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James D. Jones
Manager Emergency Planning

JAFP-15-0152
December 18, 2015

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

SUBJECT: Transmittal of Emergency Plan Updates
James A. FitzPatrick Nuclear Power Plant
Docket No.50-333
License No. DPR-059

Dear Sir or Madam:

The documents enclosed with this letter are changes to the James A. FitzPatrick Nuclear Power Plant's (JAF) Emergency Plan made pursuant to 10 CFR 50.54(q). This transmittal fulfills the requirements of 10 CFR 50.54(q), 10 CFR 50 Appendix E Section V, 10 CFR 70.32(i), and 10 CFR 72.44(f) to inform the commission of changes that have been made which do not decrease the effectiveness of the Emergency Plan.

The following documents (including change documentation and screening) are attached:

- EAP-4.1, Revision 24
- EAP-4B, Revision 1
- SAP-24, Revision 0
- EAP-16.2, Revision 16

This letter contains no new regulatory commitments.

If you should have any questions, please contact Mr. James D. Jones at (315) 349-6030.

Sincerely,

James D. Jones
Manager Emergency Planning

JDJ:cfv

Enclosure(s):

Including change documentation and screening:

- EAP-4.1, Revision 24
- EAP-4B, Revision 1
- SAP-24, Revision 0
- EAP-16.2, Revision 16

A X45
NRR

cc w/o screening:

USNRC (I&E) Regional Administrator, Region I – Controlled – 2 Copies
NRC Resident Inspector – Controlled – 1 Copy
NRC Director NMSS – Uncontrolled – 1 Copy
NRC Director Division of Spent Fuel Storage and Transportation – Uncontrolled - 1 Copy
NRC Director, Division of Security Policy – Uncontrolled – 1 Copy
NYSEMO – Controlled – 1 Copy
OCEMO – Controlled – 1 Copy

JAFP-15-0152

Enclosures

Including change documentation and screening:

- EAP-4.1, Revision 24
- EAP-4B, Revision 1
- SAP-24, Revision 0
- EAP-16.2, Revision 16

ATTACHMENT 9.4 **NRC SUBMITTAL REVIEW**

Sheet 1 of 2 *{Typical}*

Letter #: JAFP-15-0152 **Response Due:** 12/30/15

Subject: Transmittal of Emergency Plan Updates **Date Issued for Review:** 12/17/15

Correspondence Preparer / Phone #: Cathee Vickery 315-349-6777

Section I **Letter Concurrence and Agreement to Perform Actions**

POSITION / NAME	Action (concurrence, certification, etc.)	Signature (sign, interoffice memo, e-mail, or telecom)
Emergency Planning Dept.	Preparer/Reviewer	Cathee Vickery Cathee Vickery
Licensing Department	Concurrence	Mark Hawes /
Emergency Preparedness Manager	Approver	James Jones /

COMMENTS

- EAP-4.1, Rev. 24, EAP-4B, Rev.1, SAP-24, Rev. 0, EAP-16.2, Rev. 16

Section II **Correspondence Screening**

Does this letter contain commitments? **If "yes," identify the commitments with due dates in the submittal and in Section III. When fleet letters contain commitments, a PCRS LO (e.g., LO-LAR, LO-WT) should be initiated with a CA assigned to each applicable site to enter the commitments into the site's commitment management system.**	Yes No	☐ ☒
Does this letter contain any information or analyses of new safety issues performed at NRC request or to satisfy a regulatory requirement? **If "yes," reflect requirement to update the UFSAR in Section III.**	Yes No	☐ ☒
Does this letter require any document changes (e.g., procedures, DBDs, FSAR, TS Bases, etc.), if approved? **If "yes," indicate in Section III an action for the responsible department to determine the affected documents. (The Correspondence Preparer may indicate the specific documents requiring revision, if known or may initiate an action for review.)**	Yes No	☐ ☒
Does this letter contain information certified accurate? **If "yes," identify the information and document certification in an attachment. (Attachment 9.5 must be used.)**	Yes No	☐ ☒

Section III Actions and Commitments

Required Actions *Note: Actions needed upon approval should be captured in the appropriate action tracking system*	**Due Date**	**Responsible Dept.**
N/A		
Commitments *Note: When fleet letters contain commitments, a PCRS LO should be initiated with a CA assigned to each applicable site to enter the commitments into the site's commitment management system.*	**Due Date**	**Responsible Dept.**
N/A		

Section IV Final Document Signoff for Submittal

Correspondence Preparer	Cathee Vickery / Cathee Vickery
Final Submittal Review *(optional)*	N/A
Responsible Department Head	James Jones / JGJ

ENTERGY NUCLEAR NORTHEAST
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCUMENT TRANSMITTAL AND RECEIPT ACKNOWLEDGEMENT FORM

TO: **EP Admin**
DEPT.: Emergency Planning
LOCATION: **USNRC Document Control Center, Washington DC/RockvilleMD AP-03.04**

SPECIAL NOTES: JAFP Memo & EN-LI-106 form required. Include 10CFR50.54(q) Screen ~~and Evaluation~~ (EN-EP-305 Attach 9.1 & 9.2)

CONTROL MANUAL NUMBER **34**

FROM: PATTI PONZI
DEPT.: ADMINISTRATIVE SERVICES
LOCATION: JAF
DATE: December 15, 2015

APPLICABLE MANUAL: EAP PROCEDURE

DOCUMENT NUMBER	DOCUMENT TITLE	REV	EFFECTIVE DATE
---	VOLUME 2 UPDATE LIST	--	12/18/2015
EAP-4.1	RELEASE RATE DETERMINATION	24	12/18/2015

INSTRUCTIONS:

1. Insert the attached revised documents, and withdraw any noted WITHDRAWN documents from your controlled copy.
2. **DISCARD ALL SUPERCEDED DOCUMENTS, as applicable. DISCARD THIS TRANSMITTAL.**

NOTE
Failure to incorporate these documents into your controlled manual will result in cancellation of the subject controlled documents.

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2
UPDATE LIST

Date of Issue: 12/18/2015

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
N/A	TABLE OF CONTENTS	REV. 22	05/15	Informational
IAP-1	EMERGENCY PLAN IMPLEMENTATION CHECKLIST	REV. 45	02/15	Informational
IAP-2	CLASSIFICATION OF EMERGENCY CONDITIONS	REV. 34 FLOWCHART REV. 10	12/14	Informational
EAP-1.1	OFFSITE NOTIFICATIONS	REV. 72	02/15	Informational
EAP-2	PERSONNEL INJURY	REV. 33	05/15	Informational
EAP-3	FIRE	REV. 26	01/13	Informational
EAP-4	WITHDRAWN (12/14)			
EAP-4A	ONSHIFT DOSE ASSESSMENT	REV. 0	12/14	Informational
EAP-4B	DETAILED DOSE ASSESSMENT	REV. 0	12/14	Informational
EAP-4C	PROTECTIVE ACTION RECOMMENDATIONS	REV. 0	12/14	Informational
EAP-4.1	RELEASE RATE DETERMINATION	REV. 24	02/15	Informational
EAP-5.1	DELETED (02/94)			
EAP-5.2	DELETED (04/91)			
EAP-5.3	ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING	REV. 21	08/15	Informational
EAP-6	IN-PLANT EMERGENCY SURVEY/ENTRY	REV. 19	02/14	Informational
EAP-7.1	DELETED (02/94)			
EAP-7.2	DELETED (02/94)			
EAP-8	PERSONNEL ACCOUNTABILITY	REV. 74	02/15	Informational
EAP-9	SEARCH AND RESCUE OPERATIONS	REV. 13	02/15	Informational
EAP-10	PROTECTED AREA EVACUATION	REV. 22	02/15	Informational
EAP-11	SITE EVACUATION	REV. 23	02/15	Informational
EAP-12	DOSE ESTIMATED FROM AN ACCIDENTAL RELEASE OF RADIOACTIVE MATERIAL TO LAKE ONTARIO	REV. 13	02/14	Informational
EAP-13	DAMAGE CONTROL	REV. 22	07/15	Informational

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2
UPDATE LIST

Date of Issue: 12/18/2015

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
EAP-14.1	WITHDRAWN (02/23/05)			
EAP-14.2	WITHDRAWN (02/23/15)			
EAP-14.5	WITHDRAWN (02/23/15)			
EAP-14.6	HABITABILITY OF THE EMERGENCY FACILITIES	REV. 18	03/14	Informational
EAP-14.7	REMOTE ASSEMBLY AREA ACTIVATION	REV. 3	02/15	Reference
EAP-14.8	ALTERNATE TSC/SC ACTIVATION AND OPERATION	REV. 1	08/15	Reference
EAP-15	EMERGENCY RADIATION EXPOSURE CRITERIA AND CONTROL	REV. 13	07/15	Informational
EAP-16	PUBLIC INFORMATION PROCEDURE	REV. 9	03/14	Informational
EAP-16.2	JOINT INFORMATION CENTER OPERATION	REV. 15	02/15	Informational
EAP-17	EMERGENCY ORGANIZATION STAFFING	REV. 124	09/15	Informational
EAP-18	DELETED (12/93)			
EAP-19	EMERGENCY USE OF POTASSIUM IODINE (KI)	REV. 29	10/13	Informational
EAP-20	POST ACCIDENT SAMPLE, OFFSITE SHIPMENT AND ANALYSIS	REV. 11	04/14	Informational
EAP-21	DELETED (12/85)			
EAP-22	DELETED (02/98)			
EAP-23	EMERGENCY ACCESS CONTROL	REV. 15	08/15	Informational
EAP-24	EOF VEHICLE AND PERSONNEL DECONTAMINATION	REV. 11	12/14	Informational
EAP-25	DELETED (02/94)			

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

RELEASE RATE DETERMINATION
EAP-4.1
REVISION 24

EFFECTIVE DATE: December 18, 2015

INFORMATIONAL USE	QUALITY RELATED
ADMINISTRATIVE	CONTROLLED COPY

Periodic Review Due Date: December 2019

REVISION SUMMARY SHEET

LIMITED REVISION 24

1. Corrected references to other sections in the procedure in section 5.3.1.
2. Remove reference to TSC performing release rate determination activities throughout the procedure - functions are performed by EOF.
3. Remove reference to Dose Assessor Support - position was previously removed.
4. Step 1.6 of attachment 2 is revised to allow either Table 2.1 or the URI output forms to be utilized for data extraction to the required external agency forms. This provides flexibility and reduces the likelihood of transcription errors when transcription is not necessary.
5. Attachment 5 page 1 - added reference for Turbine Building and Reactor Building delta pressure points in EPIC. Added examples of unmonitored release (e.g. Rx Building or Turbine Building delta Pressure positive.
6. Attachment 5 page 4:
   a. Clarified vents in alarm need to be unisolated pathways.
   b. Clarified stack in alarm would be yellow on EPIC display.
   c. Added a note to clarify that a Reactor Building or Turbine Building positive delta pressure indicates an unmonitored release pathway.
7. Attachment 5 page 4 - Added a box that allows the EOF make an assessment of release magnitude when URI model outputs are not yet available - i.e. uses the same process as the Control Room.

TABLE OF CONTENTS

1.0 PURPOSE

1.1 This procedure provides methodologies for estimating release rates in the event of an unintended release of radioactivity to the environment using:

1.1.1 Effluent monitors readings

1.1.2 Containment High Range Monitor readings

1.1.3 Source Term (Unmonitored Releases)

1.2 This procedure provides methodologies for evaluating if there is a release of radioactivity material to the environment as a result of the emergency event.

1.3 This procedure provides methodologies for assessing ODCM release rate limits in the event of an unintended release of radioactivity to the environment.

1.4 This procedure provides methodologies for determining effluent monitor reading thresholds to reach ODCM release rate limits.

