

NOV 18 2014



~~Security Related Information - Withhold Under 10 CFR 2.390~~

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Serial No. 14-561
LIC/RPR/R0
Docket No.: 50-305
License No.: DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURES
AND NUCLEAR EMERGENCY PUBLIC INFORMATION PLAN AND IMPLEMENTING
PROCEDURES

Pursuant to 10 CFR 50 Appendix E, enclosed is Kewaunee Power Station Emergency Plan Implementing Procedures (EPIP) revision dated November 3, 2014. The revised procedures supersede the entire set of previously submitted EPIP procedures and Nuclear Public Information Plan and Implementing Procedures (NEPIP).

Please follow the instructions below.

REMOVE (and SHRED*)		INSERT	
Procedure/Form	Rev. No.	Procedure/Form	Rev. No.
Entire set of EIPs and NEIPs	Various	EP-KW-EIP-001	0
		EP-KW-EIP-002	0
		EP-KW-EIP-003	0
		EP-KW-EIP-004	0
		EP-KW-EIP-005	0
		EP-KW-EIP-SEC-001	0
		EP-KW-EIP-SRF-001	0

Mr. Hironori Peterson, Region III, NRC is being provided with a copy of this letter and two CDs, each containing the current version of the EPIP.

The procedures identified in the attachment to this letter contain Security-Related Information and are to be withheld from public disclosure under 10 CFR 2.390(d)(1).

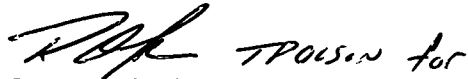
AX45
NRF

~~Security Related Information - Withhold Under 10 CFR 2.390~~

Upon removal of the Security-Related procedures listed in the attachment, this letter and the enclosure are decontrolled.

Please contact Mr. Richard Repshas at (920) 388-8217 if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "Stewart J. Yuen" with a stylized flourish at the end.

Stewart J. Yuen
Plant Manager, Kewaunee Power Station

Attachment

Enclosure

Commitments made by this letter: None

cc: Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352

Without enclosure, and with 2 CDs:
Mr. Hironori Peterson
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ATTACHMENT

EP-KW-EIP-001	Security-Related
EP-KW-EIP-002	Security-Related
EP-KW-EIP-003	Security-Related
EP-KW-EIP-004	
EP-KW-EIP-005	
EP-KW-EIP-SEC-001	Security-Related
EP-KW-EIP-SRF-001	



Kewaunee Power Station

Emergency Plan Implementing Procedure

Title: ERO Support During an Emergency

**Procedure Number
EP-KW-EIP-004**

**Revision Number
0**

**Effective Date and
Approvals On File**

Revision Summary

This revision 0 procedure is formatted in FrameMaker to standards set forth in AD-AA-101-1002, Writers Guide for Procedures and Guidance and Reference Documents.

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1.0 PURPOSE

1.1 This procedure provides instructions for the following:

- Response of site personnel to the declaration of an emergency at Kewaunee Power Station (KPS)
- Search and rescue operations
- Establishing the controls and documentation for changes to equipment or systems necessary during a declared emergency
- Processing Work Orders in a declared emergency condition

2.0 SCOPE

2.1 In the event of a plant emergency, the Shift Manager (SM) assumes the dual title and responsibilities of the Shift Manager and Emergency Director (ED).

2.2 10 CFR 50.54 (x) and (y) provide that in an emergency, where it is immediately apparent **NO** action consistent with license condition and technical specifications can provide adequate or equivalent protection, a licensee may take reasonable action that departs from a license condition or a technical specification when this action is immediately needed to protect the public health and safety. This action shall be approved, as a minimum, by the SM/ED prior to taking the action.

2.3 Personnel involved in search and rescue missions that may involve high radiation areas should keep in mind the concepts of time, distance, and shielding to minimize radiation exposure as much as possible.

2.4 The buddy system shall be in effect. Search and rescue team members will only be allowed to travel into a potentially dangerous or high radiation area if within direct sight or sound of their partner.

2.5 Proper radiological controls must be adhered to during a search and rescue.

2.6 All work performed should follow the guidelines of the Dominion Safety Policy.

2.7 All work performed must have prior approval of SM/ED prior to commencing.

2.8 Any changes to maintenance procedures must be approved by the Technical Director (TD) and SM.

- 2.9 EP-KW-EIP-003, Response to a Security Event, shall be referenced for a security event.

