01-28-2003
TSC-01.02	Severe Accident Management Summary and Strategy Recommendation	B	02-06-2002

INDEX

DATE: 01-27-2004

FORM EPIPF	TITLE	REV.	DATE
TSC-01-03	Severe Accident Management - Status	C	07-31-2003
TSC-02-01	TSC and OSF Activation Checklist	P	01-20-2003
TSC-02-02	TSC Ventilation Checklist	J	09-19-2003
TSC-02-03	Emergency Response Data System (ERDS) Link Initiation Checklist	H	01-20-2003
TSC-02-04	TSC Chart Recorder Operation Checklist	E	01-20-2003
TSC-02-05	TSC and OSF De-Activation Checklist	C	01-28-2003
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 Modification Request	H	04-29-2003
TSC-04-02	Emergency Physical Change Safety Review	**Deleted**	05-09-2002
TSC-04-03	Emergency Modification Index	G	04-29-2003
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)	H	09-02-2003
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	F	11-04-2003
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
TSC-09A-07	Core Damage Assessment Results	A	05-05-2003

WISCONSIN PUBLIC SERVICE CORP. Kewaunee Nuclear Power Plant *Emergency Plan Implementing Procedure*	No. EPIP-AD-11	Rev. T
	Title Emergency Radiation Controls	
	Date JAN 27 2004	Page 1 of 7
Reviewed By Rick Adams	Approved By Jerrie Coleman	

Nuclear Safety Related	☐ Yes ☑ No	PORC Review Required	☐ Yes ☑ No	SRO Approval Of Temporary Changes Required	☐ Yes ☑ No

1.0 Purpose

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

2.0 General Notes

2.1 Definitions

2.1.1 FEMA - Federal Emergency Management Agency

2.1.2 HP - Health Physics

2.1.3 PA - Protected Area

2.1.4 RCA - Radiologically Controlled Area

3.0 Precautions and Limitations

3.1 None

4.0 Initial Conditions

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

5.0 Procedure

5.1 **All emergency personnel** are responsible for adhering to the requirements of this procedure.

5.1.1 The requirements of the Health Physics Procedures shall be applicable during all radiological emergencies, except as authorized by the Radiological Protection Director (RPD) or Emergency Director (ED).

5.1.2 For RCA entries, if any 10CFR20 dose limit is likely to be exceeded, an "Emergency Radiation Work Permit" (ERWP), Form EPIPF-AD-11-01, shall be completed. Otherwise, use an existing Radiation Work Permit (RWP) or fill out a RWP in accordance with NAD-08.03, "Radiation Work Permit."

5.1.3 A PRIORITY ENTRY can be used for quick action to expedite the entry of emergency response personnel into the RCA in accordance with EPIP-RET-02D, "Emergency Radiation Entry Controls and Implementation" and should NOT exceed 10CFR20 dose limits.

Note

Dose extensions beyond 10CFR20 limits (see Table before Step 5.2) may be allowed within the dose guidelines specified by EPA-400 (see Table after Step 5.1.4).

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

10CFR20 RADIATION DOSE LIMITS

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

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

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

5.2 The **Emergency Director** (ED) is responsible for approving all requests for exposure in excess of 10CFR20 dose limits and the distribution of Potassium Iodide.

5.3 The **Radiological Protection Director** (RPD) has the overall responsibility for in-plant personnel monitoring and shall:

5.3.1 Ensure that personnel within the protected area are issued the appropriate dosimetry.

5.3.2 Evaluate any potential exposure to radiation in excess of 10CFR20 dose limits for approval by the ED (Form HPF-110) in accordance with HP-05.001, "Survey and Sampling Techniques." In the absence of the RPD, the ED may authorize an overexposure after concurrence of the on-shift HP or an In-plant Radiation Emergency Team (IRET) member.

5.3.3 In accordance with EPIP-AD-18, "Potassium Iodide Distribution," advise the ED on the need to make thyroid blocking agent (Potassium Iodide, a stable iodine) available to Emergency Response Organization (ERO) members who may be subject to radioiodine intake.

5.3.4 Review all RWPs and ERWPs in use.

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

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

5.3.5.1 This control may include:

a. Roping off and posting additional areas within the plant

b. Roping off and posting all doors to an entire building

c. Designating and posting the entire PA as RCA

d. Establishing roadblocks in conjunction with the ED and Site Protection Director (SPD), and designating the entire area within the roadblocks as RCA

Note

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

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

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

5.4.2 Report in-plant radiological conditions to the RPD.

5.4.3 Determine the projected amount of time in-plant emergency workers will be allowed to remain in any radiation/contaminated area through pre-entry review of:

a. Projected route exposures

b. Measured dose rates and airborne concentrations

c. Personnel exposure history

d. Projected duration of task

e. Information on current plant conditions and the plant area under consideration

5.4.4 Provide radiation monitoring coverage for all continuously occupied areas.

5.4.5 Perform air sample surveys and direct radiation surveys as directed.

5.4.6 Control exposure to airborne radionuclides in accordance with the following:

a. Use only Self-Contained Breathing Apparatus (SCBA) pressure demand respirators when entering areas of unknown airborne concentrations.

b. Limit airborne particulate exposures to < 200 DAC-HOURS to the maximum extent possible.

c. Remove any worker from further emergency duties upon exceeding 2,000 DAC-HOURS.

d. Assess internal dose by performing whole body counts in accordance with procedure HP-03.008, "Evaluation of Inhalations or Ingestions."

Note

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

5.4.7 Review all planned entries with the entry team members and discuss the following:

a. Potential stress conditions and problems

b. Work methods, work location, and description of task

c. Number of personnel required and access routes inside the RCA

d. Allowable exposure limits, expected doses, stay times

e. Tools, equipment, and parts

f. Lighting

g. Communications requirements

h. Abort instructions

5.4.8 As directed, accompany any worker entering an area where radiological conditions are unknown.

5.4.9 Remove any individual who has exceeded 10CFR20 dose limits from work involving additional radiation exposure. The worker's exposure record shall be reviewed by the RPD and ED prior to further radiation work. Any further radiation work must be authorized by the ED.

5.4.10 As directed, store samples collected post accident in designated storage locations. Liquid, air particulate, and halogen filter samples should be stored in the radioactive waste storage areas of the Auxiliary Building.

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.

7.0 References

7.1 Kewaunee Nuclear Power Plant Emergency Plan

7.2 NUREG-0654/FEMA-REP-1, REV. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (Nov. 1980)

7.3 EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (Oct. 1991)

7.4 10CFR20, Standards for Protection Against Radiation

7.5 Kewaunee Nuclear Power Plant Health Physics Procedure Manual

7.6 KNPP Commitment Tracking System number 97-125, NRC Inspection Report 97-13, Repair Personnel

7.7 Implementing Procedures

7.7.1 EPIP-RET-02D, Emergency Radiation Entry Controls and Implementation

7.7.2 NAD-08.03, Radiation Work Permit

7.7.3 EPIP-AD-18, Potassium Iodide Distribution

7.7.4 EPIP Appendix B, Forms

7.7.5 HP-03.008, Evaluation of Inhalations or Ingestions

7.7.6 NAD-01.11, Dosimetry and Personnel Monitoring

7.7.7 HP-05.001, Survey and Sampling Techniques

8.0 Records

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

8.1.1 QA Records

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

8.1.2 Non-QA Records

None