2.0 REFERENCES

2.1 Performance References

2.1.1 EAP-4A, Onshift Dose Assessment

2.1.2 EAP-4B, Detailed Dose Assessment

2.1.3 EAP-5.3, Onsite/Offsite Downwind Surveys and Environmental Monitoring

2.2 Developmental References

2.2.1 DVP-01.02, JAF OFFSITE DOSE CALCULATION MANUAL

2.2.2 EAP-1.1, OFFSITE NOTIFICATIONS

2.2.3 EAP-4A, ONSHIFT DOSE ASSESSMENT

2.2.4 EAP-4B, DETAILED DOSE ASSESSMENT

2.2.5 EAP-4C, PROTECTIVE ACTION RECOMMENDATIONS

2.2.6 EAP-5.3, ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING

2.2.7 EAP-42, OBTAINING METEOROLOGICAL DATA

2.2.8 IAP-2, CLASSIFICATION OF EMERGENCY CONDITIONS

2.2.9 JAF FSAR CHAPTER 14 - SAFETY ANALYSIS

2.2.10 NUREG-0654 - Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

2.2.11 Entergy EP Peer Group 2004 "Radiological Release Definition" Position Paper

3.0 INITIATING EVENTS

3.1 An emergency classification has been declared as defined in IAP-2.

3.2 An unmonitored release is suspected or in progress.

4.0 RESPONSIBILITIES

4.1 **The Shift Manager(SM)/Emergency Director (ED):**

4.1.1 **EVALUATE IF** a release is in progress as a result of the classified event.

4.2 **Chemistry Technician**, The on-shift chemistry technician is responsible to perform Release Rate Determination related tasks as assigned by the Shift Manager which include:

4.2.1 Support the Shift Manager in determining if a release due to the event exists.

4.2.2 Determining Release Rates / percent of ODCM limits.

4.2.3 Perform initial Dose Projections.

4.2.4 Determine monitor values that correspond to 100% of ODCM limits when releases due to the event are below ODCM limits.

4.3 **EOF Rad Assessment Coordinator**, is responsible to provide Release Rate Determination related information to the ED as follows:

4.3.1 **Dose Assessor:**

A. Determine if a release due to the event exists.

B. Determine Release Rates/percent of ODCM limits.

C. Perform initial and refined Dose Projections.

D. Determine monitor values that correspond to 100% of ODCM limits when releases due to the event are below ODCM limits.

5.0 PROCEDURE

5.1 Preliminary and On Going Actions

5.1.1 **IF** resources are available at the EOF, prior to the facility becoming operational, **THEN** the Dose Assessment staff should contact the Control Room and offer assistance with release rate determinations.

5.1.2 Determine if there is a release of radioactive material from airborne or liquid pathways to the environment as a result of the Emergency Event using Attachment 5, Release in Progress Flowchart.

A. **IF** it has been determined that there is a release as a result of the emergency event **THEN** perform the following:

1. Inform the Shift Manager / Emergency Director that there is an applicable release.

2. Determine if the release is **GREATER** than the ODCM limit using Attachment 5, Release in Progress Flowchart (Section 3 for Liquid Releases or Section 4 for Gaseous Releases).

B. **IF** the ODCM release rate limit has been exceeded based on Attachment 5, Release in Progress Evaluation Flowchart, **THEN** inform the Shift Manager / Emergency Director that there is a release above Federal Limits and the following actions shall be performed:

1. The Part 1 Form, EAP-1.1 Attachment 1, shall indicate that there is a release above Federal Limits is in progress.

NOTE: When the TSC and/or EOF are operational this form is normally completed in the TSC by the ENS Communicator - the information will need to be provided to that individual.

2. Complete the Release Rate portion of the NRC Event Notification Worksheet, EAP-1.1, Attachment 6 (normally retained in the TSC).

3. **IF** the determination is made from EOF that the ODCM limits have been exceeded **THEN** initiate a Part 2 Form, EAP-1.1, Attachment 2.

C. **IF** the ODCM limits have **NOT** been exceeded, Attachment 4 may be used to calculate effluent monitor readings that correspond to 100% of the ODCM release rate limit.

5.1.3 Determine if releases are being made from multiple release paths at the plant. **IF** more than one release pathway is related to the event at the plant **THEN**:

A. Separate Release Rates **MUST** be calculated for each individual release point.

1. Release Rates calculated for ground level releases can be combined when performing calculations such as percent of ODCM release limits.

2. Elevated and Ground level release rates can **NOT** be combined.

5.1.4 Determine the release rates using the instructions contained in this procedure using Attachment 1, Onshift Release Rate Calculations **OR** Attachment 2, EOF Release Rate Calculations.

5.1.5 **IF** a Part 2 form (EAP-1.1 Attachment 2) is required to be issued from the EOF **THEN** calculate the Iodine/Noble Gas ratio based on the dose projection release rates using Attachment 2, EOF Release Rate Determination.

5.1.6 Perform a new dose projection to determine release rates and dose rates using the following criteria:

A. Approximately every 15 minutes **IF** effluent or containment radiation monitors show continuing increase **OR** decrease in radiation levels.

B. **IF** there is a **CHANGE** in plant conditions or equipment line-ups that would have an effect on the radiological source term or release rates such as initiating the SBGT system, Drywell sprays, release point flow rates, or building ventilation isolations.

C. As requested by the Shift Manager or Radiological Assessment Coordinator (EOF).

5.2 Determining Release Rate

5.2.1 Release rates are determined using the URI Dose Assessment Program. The dose assessment software will calculate the Nobel Gas, Iodine, and Particulate release rate and the resulting offsite Exposure Rates.

5.2.2 Onshift Release Rate Determination

A. Onshift release rate determinations are performed using the URI RAPID Dose Assessment Program (EAP-4A).

B. Release Rates can be determined using the following indications or conditions:

1. Effluent Monitors (high range, Low Range, Teletector)
2. Containment High Range Monitors
3. Source Term for unmonitored release

C. Use Attachment 1 to perform Onshift release rate determinations.

D. The calculated release rates and offsite exposure rate can be used to calculate the percent ODCM limit.

5.2.3 EOF Release Rate Determination

A. Release rate determinations are performed using the URI Detailed Dose Assessment Program (EAP-4B).

B. Release Rates can be determined using the following indications or conditions:

1. Effluent Monitors (high range, Low Range, Teletector)
2. Containment High Range Monitors
3. Source Term for unmonitored release

5.2.4 **USE** Attachment 2 to perform release rate determinations from the EOF.

5.3 Determining the Percent of ODCM release rate limits

5.3.1 **EVALUATE** the percent of the ODCM limit using the following priority:

A. **IF** Onsite field monitoring team(s) are in place and surveying at the site boundary use direct exposure rate measurements by a field survey team. **Goto** step 5.3.2.

B. **IF** Onsite field monitoring team(s) are **NOT** in place and surveying at the site boundary use Dose Projection calculated Exposure Rates. **Goto** step 5.3.3.

5.3.2 **IF** survey measurements at site boundary are available, then calculate % of ODCM as follows:

A. Measured exposure rate at or beyond the site boundary.

(mR/hr) _____ / 0.057 mR/hr x 100% = _____ % ODCM.

B. Measured count rate (frisker) at or beyond the site boundary.

(ccpm) _____ / 217 ccpm x 100% = _____ % ODCM.

5.3.3 Using a current Dose Projection result that represents existing plant conditions and meteorology, calculate the percent of the ODCM limit using Attachment 3.

A. **IF** calculations are required to determine the percent of ODCM limit **USE** the instructions contained in Attachment 3 CALCULATION METHOD FOR DETERMINING PERCENT OF ODCM RELEASE RATE LIMITS.

B. **IF** the ODCM release rate limit has **NOT** been exceeded **AND** the release is via a monitored pathway, Attachment 4 can be used to determine the effluent monitor reading to reach 100% of the ODCM limit for noble gas and iodine.

5.4 **Determining effluent monitor reading thresholds to reach ODCM release rate limits**

5.4.1 Attachment 4 can be used to determine the effluent monitor reading to reach 100% of the ODCM limit for noble gas and iodine/particulate.

6.0 ATTACHMENTS

1. ONSHIFT RELEASE RATE CALCULATIONS
2. EOF RELEASE RATE CALCULATIONS
3. CALCULATION METHOD FOR DETERMINING PERCENT OF ODCM RELEASE RATE LIMITS
4. CALCULATION TO DETERMINE EFFLUENT MONITOR READING TO REACH 100% OF ODCM RELEASE RATE LIMITS
5. RELEASE IN PROGRESS FLOWCHART

ONSHIFT RELEASE RATE CALCULATIONS

1.0 Release Rate Determination

1.1 **PERFORM** a dose projection using EAP-4A, RAPID Dose Assessment using the following inputs based on plant conditions:

A. Source Term

B. Current Meteorology

C. Reactor Status

D. Release pathway

E. Release Point Information (Assessment Method)

1.2 Base on the source term and pathway selected the available assessments methods for the dose projections are displayed under the Release Point Information section of the main screen. The following options are available and listed in the order of priority to be used based on the Source Term:

1.2.1 **IF** Source Term is Reactor Core (Clad Damage yes or no)

A. Effluent Monitors

B. Containment Leakage with Containment Radiation Monitor Available

C. Containment Leakage with Containment Radiation Monitor **NOT** Available

D. Estimated RCS Leakage

1.2.2 **IF** the Source Term is Damaged Spent Fuel Assembly

A. Effluent Monitors

B. Unmonitored Damaged Spent Fuel Assembly

1.3 **IF** all errors are cleared **SELECT** the "Process Assessment" box to process the dose projection.

1.4 Print the Dose Assessment Report by **CLICKING** on the "Printer" icon at the top left of the main screen.

1.5 **PERFORM** the release rate calculations for data requested by the NRC Event Notification Form **USING** Table 1.1

1.5.1 **ENTER** the Dose Projection Date and time on the table.

1.5.2 **ENTER** the Assessment Method on the table (Effluent Monitor, Containment Leakage, RCS Leakage, Spent Fuel Monitored, etc.)

1.5.3 **IF** there is more than one affected release point, sum the release rate for all the affected ground level releases prior to entering the data on the table.

1.5.4 **USING** Table 1.1 calculate the combined iodine and particulate release rate, and the total release rate.

TABLE 1-1 Release Rate Summary

Stack Release Rate

Dose Projection Date:	Time:

Assessment Method(s):

Release category	Release Rate Ci/sec
Noble Gas[1]	
Iodine[1]	
Particulate[1]	
Total*[1]	

* Calculate Total Release Rate
Total = NG + Iodine + Part

[1] Data required for:
- NRC Event Notification Form

Vent(s) and Unmonitored Release Rate

Dose Projection Date:	Time:

Assessment Method(s):

Release category	Release Rate Ci/sec
Noble Gas[1]	
Iodine[1]	
Particulate[1]	
Total*[1]	

Sum all Release Rate for the Vents and/or ground level releases prior to entering the data in the table.

* Calculate Total Release Rate
Total = NG + Iodine + Part

[1] Data required for:
- NRC Event Notification Form

1.6 **RETURN** to the main body of the procedure following use of this Attachment.

1.0 Release Rate Determination

1.1 **PERFORM** a dose projection using EAP-4B, Detailed Dose Assessment using the following inputs based on plant conditions:

A. Source Term

B. Current Meteorology

C. Reactor Status

D. Release pathway

1.2 **IF** the Source Term is Normal Coolant or Reactor Core Accident **SELECT** the projection Assessment Tab (located on the top right of the main screen) using the following priority:

A. "Monitored" (requires an available Effluent Monitor reading and flow rate).

B. "Containment leakage" (requires an available containment radiation monitor reading and containment leak rate).

C. "RCS leakage" (requires percent of core damage value if the source term is Reactor Core Accident and a calculated/estimated RCS leak rate. **IF** a leak rate is not available then the "Unknown" option can be used).

1.3 **IF** the Source Term is Spent Fuel Accident **SELECT** the "Monitored" Assessment Tab (located on the top right of the main screen).

A. **IF** the "Monitored" Assessment Tab is not enabled then **SELECT** the "Un-Monitored Spent Fuel Accident With No Other Method Applicable" located in the Source Term data entry section under "Spent Fuel Accident".

1.4 **IF** all errors are cleared **SELECT** the "10 Miles" box on the "Process Assessment to:" box.

1.5 Print the Dose Assessment Report by **CLICKING** on the "Printer" icon at the top of the main screen then **SELECT** the "Print Dose Assessment Report" from the drop down menu.