3.0 INSTRUCTIONS

3.1 Personnel Response to a Declared Emergency

- 3.1.1 **WHEN** the plant siren sounds, **THEN LISTEN** to the announcement for further instructions.

*Technical Director/
RPD*

- 3.1.2 **IF** your pager activates **OR** the plant page declares an emergency, **THEN REPORT** to the Control Room.

Non-ERO Staff

- 3.1.3 **IF** the site declares an emergency, **THEN REPORT** to the nearest assembly area:

- ATF Lunchroom
- Warehouse Annex Lunchroom
- Security Building
- Radiation Protection Office

- 3.1.4 The senior person in the Assembly Area shall implement EP-KW-EIP-SEC-001, Security Force Emergency Responses.

3.2 Search and Rescue

Technical Director

- 3.2.1 **IF** Security reports missing personnel during assembly and accountability, **THEN COORDINATE** Search and Rescue Teams per ATTACHMENT A, Search and Rescue.

- 3.2.2 **REPORT** all area search results to the SM/ED.

- 3.2.3 **WHEN** search and rescue operations are complete **OR NO** longer necessary, **THEN RECALL** all Search and Rescue Teams.

3.3 Emergency Modifications

Technical Director

- 3.3.1 **IF** an emergency modification is required during a declared emergency, **THEN ENSURE** the EP Form, Emergency Modification Request is completed.
- 3.3.2 **ASSIGN** a number to the Emergency Modification per EP Form, Emergency Modification Index.
- 3.3.3 **REVIEW** the Emergency Modification with the SM/ED.
 - a. **DETERMINE** plant conditions are acceptable prior to allowing the installation of the Emergency Modification.
 - b. **IF** the Emergency Modification is to be installed under 10 CFR 50.54 (x) and (y), **THEN ENSURE** the SM/ED sign the appropriate Emergency Modification Request form.
- 3.3.4 **INSTALL** the Emergency Modification in accordance with the applicable Urgent or Priority 1 Work Order.
- 3.3.5 Upon entry into the recovery phase, **REVIEW** the Emergency Modification Index and **REMOVE** the mods that are **NO** longer needed.

4.0 RECORDS

The following QA records and non-QA records are generated by or created according to this document and are listed on the KPS Records Retention Schedule. These records shall be maintained according to the KPS Records Management Program.

4.1 QA Records

4.1.1 For Actual Events

- EP-KW-EIP-SEC-001, Security Force Emergency Responses

4.2 Non-QA Records

4.2.1 For Drills and Exercises

- EP-KW-EIP-SEC-001, Security Force Emergency Responses

5.0 ADMINISTRATIVE INFORMATION

5.1 Commitments

None

5.2 References

5.2.1 Procedures

- a. EP-KW-EIP-003, Response to a Security Event
- b. EP-KW-EIP-SEC-001, Security Force Emergency Responses

5.2.2 Other

- a. 10 CFR 50.54 (x) and (y)
- b. Kewaunee Power Station Emergency Plan
- c. Permanently Defueled Emergency Action Level Basis Document

ATTACHMENT A
Search and Rescue

(Page 1 of 2)

1.0 **USE** the following to determine the most likely location of missing person(s):

- Gai-tronics
- Plant security computer
- Immediate supervisor for expected work location
- Plant key checkout log
- RP access

NOTE: Search and Rescue teams should be coordinated so duplication of effort is avoided, unnecessary radiation exposure does **NOT** occur, and time is used effectively.

2.0 The Technical Director will coordinate the search and rescue effort.

3.0 **SELECT** Search and Rescue Team members according to the following criteria:

- Minimum of two personnel per team
- Knowledge of plant layout
- **IF** possible, **THEN** at least one member should be a Radiation Technician.
- **IF** possible, **THEN** At least one team member should have first aid training.