1.6 **PERFORM** the release rate calculations for data requested by the Part 1 Form, the NRC Event Notification Form and the Part 2 Form. Table 2.1 may be used to compile this information or the information may be extracted directly from the URI output forms.

A. Enter the Dose Projection Date and time on the table.

B. Enter the Assessment Method on the table (Monitored, Containment Leakage, RCS Leakage, Spent Fuel Monitored, etc.)

C. Sum the release rate for all the ground level releases prior to entering the data on the table.

D. Calculate the Iodine / Noble Gas ratio, the combined iodine and particulate release rate, and the total release rate.

TABLE 2-1 Release Rate Summary		
Stack Release Rate		
Dose Projection Date:	Time:	
Assessment Method(s):		
Release category	Release Rate Ci/sec	Iodine/NG Ratio[1]**
Noble Gas[1]		* Calculate Total Release Rate: Total = NG + Iodine + Part ** Calculate Iodine to NG Ratio I/NG Ratio=I_{RR} / NG_{RR} *** Calculate Iodine and Particulate Total [1] Data required for: • NRC Event Notification Form • Part 2 Form
Iodine[1]		
Particulate[1]		
Total*[1]		
Vent(s) Release Rate		
Dose Projection Date:	Time:	
Assessment Method(s):		
Release Category	Release Rate Ci/sec	Iodine/NG Ratio**
Noble Gas[1]		* Calculate Total Release Rate Total = NG + Iodine + Part ** Calculate Iodine to NG Ratio [1] Data required for: • NRC Event Notification Form • Part 2 Form Sum all Release Rate for the Vents and/or ground level releases prior to entering the data in the table.
Iodine[1]		
Particulate[1]		
Total*[1]		

1.7 **RETURN** to the main body of the procedure following use of this Attachment.

CALCULATION METHOD FOR DETERMINING PERCENT OF ODCM RELEASE RATE LIMIT

1.0 This Attachment can be used for calculating the percent of the ODCM release rate limit.

1.1 For initial airborne release calculations from the control room **Goto** Step 2.0.

1.2 For airborne release calculations from the EOF **Goto** Step 3.0.

1.3 For liquid release calculations **Goto** Step 4.0.

2.0 Percent of ODCM Limit for Noble Gas Release Rate from the Control Room:

2.1 For valid monitored effluent release points (in alarm) perform the following:

A. Enter the monitor reading (CPS or CPM) in the appropriate "Monitor Reading" section of the table

1. Enter only one monitor reading for the Stack which has two flow options dependent on whether Stand-By-Gas Treatment is in service.

B. Multiply the respective monitor reading by the corresponding conversion factor to calculate % ODCM limit.

C. Sum the % ODCM limit values.

D. **IF** either an individual path or the sum of multiple paths exceeds 100%, **THEN** notify the Shift Manager / Emergency Director that a release greater than ODCM limits is in progress and the following **SHALL** occur:

1. The Part 1 Form, EAP-1.1 Attachment 1, **SHALL** indicate that there is a release above Federal Limits is in progress.
2. Complete the Release Rate portion of the NRC Event Notification Worksheet, EAP-1.1 Attachment 6 (normally retained in the TSC).
3. **IF** the determination is made from the EOF, **THEN INITIATE** a Part 2 Form, EAP-1.1, Attachment 2.

TABLE 3.1- Percent of ODCM Limit for Noble Gas Release Rate

Date:	Time:				
Release Point	**Monitor Reading**	**X**	**Conversion Factor**	**=**	**% ODCM**
Stack normal flow (cps) Use only one stack value		**X**	**2.00E-04**	=	
Stack with 1 SBGT (cps) Use only one stack value		**X**	**4.00E-04**	=	
Release Point	**Monitor Reading**	**X**	**Conversion Factor**	**=**	**% ODCM**
Refuel Floor Vent (cpm)		**X**	**5.73E-04**	=	
Reactor Bldg Vent (cpm)		**X**	**5.16E-04**	=	
Turbine BLdg Vent (cpm)		**X**	**8.88E-04**	=	
Rad Waste Bldg Vent (cpm)		**X**	**2.72E-04**	=	
			Total Vent % ODCM	=	
Performed By:			Total Stack + Vent % ODCM		

2.2 **RETURN** to the main body of the procedure following use of this Attachment.

3.0 Percent of ODCM Limit for Noble Gas Release Rate from the EOF:

3.1 USING the exposure rate results from a current dose projection for **EACH** event related release point calculate the percent of the ODCM limit. Expose rate are found on the dose assessment summary report.

3.2 ENTER the calculated exposure rate in mR/hr on Table 3-2 as applicable, limit data entry out to a reasonable distance based on the magnitude of the exposure rates calculated.

3.3 TOTAL the results for the Stack, All Vents, and any unmonitored releases.

3.4 DIVIDE the total exposure rate by 0.00057 (0.057/100 to convert to %) to calculate the percent of ODCM Limit.

3.5 The total percent of the ODCM limit calculation is used to determine the Release of Radioactive material status for the Part 1 form and **IF** a Part 2 Form is required.

TABLE 3.2- Percent ODCM Limit Calculation

Exposure Rate at Distance (mR/hr)					
Release Point	**SB**	**2 Mile**	**3 Mile**	**4 Mile**	**5 Mile**
Main Stack					
Refuel Floor Vent					
Reactor Bldg Vent					
Turbine Bldg Vent					
RW Bldg Vent					
Unmonitored Pathway					
Total Dose Rate all Release Points					
Divide Total dose by 0.00057 for % of ODCM limit	**0.00057**	**0.00057**	**0.00057**	**0.00057**	**0.00057**
% ODCM limit					

CALCULATION METHOD FOR DETERMINING PERCENT OF ODCM RELEASE RATE LIMIT

4.0 Percent of ODCM Limit Based on Liquid Release Rate Calculations

4.1 Calculate the gross Liquid Release excluding Tritium using the following equation:

% ODCM. = FL x CL (μCi/ml) x 2120

% ODCM. = [FL _____] gal/m x [CL _____] μCi/ml x [2120]

% ODCM= _____

Where:
RR = release rate (Ci/sec)
FL = Flow Rate (gal/m)
CL = Concentration of liquid effluent (μCi/ml)

4.2 Assumptions for Liquid Release Calculations

A. For Gross Liquid Release excluding Tritium:

% TS = FL (gal/m) x CL (μCi/ml) x 2120
Where FL = flow rate in gallons per minute
CL = concentration of liquid effluent in μCi/ml
2120 = unit and dose conversion factor

ATTACHMENT 4 Page 1 of 2

CALCULATION TO DETERMINE EFFLUENT MONITOR READING TO REACH 100% OF ODCM RELEASE RATE LIMITS

1.0 **USING** the release rate results from a current dose projection for **EACH** event related **MONITORED** release point calculate the effluent monitor reading threshold to reach 100% ODCM release rate limit for Noble Gas and Iodine and Particulates. Dose projection results are summarized on Attachment 1, Onshift Release Rate Calculations **OR** Attachment 2, EOF/TCS Release Rate Calculations.

NOTE:
The monitor reading calculation is only applicable to the Stack and Vent Low range effluent monitors.

1.1 **ENTER** the effluent monitor reading in the requested units in Column 1 Table 4-1.

1.2 **ENTER** the Noble Gas **OR** the combined Iodine and Particulate release rate in Ci/sec in Column 2 Table 4-1

1.3 **PERFORM** the calculation using the Calculation instructions.

TABLE 4.1 – CALCULATION INSTRUCTIONS	
1.	**ENTER** the NG **OR** I&P release as appropriate rate in Column **2.**
2.	**ENTER** the Effluent monitor reading in Column **4.**
3.	**DIVIDE** Column **1** by Column **2**, **ENTER** the results in Column **3.**
4.	**Multiply** Column **3** by Column **4.**
5.	**ENTER** the results in Column **5** = Monitor reading at 100% of ODCM limit. RR = Release Rate

CALCULATION TO DETERMINE EFFLUENT MONITOR READING TO REACH 100% OF ODCM RELEASE RATE LIMITS

TABLE 4.1- Effluent Monitor Reading To Reach 100% ODCM Limit

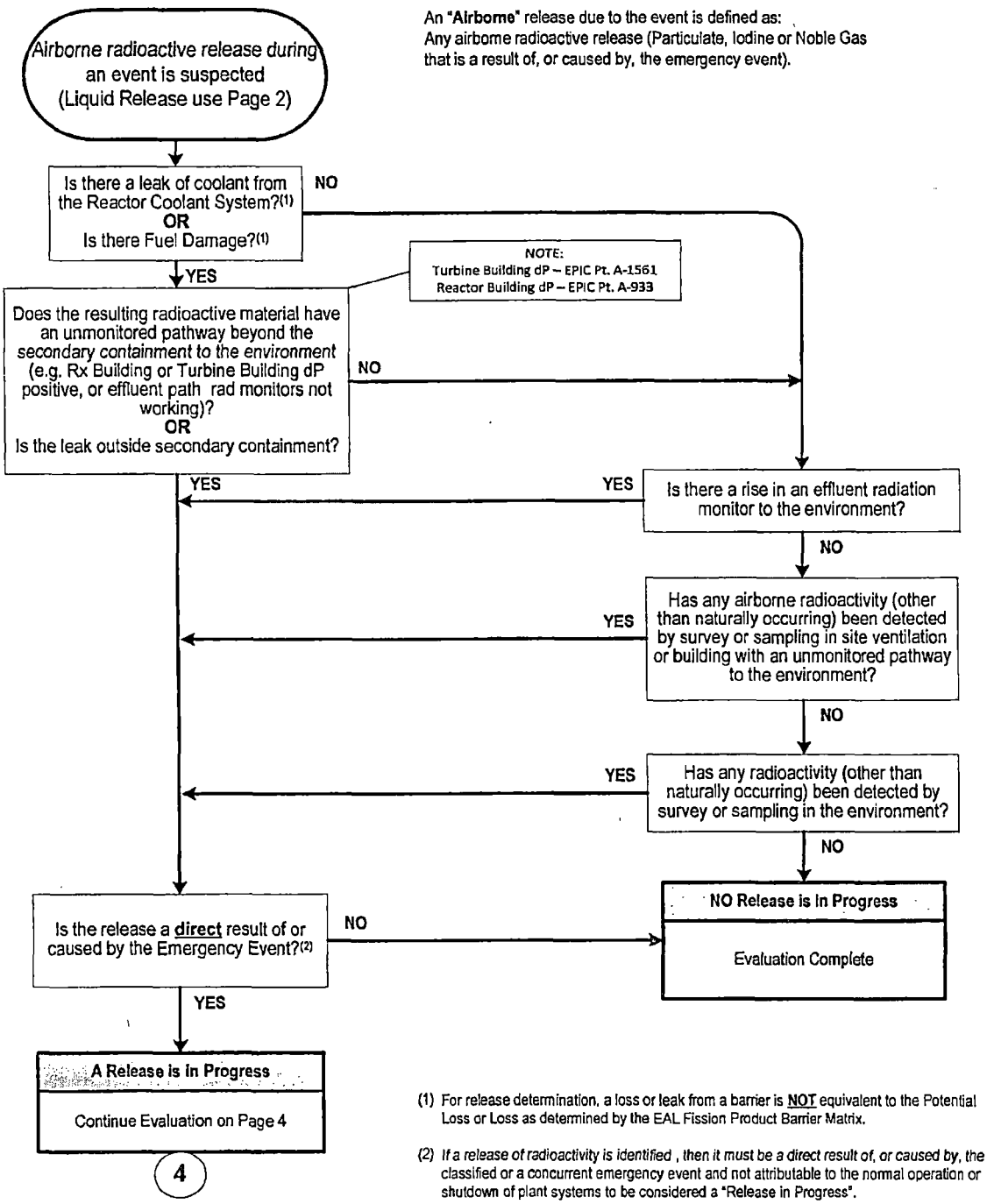
RELEASE POINT	100% ODCM RR (Ci/Sec) (Col 1)		NG Release Rate (Ci/Sec) (Col 2)		Ratio of ODCM RR to Current RR (Col 3)		Effluent Monitor Reading (Col 4)	Monitor reading at 100% ODCM (Col 5)
Main Stack (cps)	0.3	÷		=		x		=
Refuel Floor Vent (cpm)	0.0752	÷		=		x		=
Reactor Bldg Vent (cpm)	0.0752	÷		=		x		=
Turbine Bldg Vent (cpm)	0.0752	÷		=		x		=
Rad Waste Bldg Vent (cpm)	0.0752	÷		=		x		=
RELEASE POINT	**100% ODCM RR (Ci/Sec) (Col 1)**		**I&P Release Rate (Ci/Sec) (Col 2)**		**Ratio of ODCM RR to Current RR (Col 3)**		**Effluent Monitor Reading (Col 4)**	**Monitor reading at 100% ODCM (Col 5)**
Main Stack (cps)	2.47	÷		=		x		=
Refuel Floor Vent (cpm)	2.47	÷		=		x		=
Reactor Bldg Vent (cpm)	2.47	÷		=		x		=
Turbine Bldg Vent (cpm)	2.47	÷		=		x		=
Rad Waste Bldg Vent (cpm)	2.47	÷		=		x		=

Table Notes:
100% Noble Gas Stack release rate equals 0.3 Ci/sec*
100% Noble Gas Building Vent release rate equals 0.0752 Ci/sec*
100% IODINE release rate from vent or stack equals 0.0247 Ci/sec**
For building vents units are Counts per Minute (CPM)
For the stack units are Counts per Seconds (CPS)
RR = Release Rate
*From ODCM Revision 12
**From EAP-4.1, Revision 21

1.4 **RETURN** to the main body of the procedure following use of this Attachment.