4.0 **PERFORM** a brief for the Search and Rescue Teams including the following:

- Area to be searched
- Radiation levels in the area
- Any hazards they may encounter
- Communications expectations and methods
- Appropriate PPE, dosimetry, first aid equipment, and respiratory protection

ATTACHMENT A
Search and Rescue

(Page 2 of 2)

5.0 During the search and rescue effort, **PERFORM** the following:

- **MONITOR** and **RECORD** radiation levels.
- **ENSURE** all significant events are recorded
- **IF** any unexpected physical conditions **OR** radiological hazards are encountered, **THEN OBTAIN** further instructions from the TD or **ABORT** the mission.
- **WHEN** the missing person(s) is found, **THEN CONTACT** the TD.

5.1 **IF** the person(s) is injured **OR** unconscious, **THEN PERFORM** the following:

5.1.1 **PROVIDE** first aid to the extent possible without endangering the safety of the rescuer.

5.1.2 **IF** a stretcher is required, **THEN** call for assistance.

5.1.3 As soon as possible, **TRANSPORT** or **ESCORT** the individual(s) to a safe location.

6.0 At the completion of the search, **RETURN** to the Control Room for debrief.



Kewaunee Power Station

Emergency Plan Implementing Procedure

Title: Emergency Radiation Controls

**Procedure Number
EP-KW-EIP-005**

**Revision Number
0**

**Effective Date and
Approvals On File**

Revision Summary

This revision 0 procedure is formatted in FrameMaker to standards set forth in AD-AA-101-1002, Writers Guide for Procedures and Guidance and Reference Documents.

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1.0 PURPOSE

This procedure provides instruction for the following:

- Identifying and analyzing radioactive gaseous effluent
- Entering areas that have become radioactively contaminated or have increased in radiation levels
- Implementation of emergency radiation controls

2.0 SCOPE

- 2.1 This procedure shall be implemented upon declaration of an Unusual Event or Alert.
- 2.2 In the event of a plant emergency, the Shift Manager (SM) assumes the dual title and responsibilities of the Shift Manager and Emergency Director (ED).
- 2.3 Any radiation exposure in excess of 10 CFR 20 dose limits shall be authorized by the SM/ED.
- 2.4 The Radiological Protection Director (RPD) has overall responsibility for in-plant personnel monitoring.
- 2.5 When providing emergency radiation controls, non-emergency procedures should be used as much as practicable, except as noted in this procedure.

3.0 INSTRUCTIONS

NOTE: If desired, particulate grab samples may be taken and analyzed, but these samples should **NOT** delay performance of the noble gas sampling analysis.

- Particulate samples are taken and analyzed using applicable sections of RP-KW-005-004, Effluent Monitoring and Sampling Requirements, and RP-KW-005-014, Airborne Radioactivity Sample Analysis.

3.1 Gaseous Effluent Release Path, Radioactivity, and Release Rate Determination

NOTE: Alternative dose projection calculations may be performed in accordance with EP-KW-EIP-001, Emergency Response.

3.1.1 **MONITOR** the following indications and **IDENTIFY** a radioactive release is occurring from the Auxiliary Building Vent Stack:

- R-13 cpm
- R-14 cpm

3.1.2 **DETERMINE** the appropriate sample point for the release path.

3.1.3 **PERFORM** pre-sample preparation as follows:

a. For entries into controlled areas, **FOLLOW** instructions in:

- Subsection 3.2, Emergency Radiation Entry Controls
- Subsection 3.3, Emergency Radiation Exposure
- Applicable Radiation Work Permit

b. **OBTAIN** the following equipment:

- Marinelli Beaker
- Gas Syringes (10cc, 1cc, 0.1cc), if required

- 3.1.4 **IF** a noble gas grab sample from the Auxiliary Building Vent Stack is required to determine the radioactive release rate, **THEN PERFORM** the following.
- a. Using the applicable sections of RP-KW-005-004, Effluent Monitoring and Sampling Requirements, **COLLECT** a noble gas grab sample from either the R-13 or R-14 sampling skids.
 - b. Using the applicable sections of RP-KW-005-014, Airborne Radioactivity Sample Analysis, and HP-05.020, Counting of High Activity Samples, **ANALYZE** the noble gas grab sample.
 - c. **RECORD** the total radioactive release concentration ($\mu\text{Ci/cc}$) from the noble gas grab sample analysis results (e.g. APEX sample results printout) on ATTACHMENT B, Auxiliary Building Stack Release (Grab Sample).
 - d. **CALCULATE** the total release flow rate (cc/sec) by adding the operating Auxiliary Building Fan flow rates or using the alternate methods provided on ATTACHMENT B.
 - e. **RECORD** the total release flow rate (cc/sec) on ATTACHMENT B.
 - f. **CALCULATE** the radioactive release rate (Ci/sec) by multiplying the total radioactive release concentration ($\mu\text{Ci/cc}$) by total release flow rate (cc/sec) and by 1E-6 ($\text{Ci}/\mu\text{Ci}$).
- $$\text{Ci/sec} = \mu\text{Ci/cc} \times \text{cc/sec} \times 1\text{E-6}$$
- g. **RECORD** the radioactive release rate (Ci/sec) on ATTACHMENT B.
 - h. **PRINT, SIGN, and DATE** the completed ATTACHMENT B.
 - i. **ATTACH** all sample results to completed ATTACHMENT B and **TRANSMIT** to the RPD for review and input to dose projection calculation if applicable.

NOTE: Personnel engaged in emergency repair, emergency operation, and rescue operations should keep in mind the concepts of time, distance, and shielding to minimize radiation exposure.

3.2 Emergency Radiation Entry Controls

3.2.1 **REVIEW** shielded pathways and critical equipment location maps to establish radiological conditions and to determine an access pathway to the affected areas.

NOTE: During emergency situations when quick action is necessary, continuous surveillance by a Radiation Technologist or RP Supervisor/Staff may substitute for the RWP. (Ref. 5.2.1.c)

3.2.2 **IF** necessary, **THEN COMPLETE** a Radiation Work Permit (RWP) prior to entry in accordance with RP-KW-001-016, Radiation Work Permit - Preparation, Issuance, and Termination.

3.2.3 **ENSURE** the following are used properly in compliance with the RWP.

- Instrumentation
- Respiratory protection
- Clothing
- Dosimetry

3.2.4 **IF** responding to a fuel handling accident, **THEN ENSURE** a beta sensitive survey instrument is used due to presence of Kr-85 noble gas.

3.2.5 **REVIEW** exposure records of personnel entering the affected areas.

3.2.6 **DETERMINE** each entrant's remaining annual dose.

- a. **CALCULATE** stay times based on this dose.
- b. **REVIEW** these calculations with each entrant.

NOTE: It is recommended that annual doses to personnel in the radiological area during an emergency situation remain below 10 CFR 20 dose limits.

NOTE: SM/ED approval is required with concurrence of the RPD, for entries where a team member is likely to exceed 10 CFR 20 dose limits. RPD concurrence may be obtained via teleconference.

3.2.7 **BRIEF** personnel on dose limits and conditions set in accordance with ATTACHMENT A, 10 CFR 20 Limits and EPA-400 Dose Guidelines, for their assigned task, noting the following:

- TEDE less than 10 rem for protecting valuable property
- TEDE less than 25 rem for Search and Rescue

3.2.8 During the entry, **MONITOR** the following:

- Communications
- Radiation levels in specific areas
- Dose rates and doses received to the entrants

3.2.9 **LOG** any important events, locations, and time of occurrence.

3.2.10 **REPORT** information in Step 3.2.8 and 3.2.9 to the RPD.

3.3 Emergency Radiation Exposure

- 3.3.1 **IF** entry into a radiological area is likely to exceed 10 CFR 20 dose limits, **THEN**, **COMPLETE** ATTACHMENT C, Emergency Exposure Authorization.
- 3.3.2 **WHEN** ATTACHMENT C has been completed, **THEN ENSURE** RPD concurs and SM/ED approves the Emergency Radiation Exposure.
- 3.3.3 **PERFORM** a pre-job brief with personnel likely to exceed 10 CFR 20 dose limits and **INCLUDE** the following.
- Work location and access route
 - Work method, tools, equipment, and parts
 - Area dose rates, airborne concentrations, and stay times
 - Communication requirements
 - Potential problems and abort instructions
- 3.3.4 **REMOVE** any individual who has exceeded 10 CFR 20 dose limits from work involving additional radiation exposure.
- Any additional radiological work shall be approved by the SM/ED.
- 3.3.5 **IF** any personnel has exceeded **OR** is suspected to have exceeded 25 rem TEDE, **THEN REFER** them for appropriate medical care.

3.4 Completion

- 3.4.1 **SEND** completed EIPs, forms, and other applicable records to Operations - EP Personnel.