ATTACHMENT 5 Page 1 of 4

RELEASE IN PROGRESS FLOWCHART

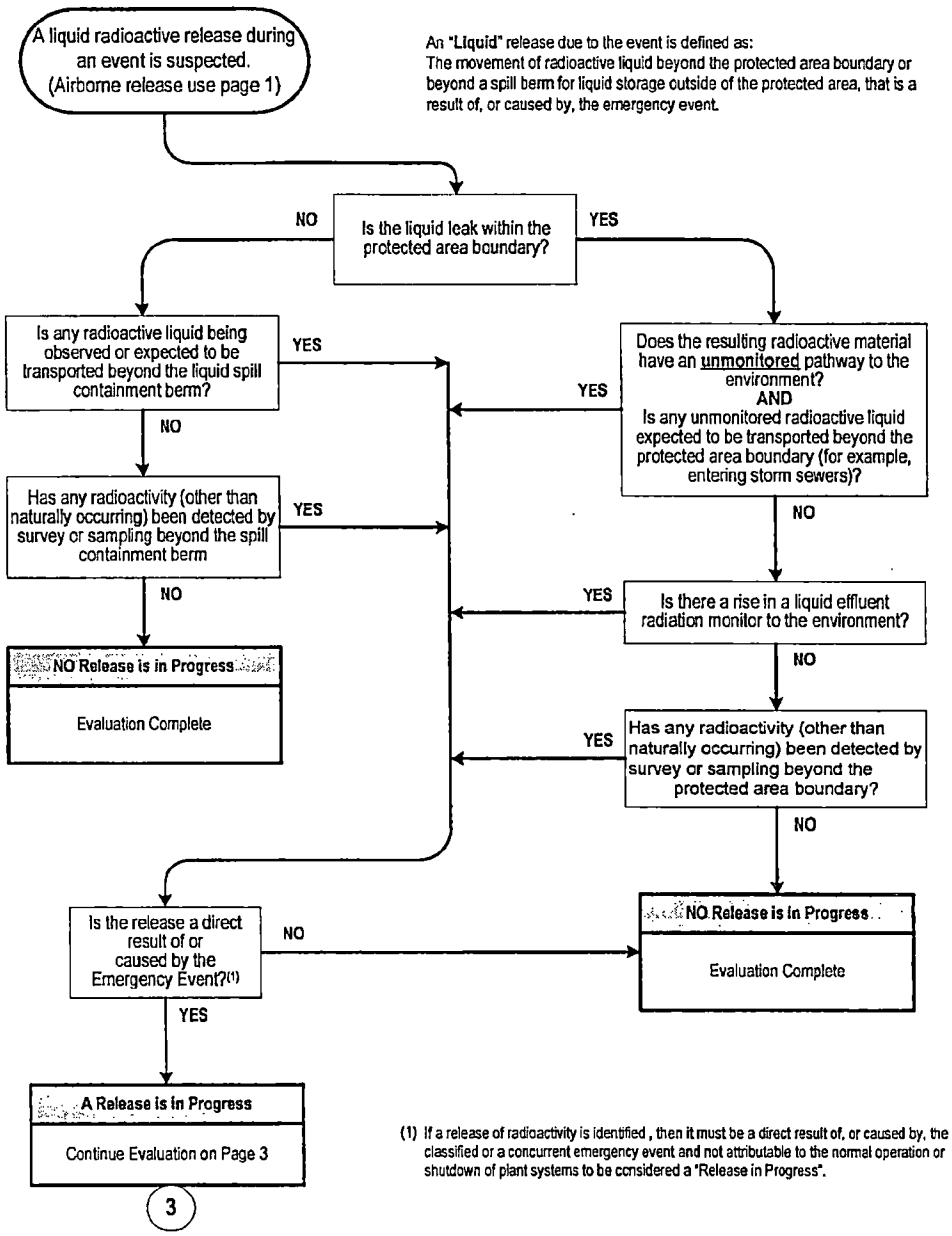


(1) For release determination, a loss or leak from a barrier is NOT equivalent to the Potential Loss or Loss as determined by the EAL Fission Product Barrier Matrix.

(2) *If a release of radioactivity is identified , then it must be a direct result of, or caused by,* the classified or a concurrent emergency event and not attributable to the normal operation or shutdown of plant systems to be considered a "Release in Progress".

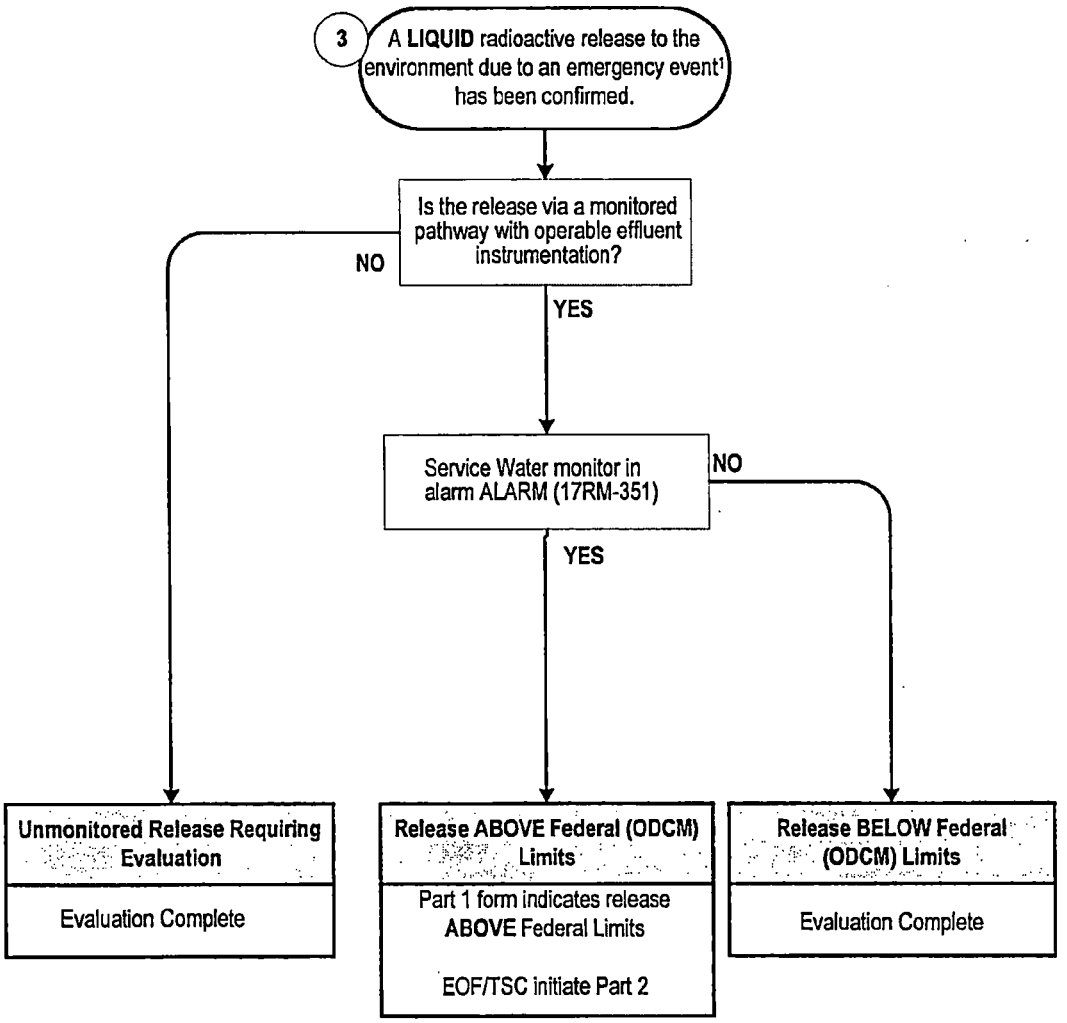
ATTACHMENT 5

RELEASE IN PROGRESS FLOWCHART



ATTACHMENT 5 Page 3 of 4

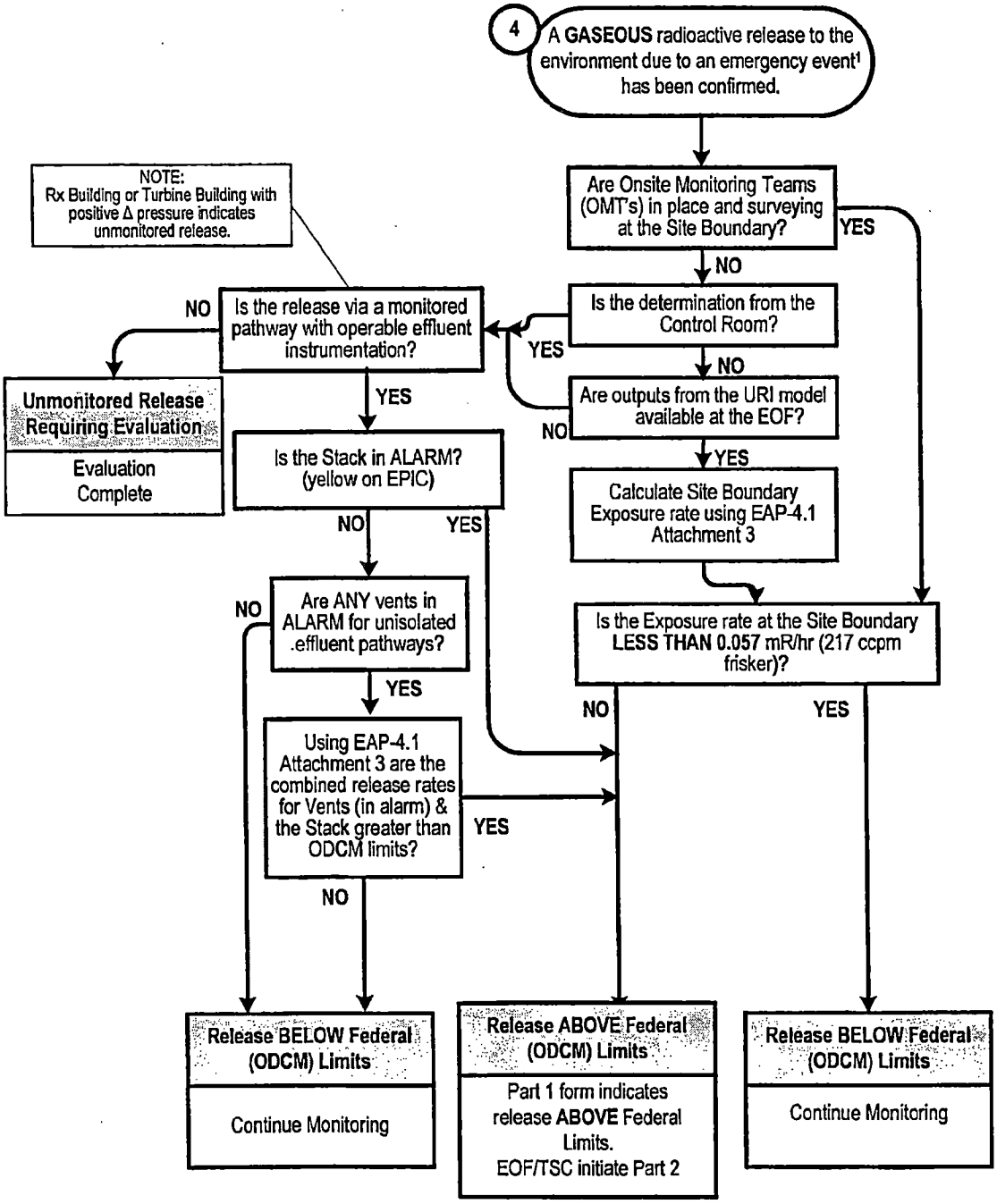
RELEASE IN PROGRESS FLOWCHART



(1) If a release of radioactivity is identified , then it must be a direct result of, or caused by, the classified or a concurrent emergency event and not attributable to the normal operation or shutdown of plant systems to be considered a "Release in Progress".