4.0 RECORDS

The following QA records and non-QA records are generated by or created according to this document and are listed on the KPS Records Retention Schedule. These records shall be maintained according to the KPS Records Management Program.

4.1 QA Records

4.1.1 For Actual Events

- ATTACHMENT B, Auxiliary Building Stack Release (Grab Sample)
- ATTACHMENT C, Emergency Exposure Authorization

4.2 Non-QA Records

4.2.1 For Drills and Exercises

- ATTACHMENT B, Auxiliary Building Stack Release (Grab Sample)
- ATTACHMENT C, Emergency Exposure Authorization

5.0 ADMINISTRATIVE INFORMATION

5.1 Commitments

None

5.2 References

5.2.1 Procedures

- a. EP-KW-EIP-001, Emergency Response
- b. HP-05.020, Counting of High Activity Samples
- c. RP-KW-001-016, Radiation Work Permit - Preparation, Issuance, and Termination
- d. RP-KW-005-004, Effluent Monitoring and Sampling Requirements
- e. RP-KW-005-014, Airborne Radioactivity Sample Analysis

5.2.2 Other

- a. Kewaunee Power Station Permanently Defueled Emergency Plan
- b. Permanently Defueled Emergency Action Level Basis Document
- c. EPA-400-R-92-001, Manual of Protective Actions Guides and Protective Actions for Nuclear Incidents, May 1992

ATTACHMENT A
10 CFR 20 Limits and EPA-400 Dose Guidelines
(Page 1 of 1)

Table 1		
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	Annual	50 REM
DAC-HOUR, Adult	Annual	2000 DAC-HOURS

Table 2		
EPA RADIATION DOSE GUIDELINES (EPA-400)		
Projected Dose (rem) to Emergency Team Workers	Actions/Conditions	Comment
TEDE < 5	Control exposure of emergency workers to these levels except for those instances listed below. (Appropriate controls for emergency workers include time limitations and respirators.)	"All other organs" include: skin, extremities, and thyroid.
Lens of the eye < 15		
All other organs < 50 TODE		
TEDE < 10	Emergency workers exposure should be controlled below these levels when their mission involves protecting valuable property.	
Lens of the eye < 30		
All other organs < 100 TODE		
TEDE < 25	Emergency workers exposure should be controlled below these levels when their mission involves life saving or protection of large populations.	
Lens of the eye < 75		
All other organs < 250 TODE		
TEDE > 25	Exposures above these levels to emergency workers will be on a voluntary basis only to persons fully aware of the risks involved.	
Lens of the eye > 75		
All other organs > 250 TODE		

ATTACHMENT B
Auxiliary Building Stack Release (Grab Sample)

(Page 1 of 1)

1.0 Total Radioactive Release Concentration from noble gas grab sample analysis results:

_____ (μCi/cc) (Applicable sample results attached)

2.0 Total release flow rate:

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

OR

* Auxiliary Building Stack Flow from the Plant Process Computer System (PPCS) Tag #
F7001G _____ CFM = (X)

$$\frac{(X) \times (2.83E4)}{60} = cc/sec$$

3.0 Radioactive Release Rate:

Total Release Concentration (μCi/cc) X Total Release Flow Rate (cc/sec) X 1E - 6 (Ci/μCi) = Ci/sec

_____ (μCi/cc) X _____ (cc/sec) X 1E - 6 (Ci/μCi) = _____ Ci/sec

Completed by: _____ Date: _____

Print / Sign

Reviewed by: _____ Date: _____

Print / Sign

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

INFORMATION USE

ATTACHMENT C
Emergency Exposure Authorization

(Page 1 of 3)

NOTE: Only the type of exposure expected to be exceeded need be estimated and approved.

NOTE: Approval of Emergency Exposures is a Non-delegable Responsibility.

WARNING: Emergency worker exposure limits are **NOT** to be applied to minors or pregnant women.

Emergency Exposure Guidelines:

1. All Emergency Exposures shall be authorized by the Emergency Director.
2. All individuals may be authorized up to 5 Rem TEDE, 15 Rem LDE, or 50 Rem SDE/TODE emergency exposure for a given emergency event. Historical occupational exposure is **NOT** totaled into this limit.
3. Volunteers may be authorized up to 10 Rem TEDE, 30 Rem LDE, or 100 Rem SDE/TODE to protect valuable property.
4. Volunteers may be authorized up to 25 Rem TEDE, 75 Rem LDE, or 250 Rem SDE/TODE for life saving or the protection of large populations.
5. Individuals may volunteer to receive greater than 25 Rem TEDE, 75 Rem LDE, or 250 Rem SDE/TODE for life saving or the protection of large populations.
6. All emergency exposures are voluntary. For higher doses (greater than 5 Rem) individuals over the age of 45 are preferable.
7. Individuals shall be briefed on the possible effects from high levels of radiation exposure (**SEE** page 3 of this Attachment).

ATTACHMENT C
Emergency Exposure Authorization
(Page 2 of 3)

Name: _____ TLD #: _____ Age: _____

Reason for exposure in excess of 10 CFR 20 limits: (**INCLUDE** tasks to be performed)

	Estimated Dose Needed for Task ⁽¹⁾	Authorized Emergency Dose
Whole Body (TEDE)	_____ REM	_____ REM
Lens of the Eye (LDE)	_____ REM	_____ REM
Extremity / Organ (SDE / TODE)	_____ REM	_____ REM

I have volunteered to perform the task(s) during which I will receive the emergency exposure, and I understand the potential consequences of the proposed emergency assignment from attached summary.

Individual to Receive Exposure: _____ Date: _____
Signature

Radiation Protection Director
Concurrence: _____ Date: _____
Signature

Emergency Director
Approval ⁽²⁾: _____ Date: _____
Signature

(1) Only the type of exposure expected to be exceeded need be estimated and approved.

(2) Approval of Emergency Exposures is a Non Delegable Responsibility.

ATTACHMENT C
Emergency Exposure Authorization
(Page 3 of 3)

Possible Effects From High Levels Of Radiation Exposure

Radiation injury depends on numerous factors such as the type of radiation, the parts of the body exposed, the rate and duration of exposure, the number of exposures, and the age and sex of the irradiated person. There are short and long term effects from high levels of radiation exposure.

Short Term Effects:

Whole Body Effects:

- | | |
|-----------------|--|
| 15 to 20 Rem | - <u>NO</u> symptoms, blood test may show some slight changes. |
| 50 to 200 Rem | - Some nausea, vomiting, and slight decrease in blood count, <u>NO</u> deaths expected. |
| 200 to 450 Rem | - Most have nausea, vomiting, and feel flu symptoms. Most have hair loss, infection likely, 10-50% deaths without medical attention. |
| 450 to 600 Rem | - Flu, bleeding from mouth and throat, infections likely, 50-90% deaths without medical attention. |
| 600 to 1000 Rem | - Symptoms worse than above, 90-100% deaths without medical attention. |

Radiation Injury to the Skin:

- | | |
|--------------------|--|
| Less than 1000 Rem | - First degree thermal burn (similar to sunburn) |
| To 5000 Rem | - Blisters form and break open
- Similar to scalding or chemical burn |
| Over 5000 Rem | - Ulceration and major skin damage |

Potential Long Term Effects: Based on information from the National Research Council (BEIR V).

- | | |
|---------------------|---|
| Cancer Probability: | - The normal chance of contracting fatal cancer for a group of people with <u>NO</u> radiation exposure in the United States is 20%. If this group of people were exposed to 100 Rem, the chance of any person contracting fatal cancer would increase to 28%. |
| Genetic Effects: | - A 100 Rem exposure to radiation is estimated to increase the chance of a genetic effect from 0.25% for the average person with <u>NO</u> radiation exposure to 0.5%. |
| Fertility Effects: | - An exposure to the gonads of 250 Rem may cause reduced fertility, and an exposure of 600 Rem may cause permanent sterility. |
| Cataracts: | - (Cloudiness or darkening in the lens of the eyes.) 200 Rem to the eyes may cause cataracts (ICRP 41). |



Kewaunee Power Station

Emergency Plan Implementing Procedure

Title: Site Relocation Facility Emergency Response

Procedure Number
EP-KW-EIP-SRF-001

Revision Number
0

**Effective Date and
Approvals On File**

Revision Summary:

This revision 0 procedure is formatted in FrameMaker to standards set forth in AD-AA-101-1002, Writers Guide for Procedures and Guidance and Reference Documents.