ATTACHMENT 5 Page 4 of 4

RELEASE IN PROGRESS FLOWCHART



(1) If a release of radioactivity is identified, then it must be a direct result of, or caused by, the classified or a concurrent emergency event and not attributable to the normal operation or shutdown of plant systems to be considered a "Release in Progress".

Procedure/Document Number: EAP-4.1	Revision: 24
Equipment/Facility/Other: N/A	
Title: Release Rate Determination	

Part I. Description of Activity Being Reviewed (event or action, or series of actions that may result in a change to the emergency plan or affect the implementation of the emergency plan):

1. Corrected references to other sections in the procedure in section 5.3.1.
2. Remove reference to TSC performing release rate determination activities throughout the procedure - functions are performed by EOF.
3. Remove reference to Dose Assessor Support - position was previously removed when transition to the Standard ERO occurred.
4. Step 1.6 of attachment 2 is revised to allow either Table 2.1 or the URI output forms to be utilized for data extraction to the required external agency forms. This provides flexibility and reduces the likelihood of transcription errors when transcription is not necessary.
5. Attachment 5 page 1 - added reference for Turbine Building and Reactor Building delta pressure points in EPIC and added examples of unmonitored release (e.g. Rx Building or Turbine Building delta Pressure positive).
6. Attachment 5 page 4:
   a. Clarified vents in alarm need to be un-isolated pathways.
   b. Clarified stack in alarm would be yellow on EPIC display.
   c. Added a note to clarify that a Reactor Building or Turbine Building positive delta pressure indicates an unmonitored release pathway.
7. Attachment 5 page 4 - Added a box that allows the EOF to make an assessment of release magnitude when URI model outputs are not yet available - i.e. uses the same process as the Control Room.

Part II. Activity Previously Reviewed? Is this activity fully bounded by an NRC approved 10 CFR 50.90 submittal or Alert and Notification System Design Report? If YES, identify bounding source document number/approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below: **Justification:** ☐ Bounding document attached (optional)	☐ YES 50.54(q)(3) Evaluation is NOT required. Enter justification below and complete Part VI.	☒ NO Continue to next part

Part III. Applicability of Other Regulatory Change Control Processes

Check if any other regulatory change processes control the proposed activity.(Refer to EN-LI-100)

NOTE: For example, when a design change is the proposed activity, consequential actions may include changes to other documents which have a different change control process and are **NOT** to be included in this 50.54(q)(3) Screening.

APPLICABILITY CONCLUSION

☒ If there are no controlling change processes, continue the 50.54(q)(3) Screening.
☐ One or more controlling change processes are selected, however, some portion of the activity involves the emergency plan or affects the implementation of the emergency plan; continue the 50.54(q)(3) Screening for that portion of the activity. Identify the applicable controlling change processes below.
☐ One or more controlling change processes are selected and fully bounds all aspects of the activity. 50.54(q)(3) Evaluation is NOT required. Identify controlling change processes below and complete Part VI.

CONTROLLING CHANGE PROCESSES

The process is controlled by 50.54q.

Part IV. Editorial Change Is this activity an editorial or typographical change such as formatting, paragraph numbering, spelling, or punctuation that does not change intent? **Justification:** **Item 1 is an editorial change (procedure section references) – this requires no further screening. NO is checked because the other items are not editorial and require screening - items 2-7 will be screened.**	☐ YES 50.54(q)(3) Evaluation is NOT required. Enter justification and complete Part VI.	☒ NO Continue to next part

Procedure/Document Number: EAP-4.1	Revision: 24
Equipment/Facility/Other: N/A	
Title: Release Rate Determination	
Part V. Emergency Planning Element/Function Screen (Associated 10 CFR 50.47(b) planning standard function identified in brackets) Does this activity affect any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II?	
1. Responsibility for emergency response is assigned. [1]	☒
2. The response organization has the staff to respond and to augment staff on a continuing basis (24/7 staffing) in accordance with the emergency plan. [1]	☐
3. The process ensures that on shift emergency response responsibilities are staffed and assigned. [2]	☐
4. The process for timely augmentation of onshift staff is established and maintained. [2]	☐
5. Arrangements for requesting and using off site assistance have been made. [3]	☐
6. State and local staff can be accommodated at the EOF in accordance with the emergency plan. [3]	☐
7. A standard scheme of emergency classification and action levels is in use. [4]	☐
8. Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes after declaration of an emergency and providing follow-up notifications. [5]	☐
9. Administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway. [5]	☐
10. The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter. [5]	☐
11. Systems are established for prompt communication among principal emergency response organizations. [6]	☐
12. Systems are established for prompt communication to emergency response personnel. [6]	☐
13. Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ). [7]	☐
14. Coordinated dissemination of public information during emergencies is established. [7]	☐
15. Adequate facilities are maintained to support emergency response. [8]	☐
16. Adequate equipment is maintained to support emergency response. [8]	☐
17. Methods, systems, and equipment for assessment of radioactive releases are in use. [9]	☒
18. A range of public PARs is available for implementation during emergencies. [10]	☐
19. Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities. [10]	☐
20. A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.[10]	☐

Procedure/Document Number:EAP-4.1	Revision: 24	
Equipment/Facility/Other: N/A		
Title: Release Rate Determination		
21. The resources for controlling radiological exposures for emergency workers are established. [11]		☐
22. Arrangements are made for medical services for contaminated, injured individuals. [12]		☐
23. Plans for recovery and reentry are developed. [13]		☐
24. A drill and exercise program (including radiological, medical, health physics and other program areas) is established. [14]		☐
25. Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses. [14]		☐
26. Identified weaknesses are corrected. [14]		☐
27. Training is provided to emergency responders. [15]		☐
28. Responsibility for emergency plan development and review is established. [16]		☐
29. Planners responsible for emergency plan development and maintenance are properly trained. [16]		☐

APPLICABILITY CONCLUSION

☐ If no Part V criteria are checked, a 50.54(q)(3) Evaluation is NOT required; document the basis for conclusion below and complete Part VI.

☐ If any Part V criteria are checked, complete Part VI and perform a 50.54(q)(3) Evaluation.

BASIS FOR CONCLUSION

See the attached EAP-4.1 Revision 24 Screening Matrix for the basis for the conclusion that no further evaluation is required for the changes listed.

Part VI. Signatures:

Preparer Name (Print) Pete Cullinan	Preparer Signature	Date: 12/10/15
(Optional) Reviewer Name (Print)	Reviewer Signature	Date:
Reviewer Name (Print) TIMOTHY F. GARVEY Nuclear EP Project Manager	Reviewer Signature	Date: 12/15/15
Approver Name (Print) (acting) P. Cullinan EP manager or designee	Approver Signature	Date: 12/15/15

ENTERGY NUCLEAR NORTHEAST
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCUMENT TRANSMITTAL AND RECEIPT ACKNOWLEDGEMENT FORM

TO: **EP Admin**
DEPT.: Emergency Planning
LOCATION: **USNRC Document Control Center, Washington DC/RockvilleMD**

SPECIAL NOTES: JAFP Memo & EN-LI-106 form required. Include 10CFR50.54(q) Screen ~~and Evaluation~~ (EN-EP-305 Attach 9.1 & 9.2)

CONTROL MANUAL NUMBER **34**

FROM: PATTI PONZI
DEPT.: ADMINISTRATIVE SERVICES
LOCATION: JAF
DATE: December 16, 2015

APPLICABLE MANUAL: EP PROCEDURE

DOCUMENT NUMBER	DOCUMENT TITLE	REV	EFFECTIVE DATE
EAP-4B	DETAILED DOSE ASSESSMENT	1	12/18/2015
UPDATE LIST	EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2	N/A	12/18/2015

INSTRUCTIONS:

1. *Insert the attached revised documents, and withdraw any noted WITHDRAWN documents from your controlled copy.*
2. **DISCARD ALL SUPERCEDED DOCUMENTS, as applicable. DISCARD THIS TRANSMITTAL.**

NOTE
Failure to incorporate these documents into your controlled manual will result in cancellation of the subject controlled documents.

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

DETAILED DOSE ASSESSMENT
EAP-4B
REVISION 1

EFFECTIVE DATE: December 18, 2015

ADMINISTRATIVE	QUALITY RELATED
INFORMATIONAL USE	CONTROLLED

Periodic Review Due Date: December 2019

REVISION SUMMARY SHEET

REV. NO.

1 Limited Revision

1. Editorial adjustment such as spelling, grammar, structure, bullet adjustments for added deleted sections, etc.
2. Section 3.1 - delete "General" and change to "an" emergency has been declared and the EOF is operational.
3. Delete Section 5.4 TSC Dose Assessment Staff - alignment to the Fleet Standard ERO removes TSC Dose Assessment positions. Dose assessment is performed initially from the Control Room per EAP-4A and then transfers directly to the EOF when operational.
    a. Removed all reference to TSC performing dose assessment functions throughout the procedure.
        i. Section 1.1 reference to TSC deleted.
        ii. Section 5.3 reference to TSC deleted.
        iii. Section 7.1 deleted.
4. Deleted from section 5.5: "The RC is responsible for offsite dose assessment at the TSC until the EOF is staffed." Alignment to the Fleet Standard ERO removes TSC Dose Assessment positions. Dose assessment is performed initially from the Control Room per EAP-4A and then transfers directly to the EOF when operational.
5. Added Section 5.5.1: "The RC is responsible to support the EOF Dose Assessment group by determining the release pathway and providing that information to the EOF Dose Assessment group."
    a. Added Section 8.5.1 to provide direction to request the RC to determine the release pathway utilizing Attachment 1 page 3, Release Pathway Selection Aide.
6. Added Section 5.6: TSC Reactor Engineer (RxE): is responsible to the EOF Dose Assessment group to develop core damage estimates consistent with EAP-44, Core Damage Estimation, for use in the URI dose assessment model.
7. Revised section 7.3 to reflect recording met data in WebEOC or on the Meteorological Data Worksheet - either is applicable.
8. Revised Section 7.4 to clarify conditions that would warrant re-performing dose projections and

removed the "approximately 15 minute" criteria.

9. Added section 8.1.7 to clarify expectations for completing Detailed Dose Assessment Data Input Form Attachment 1 and paperwork requirements for URI runs that will used for decision making - i.e. classifications and/or PARs.

10. Added clarifying information to section 8.4.3.C - this information clarifies the spent fuel option and is already include in Step 1.1.1 of Attachment 9.

11. Delete Section 8.5.3 - the following step more clearly defines action required related to process reduction factor - this deletion removes duplication while providing clarity.

12. Added a note to section 8.5.4 to reinforce step 8.5.4 information.

13. Added word "- direction" to step 8.6.1.B.3 to clarify the step with no intent change.

14. Section 8.9.1 added order of priority guidance when, for "Assessment Methodology" selection, multiple Methods are available. This is for improved human factors - reduces decision making by providing clear instruction.

15. Sections 8.9.3.A.1.a and 8.9.4.A.1 added "Rx Engineer" to clarify who to obtain information from.

16. Added Note to Section 8.9.6.A: EAP-5.3 attachments provide distances from the center of the NMP/JAF site for various sample locations. The URI software provides more detailed algorithms that may be used to determine distances for sample points from the JAF station.

17. Human factors improvements to Attachment 1: rearranged the form to better align to the URI model inputs and order, added several procedure section references and added a screen shot of the URI Pathway Selection screen.

18. Revised Attachment 2 section 1.1.1 - to clarify terminology and remove superfluous wording with no change in intent.

19. Removed Attachment 3 - the form is not required and is not necessary. Human factors to prevent transcription errors of data. Other form numbering adjusted accordingly.

20. Attachment 5 - deleted reference to exposure meter for air sample calculations - there is no option in URI for exposure meter input for air

sample calculations therefore this option is not used and may cause confusion. Provided clarifying wording on instrument selection to prevent duplication with no intent change.

21. Revised Attachment 6 step 3.6 to have the user print the results from URI rather logging results on an attachment. Human factors - remove the possibility of transcription errors.

22. Changed Shift Manager to Emergency Director on Attachment 6, Section 3.6 to reflect the position that actually performs the function.

23. Revised Attachment 8 to include effluent monitor pathway rad monitor scale as a reference.

TABLE OF CONTENTS

1.0 PURPOSE

1.1 To provide the method for performing Offsite dose assessment during radiological accident conditions at James A. FitzPatrick NPP using the Unified RASCAL Interface (URI) by the Emergency Response Organization at the EOF. The URI software can also be used for determining release rates during a radiological release event.

> **NOTE:**
> Initial Dose Assessment Projections by the Onshift ERO staff are performed in accordance with EAP-4A, Onshift Dose Assessment.

1.2 **Scope/Applicability**

1.2.1 This procedure is applicable to:

A. The Site and Entergy Fleet ERO staff performing Dose Projections using the DETAILED Assessment option contained in the URI program.

B. This procedure may also be used by Offsite Response Organizations (OROs) who use URI for Dose Assessment.

2.0 REFERENCES

2.1 **Performance References**

2.1.1 EAP-4.1, Release Rate Determination

2.1.2 EAP-5.3, Onsite/Offsite Downwind Surveys and Environmental Monitoring

2.1.3 EAP-42, Obtaining Meteorological Data

2.1.4 EAP-4A, RAPID Dose Assessment

2.1.5 EAP-4C, Protective Action Recommendations

2.1.6 EAP-1.1 Offsite Notifications

2.1.7 EAP-44, Core Damage Estimation

2.2 **Developmental References**

2.2.1 James A. FitzPatrick NPP Site Emergency Plan

2.2.2 DVP-01.02 - OFFSITE DOSE CALCULATION MANUAL

2.2.3 Unified RASCAL Interface, Requirements Specification, JAF Site Annex Software Version 2

2.2.4 Emergency Dose Calculation Manual - Unified RASCAL Interface User's Guide

2.2.5 NUREG 0654/FEMA-REP-1, Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (and Supplements)

2.2.6 Response Technical Manual RTM-Vol 1 Rev 4

2.2.7 Entergy White Paper January 21, 2011, Protective Action Recommendation Determination

2.2.8 Entergy EP Peer Group 2004 "Radiological Release Definition" Position Paper

3.0 **INITIATING EVENTS**

3.1 An Emergency has been declared and the EOF is operational.

OR

3.2 An actively venting monitored gaseous release point exceeds alarm set points.

OR

3.3 An unmonitored gaseous release of radioactive material to the atmosphere is suspected or underway.

OR

3.4 A release of radioactive material to the atmosphere is suspected or underway due to an emergency event.

4.0 DEFINITIONS

4.1 **ATWS:** Anticipated Transient Without SCRAM (>2.5% for JAF).

4.2 **CDET:** Committed Dose Equivalent to the Thyroid or the dose to the thyroid that will be received from intake of radioactive material (radioactive isotopes of iodine) by an individual during the 50 year period following the intake.

4.3 **Dose Equivalent Iodine (DEI):** The concentration of 1-131 (uCi/gram) which alone would produce the same thyroid dose as the quantity and isotopic of mixture of 1-131,1-132, 1-133, 1-134 and 1-135 actually present or, Iodine isotope mix converted to the equivalent amount of I-131 for dose comparison purposes.

4.4 **EPIC:** Emergency and Plant Information Computer. Computer system providing display of plant data to the control room, TSC, and EOF. EPIC includes Safety Parameter Display System (SPDS) information. EPIC can be used as a source of plant data for the purpose of dose assessment.

4.5 **Plant Data Server (PDS):** The PDS receives plant parameter data from the EPIC computer system and makes the data available on the Entergy Local Area Network (Level 2 network) using the PDS application. PDS can be used as a source of plant data for the purpose of dose assessment.

4.6 **Plume Exposure Pathway:**

4.6.1 Pathway where principal exposure source is from:

1. Plume and deposited materials for whole body external gamma radiation exposure.
2. Passing radioactive plume for inhalation exposure. Exposure time could range from hours to days.

4.7 **Process Reduction Factor (PRF)**: is a numerical value assigned to radionuclide concentration reduction mechanisms used to modify the estimate of the source term that is available for release to the environment (activity that is actually released). The PRFs are active and passive engineering controls between the points where the radioactivity is first available to be released and the point of release to the environment. Process reduction includes such mechanisms as filtration, removal by sprays, scrubbing by passage through water, fallout or plate-out on surfaces within buildings or structures based on hold up times in buildings or containment volumes. The PRFs are additive. In the RAPID assessment module the PRFs are automatically assigned based on the pathway selected and cannot be changed by the user.

4.8 **Protective Action Guidelines (PAGs)**: Radiation exposure guidelines established by the Environmental Protection Agency which are used to determine the appropriate protective actions to be taken on the part of emergency workers and the general public. These actions include sheltering and evacuation.

4.9 **Protective Action Recommendations (PARs)**: A recommendation made by JAF personnel to the offsite authorities on the appropriate protective actions to be taken on the part of the general public. The PARs are based on plant conditions or dose projections using the PAGs for guidance.

4.10 **Release Duration**: The estimated time of a release to the environment, based on either plant conditions or on anticipated exposure times to the public based on Evacuation Time Estimates.

4.11 **Secure File Transfer Protocol (SFTP)**: This is a computing network protocol for accessing, managing, and transferring files on remote file systems. The SFTP site is used to exchange dose projection files between the JAF and NMP site for the purpose of summing dose projections for a multi-Unit release scenario.

4.12 **Shutdown Power Level Threshold (SPLT)**: The measured average core power level threshold below which the reactor is considered to be shut down. For example, in an ATWS event, the power level threshold above which the reactor is considered not shut down and below which it is considered shutdown. The SPLT value for JAF is < 2.5% of core thermal power.

4.13 **Spiking Factor (Coolant Spiking)**: A significant increase of certain radionuclides in the reactor coolant, typically cesiums and iodines generally caused by a reactor transient such as a reactor scram or rapid power changes that result in a sudden drop in reactor coolant system pressure relative to the fuel assembly internal pressure. A rapid change in reactor power may be assumed to be a change of greater than 15% of reactor power per hour. Spiking has no effect on Noble Gas Concentrations in the coolant. The spiking factor is entered in URI as a numerical value.

4.14 **Total Effective Dose Equivalent (TEDE)**: A method of converting exposure to radiation to the biological effects that it will cause to the human body. It combines the external and internal ionizing radiation exposure. The TEDE is the sum of Deep Dose Equivalent and Committed Effective Dose Equivalent.

5.0 RESPONSIBILITIES

5.1 **Emergency Planning Manager**: shall ensure that as part of initial and requalification training, individuals are provided with information on the purpose and use of the URI software and appropriate cautions associated with its use.

5.2 **The Dose Assessor(s)**: shall perform required dose projections as assigned, using the Unified RASCAL Interface (URI) program.

5.3 **EOF Dose Assessment Staff**: shall relieve the OnShift dose assessors of the responsibility for dose assessment per their applicable checklists and perform required dose assessments.

5.4 **EOF Radiological Assessment Coordinator (RAC)**: is responsible to the Emergency Director for managing the radiological monitoring and assessment aspects offsite during an emergency in order to assess the radiological consequences to the public.

5.5 **TSC Radiological Coordinator (RC)**: is responsible to the Emergency Director/Emergency Plant Manager for managing the radiological monitoring and assessment aspects onsite during an emergency in order to assess the radiological consequences to the plant staff.

5.5.1 The RC is responsible to support the EOF Dose Assessment group by determining the release pathway and providing that information to the EOF Dose Assessment group. The EOF Dose Assessment group may obtain the information directly from EOF personnel if available (e.g. Technical Advisor).

5.6 **TSC Reactor Engineer (RxE):** is responsible to the EOF Dose Assessment group to develop core damage estimates consistent with EAP-44, Core Damage Estimation, for use in the URI dose assessment model.

6.0 LIMITATION AND PRECAUTIONS

6.1 URI can only calculate doses for a single release pathway at one time. If releases are occurring via multiple release pathways or from multiple sites then individual dose assessments will need to be run and the results summed using the instructions in Attachment 6.

6.2 URI can calculate dose assessments to either 10 miles or 50 miles. The 50 mile assessments have the following limitations:

- Will only display assessment results from 10 to 50 miles
- Will only be displayed as sectors
- Shall not be used for classification purposes
- Shall only be used for PAR determination beyond 10 miles and **ONLY IF** 10 mile dose assessment results indicate that PAGs have been exceeded beyond 10 miles.

6.3 Dose projections results using Field Team survey results should be based on both the measured exposure rate and iodine concentration at the survey location whenever possible. When iodine concentrations are not available URI uses default source term and leak rates that can bias the calculated thyroid doses.

6.4 Attachment 8, Stack and Vent Parameters provides guidance for determining the appropriate parameters for the site effluent release points.

6.5 For pathways with both low range and high range monitors **DO NOT** use the high range monitor reading unless the low range monitor is full scale.

7.0 PRELIMINARY AND ON-GOING ACTIONS

The following Preliminary or On-going Actions are completed by the EOF staff as plant conditions warrant. These actions can be performed in any logical order.

7.1 Determine if there is a release of radioactive material to the environment as a result of the Emergency Event using EAP-4.1, Release Rate Determination.

7.1.1 **IF** a release is determined to be in progress, **THEN** inform the Emergency Director (ED) that there is an abnormal release due to the event and the PART 1 form (EAP-1.1 Attachment 1) must indicate that there is a release of radioactive material due to the event.

7.2 Use Attachment 1, Detailed Dose Assessment Data Entry Form to record and document information used to perform a dose projection. Complete one form for each release point.

7.3 Obtain meteorological data using EAP-42, Obtaining Meteorological Data every 15 minutes. Met data may be logged in WebEOC or on Attachment 7, Meteorological Data Log.

7.4 Perform a dose projection as conditions warrant or as directed by the RAC, e.g.:

7.4.1 Met condition changes that could result in PAR changes.

7.4.2 Effluent flow or release rate changes that could result in PAR changes.

7.4.3 New release pathway occurs.

7.4.4 Process reduction factors change - e.g. Standby Gas Treatment system quits working.

7.4.5 Field data availability that could result in PAR changes.

7.4.6 During no-abnormal-release scenarios dose projections may not be required to be performed based on RAC judgment (e.g. HAB events with no abnormal release).

7.5 Use EAP-4.1 to determine if the ODCM release rate limits have been exceeded.

7.5.1 **IF** the Release Rate is greater than the ODCM limit **THEN** immediately inform the Emergency Director (ED) of the following requirements:

A. The next Part 1 Form must indicate that a release above Federal limits is in progress.

B. A Part 2 form (EAP-1.1 Attachment 2) must be initiated in accordance with EAP-1.1.

7.5.2 **IF** the release is below the ODCM release rate limits **THEN** perform the following actions:

A. **IF** the release is through a monitored pathway **THEN** use EAP-4.1, Release Rate Determination to calculate the effluent monitor readings to reach the ODCM release rate limits for Noble Gas and Iodine.