- New EP procedure for Site Relocation Facility setup and staffing.

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B Site Relocation Facility (SRF) Briefing Protocol	9

1.0 PURPOSE

This procedure provides instruction for the setup and staffing of the Site Relocation Facility (SRF).

2.0 SCOPE

- 2.1 This procedure shall be implemented if the site is experiencing a Hostile Action, or a threat thereof, and the Shift Manager/Emergency Director (SM/ED) and Security agree that staging for augmentation of the Emergency Response Organization (ERO) is necessary.
- 2.2 The position of Site Relocation Facility Director (SRFD) should be filled by a qualified Emergency Director.
- 2.3 The SRF is for site support only. Classification, Notification, and Dose Assessment remain in the Control Room and does **NOT** transfer to the SRF.
- 2.4 **IF** a qualified Emergency Director (ED) does **NOT** report to the SRF, **THEN** a qualified Technical Director (TD) shall assume the SRFD position.
- 2.5 Minimum staffing should include an ED, TD, and a Radiation Protection Director (RPD).

3.0 INSTRUCTIONS

3.1 Site Relocation Facility (SRF) Setup and Staffing

- 3.1.1 **WHEN** a qualified ED reports to the SRF, **THEN ASSUME** the Site Relocation Facility Director (SRFD) position.
- a. **ANNOUNCE** your name.
 - b. **ANNOUNCE** that you have assumed the SRFD position.

NOTE: Only Kewaunee Power Station (KPS), Fire, and Law Enforcement personnel are authorized in the SRF. Other personnel need authorization from the SRF Director.

- 3.1.2 **ASSIGN** an SRF staff member to provide access control at the entrance of the SRF.
- 3.1.3 **SET UP** the SRF per ATTACHMENT A, Site Relocation Facility (SRF) Setup Checklist.
- 3.1.4 **PERFORM** or **DELEGATE** assessment of personnel reporting alcohol consumption for Fitness For Duty per the Fitness For Duty Desktop Guide.
- 3.1.5 **MONITOR** the staffing level of the SRF positions as follows.
- **REASSIGN** personnel as necessary to fill vacant positions.
 - **CALL** in additional personnel as necessary.
 - **RETAIN** an additional SRF Director as necessary.
- 3.1.6 **WHEN** minimum staffing and setup is complete, **THEN DECLARE** the SRF activated.
- 3.1.7 **CONTACT** the Control Room and **OBTAIN** a briefing on emergency events, mitigating actions, and current plant status.
- 3.1.8 **OBTAIN** any requests from the Control Room on staging of additional personnel.

- 3.1.9 **REQUEST** the TD to perform the following:
 - a. **OBTAIN** information from Local Law Enforcement Agency (LLEA) on the location of the Incident Command Post (ICP).
 - b. **REQUEST** LLEA to provide security at the SRF.
- 3.1.10 **IF** requested and available, **THEN DIRECT** a member of Operations, Security, and Radiation Protection to the ICP as KPS liaisons.
- 3.1.11 **OBTAIN** an Onsite Regional Report from Security.
- 3.1.12 **ASSIGN** the RPD to maintain accountability of personnel on site as additional personnel are dispatched or relief crews report.
- 3.1.13 **IF** Work Orders or Emergency Modifications are needed, **THEN REFER** to EP-KW-EIP-004, ERO Support During an Emergency.
- 3.1.14 **ENSURE** that provisions for subsequent shift staffing, meals, and lodging are being made as necessary.
- 3.1.15 **ENSURE** TD makes arrangements with LLEA and onsite Security for provisions being delivered.
- 3.1.16 **PROVIDE** periodic briefings in the SRF.
- 3.1.17 **IF** the plant emergency has been terminated, **THEN PERFORM** recovery actions as follows:
 - a. **DIRECT** the SRF staff to restore the SRF to pre-event condition.
 - b. **COLLECT** all documentation developed during the event.
 - c. **DELIVER** the documentation to Operations.
 - d. **SUBMIT** a Condition Report (CR) on any identified deficiency.
 - e. **PARTICIPATE** in an event debriefing/critique.

4.0 RECORDS

The following QA records and non-QA records are generated by or created according to this document and are listed on the KPS Records Retention Schedule. These records shall be maintained according to the KPS Records Management Program.