B. Inform the Emergency Director (ED) of the protected monitor values.

7.6 **IF** dose projection results show Exposure Rates greater than 0.057 mrem/hr at or beyond the site boundary, **THEN** the ODCM release rate limits have been exceeded based on the projected exposure rate, immediately inform the Emergency Director (ED) of the following requirements:

7.6.1 The next Part 1 Form must indicate that a release ABOVE Federal limits is in progress.

7.6.2 A Part 2 form (EAP-1.1 Attachment 2) must be initiated in accordance with EAP-1.1.

7.7 Evaluate the 15 minute meteorological data for changes that can effect does projection results and PARS:

7.7.1 Wind direction changes affecting new ERPAs

7.7.2 Stability class change

7.8 **IF** during the course of dose assessment, the dose to the population is projected to exceed 100 mRem TEDE or 500 mRem CDE Thyroid **THEN** advise the Emergency Director (ED) to evaluate EAL criteria for offsite doses (AS-1.2).

7.9 **IF** during the course of dose assessment, the dose to the population is projected to exceed 1 Rem TEDE or 5 Rem CDE Thyroid, **THEN** advise the Emergency Director (ED) to evaluate EAL criteria for offsie doses (AG-1.2).

7.10 When a dose projection is performed using a monitored release pathway URI will calculate the monitor reading that will result in a PAG at the Site Boundary, 2 miles, and 5 miles. The ED and the RAC shall be advised of these projected monitor readings.

7.11 Determine if a Lake Breeze or Land Breeze is in progress based on Attachment 11, Lake and Land Breeze Flowchart. Advise the Field Team Coordinator of potential lake or land breeze effects.

7.11.1 **IF** a radiological release is in progress and plume maximum readings are > 15° from the expected plume centerline based on meteorological indications at ≥ 2 miles, **THEN** have Offsite Monitoring Teams (OMT) transverse the expanded plume or multiple downwind

sectors at a distance of about two miles or greater. Lakeview Rd./Miner Rd./Nine Mile Point Rd. may be used for this assessment.

7.11.2 **IF** maximum plume readings are found in areas other than downwind (> 15° from centerline) **THEN** use EAP-4C, Protective Action Recommendations to determine if additional protective action recommendations are needed based on the Land/Lake Breeze affects.

7.12 **IF** unmonitored release is suspected or known to be in progress, **THEN:**

7.12.1 Obtain radiation survey at potential plume centerline as close to site boundary as practical. See Attachment 3, Site Boundary Map for site boundary location.

7.12.2 **IF** readings indicate > 1 rem/hr based on field survey **THEN** immediately inform the ED that the Protective Action Guide (PAG) doses have been measured and the General Emergency criteria (EAL AG1.3) may be met if conditions exist or expected to exist for => than 1 hr.

7.12.3 **IF** field readings indicate greater than 0.057 mrem/hr (> 217 ccpm on a frisker) based on field survey **THEN** inform the ED that a release above ODCM limits exists based on field survey data.

7.13 Determine if releases are being made from multiple release paths at the plant or from the site. Dose projections shall be performed for each pathway and the projected doses summed per Attachment 6, Summing Dose Assessment Results.

7.13.1 In the case where there are releases from both sites simultaneously the releases will be assessed by the respective plant staffs and the results files provide on the SFTP site for summation by each plant staff

7.14 Evaluate Down Wind Survey Team survey results against projected doses. Field surveys should be used in conjunction with the URI projections to determine the actual radiological conditions.

7.15 **IF** dose assessment results indicate PAGs beyond 10 miles, **THEN** dispatch Field Monitoring Teams to downwind areas to verify the calculated exposure rates prior to issuing PARs outside the 10 mile EPZ.

8.0 PERFORMING A DOSE PROJECTION

8.1 Preliminary URI Guidance

8.1.1 Attachment 9, URI Parameter Guide contains descriptions of the URI parameter groups, option selections and input data required for operator reference.

8.1.2 URI Detailed Dose Assessment module contains reports and operations that can be useful when running or evaluating dose assessment data. These functions may not be explicitly called-out in the procedure but are described in Attachment 10, Assessment Results Displays, Reports and Miscellaneous Calculations.

8.1.3 Reports are automatically sent to the default printer. To change printer:

A. Select the "Start Icon" located in the windows task bar at the left end.

B. Select "Devices and Printers".

C. Right click on the desired printer Icon.

D. Select "set as default".

8.1.4 Multiple sets of dose assessment reports are printed by default. To change, from Detailed Assessment menu select "File" then "Printer" then "Number of Copies", then enter number of copies desired. Program reverts to default when closed.

8.1.5 A round red exclamation point next to a URI data entry field means that field is required to perform assessment calculations.

8.1.6 **IF** "Process Assessment" button on the Detailed Assessment form is not visible but user wishes to recalculate the dose projection, **THEN** select "Force Recalculation" button on main toolbar.

8.1.7 Each URI run that will be used for decision-making - i.e. Emergency Classification (verifying that an EAL is met or not met) or protective action recommendations shall have:

A. A completed URI input form (EAP-4B Attachment 1, Detailed Dose Assessment Data Entry Form)

B. URI output

C. Signed and dated performer and validator:

1. Validator should be either a Dose Assessor or RAC.

D. URI runs NOT used for decision making do not require the above.

1. IF a "what-if" URI run appears to warrant revised PARs and/or Emergency Classification escalation, THEN the Dose Assessor SHALL:

a. Complete an Attachment 1.

b. Have an independent validation that the Attachment 1 inputs are used in the URI run and that the inputs are valid for the conditions of the URI run.

E. URI products used for decision making shall be sent to the State and County (reference the Emergency Facility Telephone Directory).

F. Attachment 1 forms may be copied and hand edited for subsequent runs rather than completing a new form.

8.2 **Unified Rascal Interface (URI) Start Up**

8.2.1 Start URI application for the JAF site using the following priority:

A. Designated facility Dose Assessment Computers

1. Select the "URI Icon" on the computer desktop to load the program from the hard drive;

OR

2. Perform the following steps:
   a. Select the "Start icon"
   b. Select "All Programs"
   c. Select "JAF URI" from the program list
   d. **IF** the program does not load from the hard drive, **THEN** load the program from the Entergy Network as follows:
      1) Select the computer "Start icon"
      2) Select "All Programs"
      3) Select "Nuclear Corporate Applications (ESM)"
      4) Select "Nuclear Emergency Response"
      5) Select "URI-JAF"

B. Any Entergy Network Computers
   1. Select the computer "Start icon"
   2. Select "All Programs"
   3. Select "Nuclear Corporate Applications (ESM)"
   4. Select "Nuclear Emergency Response"
   5. Select "URI-JAF"

C. **IF** program fails to start or an error is received, **THEN** locate the facility back up disk and load the program on an available computer. Refer to Attachment 13, URI Computer Program Loading Instructions for details.

8.3 Detailed Dose Assessment

NOTE

A round red exclamation point next to a URI data entry field means the field requires additional information to continue calculations.

Additional details about the pathway, including available effluent monitors, are displayed by hovering the mouse over pathway letter ID box on the graphic display.

8.3.1 Select the "Detailed" Tab or "Cloud icon" on the startup screen.

NOTE

Section 8.4 through 8.11 may be used in any order and not all sections are applicable for each accident type/pathway.

NOTE

Guidance on URI parameters, required data, entry selection is contained in Attachment 9, URI Parameter Guide

8.4 Source Term Basis Determination

8.4.1 Contact Reactor Engineering (CR/TSC) or Operations to determine the Source Term for performing an assessment based on core conditions and/or type of accident or transient that has occurred. EAP-44 "Core Damage Estimation" provides guidance on estimating the type and extent of core damage.

8.4.2 **IF** Reactor Engineering has determined that core damage has occurred **THEN** request an estimate of the type of core damage and the associated percent of damage.

8.4.3 **IF** TSC Engineering/Operations has determined that RCS leakage is occurring **THEN** request an estimate of the source and leakage rate.

A. **IF** source term is from Reactor Coolant System (RCS) without core damage **THEN** select "Normal Coolant".

1. **IF** any of the following have occurred **THEN** check the "Spiking checkbox":

a. Power has changed by ≥ 15% per hour since event start.

b. A rapid depressurization of the RCS (reactor scram).

2. **IF** Spiking was selected **THEN** determine Spiking Factor:

a. **IF** a post power change RCS Dose Equivalent Iodine (DEI) sample result is available **THEN** calculate Spiking Factor as follows:

1) Select "Calculations" then "Spiking Factor" from main menu and then enter the DEI concentration. After entering the data SELECT the "update spiking factor on calling form" box. The spiking factor data box on the main screen will be populated with the results.

OR

2) **PERFORM** the following Spiking Factor calculation using Attachment 1, Detailed Dose Assessment Data Entry screen.

$$BWR\ Spiking\ Factor = \frac{DEI\ \mu Ci/gm}{5.55E-03\ \mu Ci/gm}$$

b. **IF** calculated Spiking Factor is >1 and < 1000 **THEN** enter calculated value.

c. **IF** calculated Spiking Factor is > 1000 **THEN** enter 1000

3. **IF** a post power change RCS sample is not available **THEN** enter a default Spiking Factor of 30

B. **IF** source term is from Reactor Coolant System (RCS) with core damage then select "Reactor Core Accident".

1. **SELECT** Type of Damage as determined by Reactor engineering, "Clad" or "Melt" or "**IF** information is not available **THEN** select "Clad".

C. **IF** source term is from Spent Fuel damage **THEN** select "Spent Fuel Accident".

1. Spent Fuel Accident - The "Spent Fuel Accident" option is selected if the incident involves damage to spent fuel in a depressurized condition. The age of the fuel since discharge ("New" or "Old") is used to decay the activity in the fuel assembly(s) involved in the incident.
   a. The "New" option uses a source term representative of spent fuel that has been irradiated within 6 months of the event. Reactor Engineering or TSC Engineering should be consulted when using this factor.
   b. The "Old" option uses a source term representative of spent fuel that has not been irradiated within 6 months of the event. Reactor Engineering should be consulted when using this factor.
2. **IF** Spent Fuel release cannot be monitored or no data is available, **THEN** check "Un-Monitored Spent Fuel Accident with No other method applicable" checkbox.
3. **IF** Spent Fuel release can be monitored or other release data is available, **THEN** ensure the "Un-Monitored Spent Fuel Accident with No other method applicable" checkbox is unchecked.
4. **IF** the date the fuel assembly was last in reactor is known **THEN** enter date in Reactor Status, "Last Irradiated" textbox.
5. **IF** the plant is not currently in a Refueling Outage **THEN** select "OLD" and enter the approximate date and time that the reactor was shut down for refueling in the Reactor Status, "Last Irradiated" textbox.
6. The "Fuel Status:" and "Amount of Spent Fuel Damage (%):" data is automatically populated based on the Spent Fuel release pathway selected in the subsequent step (section 8.5, Release Pathway Determination).

8.5 Release Pathway Determination

NOTE

The Pathway selection is made prior to entering the meteorological data. The required meteorological data is dictated by the pathway selections.

Additional details about the pathway, including available effluent monitors, are displayed by hovering the mouse over pathway letter ID box on the graphic display.

Additional details about the pathway, including available effluent monitors, are displayed by hovering the mouse over pathway letter ID box on the graphic display.

8.5.1 Request the TSC Rad Coordinator (RC) to determine the release pathway using Attachment 1 page 3.

A. This information may be determined directly from EOF personnel (e.g. Technical Advisor, Lead Offsite Liaison, etc.) if the information is available.

8.5.2 Open the Pathway Graphic by double clicking on the yellow Pathway Bar.

8.5.3 Select the pathway that best represents the release in progress by clicking the "pathway letter ID box" on the right side of the graphic.

NOTE

Process Reductions Factors (PRF) must be validated for each model run. The PRF's do not automatically adjust based on other selections related to pathway.

8.5.4 Verify that the Process Reduction Factor settings are correct for the existing plant conditions and equipment line up. Refer to Attachment 2, Process Reduction Factor Determination for guidance and enter required changes by using the radio buttons or data entry boxes.