4.1 QA Records

- None

4.2 Non-QA Records

- None

5.0 ADMINISTRATIVE INFORMATION

5.1 Commitments

None

5.2 References

5.2.1 Procedures

- EP-KW-EIP-004, ERO Support During an Emergency
- SIP-20.02-2, KPS Protected Area Visitor Log
- SIP-40-06, Security Threat Assessment
- SY-AA-108, Investigating Potential Tampering, Vandalism, or Malicious Mischief

5.2.2 Other

- CA023860, CA to EP to be specific on the actions the Contractors at the New Training Facility would perform.
- CA139589, Evaluate EPIP-SEC-03 (& other relevant procedures)

ATTACHMENT A
Site Relocation Facility (SRF) Setup Checklist
(Page 1 of 2)

- 1.0 **SET UP** the SRF as follows.
- 1.1 In the main room, **SET UP** two tables at the white board in an "L" shape.
- 1.2 **SET UP** chairs around the tables.
- 1.3 **UNLOCK** the door to the Carlton Town Boards meeting room (first door on the right).
- 1.4 **UNLOCK** the black four-drawer file cabinet.
- 1.5 **PLACE** the procedures from the top drawer of the file cabinet on the ERO tables located in the main room.

NOTE: The third drawer down has phones, phone cables, and administrative supplies.

- 1.6 **PLACE** phones on ERO Table in the main room.
- 1.7 **RETRIEVE** the four line telephone cables (taped together).

NOTE: Facing the window in the Carlton Town Board meeting room, the telephone four-line jack is located in the left corner.

NOTE: The end of the cable that has the splitters goes to the ERO table.

- 1.8 **PLUG** the telephone cables in as follows:
 - Black telephone wire (2415) - Upper Left
 - White telephone wire with red tape (2364) - Lower Left
 - White telephone wire (2482) - Upper Right
 - Gray telephone wire (2452) - Lower Right
- 1.9 **RUN** the four line telephone cables to the table.

ATTACHMENT A
Site Relocation Facility (SRF) Setup Checklist
(Page 2 of 2)

1.10 From right to left, **PLUG** phones up to the four line telephone cable as follows.

1.10.1 Grey telephone wire - Technical Director (2452)

1.10.2 White telephone wire with red tape - ED/SRFD (2364)

1.10.3 White telephone wire - Radiation Protection Director (2482)

1.10.4 Black telephone wire - Spare (2415)

1.11 **TURN ON** copier labeled, "Property of Kewaunee Nuclear Plant."

1.12 **SET UP** other chairs and tables in the conference room as needed.

ATTACHMENT B
Site Relocation Facility (SRF) Briefing Protocol
(Page 1 of 2)

1.0 QUIET, PROFESSIONAL, FOCUSED

- **NO** jokes, side conversations, etc.
- Keep facility focused "on track" - Pre-announced and approximately every 30 minutes
- Keep it short
- Handle details after briefing

2.0 ONLY INTERRUPTED BY URGENT CALLS

- Classification changes
- Start of significant release
- Personnel injuries
- Major changes in plant status

3.0 EMERGENCY DIRECTOR/SITE RELOCATION FACILITY DIRECTOR FACILITATES BRIEF

- Announce start of brief
- Provide key information
- Solicit information from staff

4.0 TECHNICAL DIRECTOR PROVIDES BRIEF INFORMATION FOR:

- SRF Activation and Operational Status
- Current Emergency Classification
- Emergency modifications to equipment or systems
- Work Requests
- Engineering Support Activities
- Staffing or Provision Requests

ATTACHMENT B
Site Relocation Facility (SRF) Briefing Protocol
(Page 2 of 2)

5.0 RADIOLOGICAL PROTECTION DIRECTOR PROVIDES BRIEF INFORMATION FOR:

- Status of radiological effluent release
- Off-Site Dose Assessment Evaluations
- Emergency Radiation controls
- Conditions which may warrant evacuation of site personnel
- Habitability status including areas of the site that may **NOT** allow eating or drinking

6.0 SUMMARIZATION BY EMERGENCY DIRECTOR:

- Overall priorities
- Next briefing time
- Command and Control Issues

7.0 END OF BRIEF