8.6 Meteorological Data Entry

NOTE

Only one onsite MET tower instrument height may be selected at a time. Any number of offsite towers may be selected. The "Alternate Data" operation is only selected if onsite meteorological tower data is not available and data from offsite sources such as the NWS is used.

8.6.1 Enter Site Tower data as follows:

A. Obtain MET data per EAP-42 "Obtaining Meteorological Data".

B. Using Attachment 8, Stack and Vent Parameters determine the meteorological tower best representing release height.

1. Enter the tower by checking the checkbox in the "Use" column of Meteorological Data table.
2. Enter Wind Speed in appropriate units.
3. Enter Wind Direction - direction wind is coming from.
4. Enter Stability Class. **IF** NOT available, **THEN** enter Delta T.

C. Select the precipitation status best representing current precipitation using the "Precipitation" dropdown menu. **IF** precipitation is unknown **THEN** SELECT "None" from dropdown list.

1. None - No rain or snow.
2. Light Rain - Drizzle, < 0.1 inches / hour.
3. Moderate Rain - Heavy Drizzle, 0.1 to 0.3 inches / hour.
4. Heavy Rain - > 0.3 inches / hour.
5. Light Snow - Visibility > 0.63 miles.
6. Moderate Snow - Visibility 0.31 to 0.63 miles.
7. Heavy Snow - Visibility < 0.31 miles.

8.7 **Reactor Status Determination**

8.7.1 **IF** Source Term is Normal Coolant or Reactor Core Accident **THEN:**

A. For Non-ATWS events; **IF** reactor is NOT shutdown **THEN** ensure "Reactor Shutdown" checkbox is unchecked otherwise:

1. Check Reactor "Reactor Shutdown"
2. Enter Date and Time reactor was shut down.

B. For ATWS events; IF power is >2.5% then ensure "Reactor Shutdown" checkbox is unchecked otherwise:

1. Check "Reactor Shutdown" checkbox
2. Enter Date and Time power reduced below 2.5%.

8.7.2 **IF** Source Term is a Spent Fuel Accident **THEN** the associated decay time was set by the program when source term was selected.

8.8 **Release Duration Determination**

NOTE

Release durations will automatically be adjusted to a 15 minute increment.

8.8.1 Consult with TSC and EOF Ops personnel on the projected duration of radiological release.

A. ENTER estimated Release Duration. **IF** release duration is unknown **THEN** enter a default of 4 hours in the "Duration" textbox.

8.9 **Assessment Methodology**

8.9.1 Release point/source tabs are enabled based on the pathway. Select the best methodology from the available options. When information is available for multiple methodologies utilize the following order of priority:

A. Monitored Release - Uses installed effluent monitors. Goto Step 8.9.2.

B. Release Point Sample - Uses effluent sample results in uCi/cc. Goto step 8.9.5.

C. Field Team - Back calculates based on Offsite Monitoring Team survey and sample results. Goto step 8.9.6.

D. Containment Leakage - Uses coolant or core conditions including percent core damage or containment high radiation monitor readings and a gaseous leak rate. Goto step 8.9.3.

E. RCS Leakage - Uses Reactor Coolant System liquid leak rate. Goto step 8.9.4.

NOTE
The Unmonitored Spent Fuel option is selected when the Source Term of Spent Fuel Damage was selected.

F. Unmonitored Spent Fuel - Used only if other assessment methods are not available for Spent Fuel Accident Source Terms. Goto step 8.9.7.

8.9.2 Monitored Release

NOTE
For pathways with both low range and high range monitors **DO NOT** use the high range monitor reading unless the low range monitor is full scale.

A. Select "Monitored" tab

B. Select the appropriate effluent monitor from the list of applicable monitors.

C. Enter monitor reading for selected monitor in the "Reading" textbox.

D. **IF** Release Point Flow Rate is requested **THEN** enter flow rate in the "Flow Rate" textbox in the required units.

E. **IF** all errors have been resolved, **THEN** on the "Process Assessment To" bar select "10 Miles" or "50 Miles" button to run the dose assessment.

F. Goto step 8.10.

8.9.3 **Containment Leakage**

A. **SELECT** appropriate Method from the enabled options.

1. **IF** % Fuel Damage is selected **THEN** enter percent damage that corresponds to the Source Term and the Type of Damage (Clad or Melt).

   a. **IF** both a Clad and Melt value are provided, **THEN** either run individual assessments using each value **OR** request clarification from Rx Engineer relative to which is more representative of actual conditions.

2. **IF** Containment Radiation Monitor is selected **THEN** enter corresponding Containment High Range radiation monitor reading obtained from EPIC (27-RE-104 A/B, highest value is displayed).

B. Enter the appropriate **gaseous** release volume as follows:

1. Select "Leakage" when using the percent primary containment design leakage a value of 0.5% is used as a default or enter a calculated leakage as a percent of containment volume (cont. Vol=7.48E+9 cc).
2. **IF** the primary containment has at least a 1-ft^2 hole providing a direct release path to environment **THEN** select "Catastrophic Failure".
3. **IF** primary containment gaseous volume is leaking due to isolation failures, such as open valves or failed penetrations that do not meet the requirement of a Catastrophic Failure, **THEN** select "Failure to isolate".
4. The current "as left" containment leak rate based on ST-39B or an estimate of the leakage related to the event can be obtained from TSC engineering. Select "Calc'd Cont. Leak Rate" when using a calculated leak rate and **ENTER** leak rate in cfm.

C. **IF** all errors have been resolved, **THEN** on the "Process Assessment To" bar select "10 Miles" or "50 Miles" button to run the dose assessment.

D. **Goto** step 8.10.

8.9.4 RCS Leakage

A. Select appropriate Method from any enabled options.

1. **IF** % Fuel Damage is selected then **ENTER** "percent damage" that corresponds to Source Term, Type of Damage (Clad or Melt). Obtain from Rx Engineer.

B. Determine appropriate **liquid** Release Mode from enabled options as follows.

1. **IF** leak rate is unknown **THEN** select "Unknown Leak Rate".

2. **IF** leak rate is known, **THEN** select "Calculated RCS Leak Rate" and enter coolant leak rate in gpm

C. **IF** all errors have been resolved, **THEN** on the "Process Assessment To" bar select "10 Miles" or "50 Miles" button to run the dose assessment.

D. Goto step 8.10.

8.9.5 **Release Point Sample**

NOTE

Sample must include Particulate, Iodine and Noble Gas. If a class of isotope is left blank, then assessment is incomplete. Entering zero is acceptable.

A. Enter release point flow rate in SCFM.

B. Enter release concentrations in uCi/cc for each corresponding isotope.

C. **IF** all errors have been resolved, **THEN** on the "Process Assessment To" bar SELECT "10 Miles" or "50 Miles" button to run the dose assessment.

D. Goto step 8.10.

8.9.6 **Field Team**

WARNING

Dose projections results using Field Team survey results should be based on **BOTH** the measured exposure rate **AND** iodine concentration at the survey location whenever possible. When iodine concentrations are not available URI uses default source term and leak rates that can bias the calculated thyroid doses.

NOTE

EAP-5.3 attachments provide distances from the center of the NMP/JAF site for various sample locations. The URI software provides more detailed algorithms that may be used to determine a more accurate distance for sample points from the JAF station.

A. Enter downwind distance in miles where sample was taken. URI assumes sample was taken at or close to plume centerline.

B. Enter 3' closed window exposure rate in mR/hr.

C. Enter Field Team air sample results as follows:

1. **IF** field team air sample is available, **THEN**

   a. Goto Attachment 5, Air Sample Results and Thyroid Dose Calculations to calculate field team sample result.

   b. **IF** concentration is less than calculated Lower Limit of Detection (LLD), then ENTER 0, otherwise ENTER I-131 concentration in µCi/cc.

2. **IF** field team air sample result is not available, **THEN** blank I-131 concentration value. Do not enter 0.

D. Enter time field team survey data was taken

E. **IF** all errors are resolved, **THEN** on the "Process Assessment To" bar SELECT "10 Miles" or "50 Miles" button to run the dose assessment.

F. Goto step 8.10.

8.9.7 **Un-Monitored Spent Fuel**

A. No additional inputs are required when using this methodology. **IF** all errors have been resolved **THEN** on the "Process Assessment To" bar select "10 Miles" or "50 Miles" button to run the dose assessment.

B. Goto step 8.10.

8.10 **Dose Assessment Results**

8.10.1 Print the Dose Assessment Report:

A. Select "Printer icon" on the toolbar on assessment method tab.

1. From the dropdown menu, select "Print Dose Assessment Report".

B. The Dose Assessment Summation Report can be printed to a Microsoft XPS document file. To print select "Printer icon" on the toolbar on assessment method tab.

1. From the dropdown menu, select "Print Dose Assessment Report to Microsoft XPS Document".

2. The XPS file can be attached to e-mail or WebEOC forms for distribution and viewed via Microsoft's Internet Explorer.

8.10.2 Dose Projection results may be viewed or printed on a map. From the main menu or toolbar, SELECT "View" THEN "View Receptor Point Map".

A. Select the 2, 5, or 10 mile map to view.

B. Select the footprint results for either TEDE Dose or CDE Thyroid Dose.

C. Select a map Zoom Level.

D. Select the Display Options

1. RASCAL Sector Results - Draws the 36 NRC sectors on the map which represents the close in doses to ~ 2.25 miles. RASCAL sectors are 10° each, split into 8 distance segments. Sector 1 starts at 5° and arcs in a clockwise direction.
2. RASCAL Puff Results - Draws the 41 x 41 grids on the map which represents the doses beyond 2.25 miles for a 10 mile calculation or all distances for a 50 mile calculation. Column 1 is on the left with row 1 on the bottom.
3. Sectors - Displays the classic 16, 22.5° sectors.
4. Mile Circles - Displays the 2, 5 and 10 mile distances for a 10 mile calculation or 10, 25 and 50 mile distances for a 50 mile calculation.
5. Receptor Points - Displays the preset points of interest. Additional information can be obtained by double clicking each point as needed.
6. Show Balloon - Displays an information balloon when the mouse is dragged across the map.

E. Select "Print Current View" to print the contents of the map displayed in the window to the default printer.

F. Select "Print View to XPS" to print the contents of the map displayed in the window to a Microsoft XPS document file. The XPS file can be attached to e-mail or WebEOC forms for distribution and viewed via Microsoft's Internet Explorer.

8.10.3 To export the plume graphic to a Google Earth file, **SELECT** "Export" THEN "Google Earth" from the main menu.

8.10.4 Additional Reports are available and are listed in Attachment 10, Assessment Results Displays, Reports and Miscellaneous Calculations.

8.10.5 IF releases are occurring from multiple release points at the JAF plant or from multiple units at the site then perform SUMMATION of multiple dose assessments by completing the instructions in attachment 6. Summing Dose Assessment Results.

8.10.6 Goto Step 8.11 Dose Assessment Evaluation.

8.11 **Dose Assessment Evaluation**

8.11.1 Review Dose Assessment Report for Classifications or Upgrades.

A. **IF** Table-1 EAL values are projected to be exceeded by dose assessment or OMT survey at or beyond the site boundary, **THEN IMMEDIATELY** inform ED.

TABLE 1 - EAL TABLE

EAL	TEDE (mrem)	CDE_T (mrem)
AS1.2	> 100	> 500
AG1.2	> 1000	> 5000

B. **IF** Table 2 - EPA 400 Protective Action Guidelines (EPA PAGs) values are projected to be exceeded by dose assessment or OMT survey in any ERPA not already included in a PAR, **THEN IMMEDIATELY** inform ED.

TABLE 2 - EPA 400 PROTECTIVE ACTION GUIDELINES (EPA PAGS)

PAR	TEDE (mRem)	CDE_T (mRem)
Evacuate	>1000	>5000
Shelter in place	Shelter if evacuation is not practical due to impediments	

C. Evaluate the need for 50 Mile dose projections with Radiological Assessment Coordinator (RAC).

D. **IF** PAGs will be exceeded beyond 10 miles, **THEN IMMEDIATELY** notify ED and Oswego County.

9.0 **RECORDS**

9.1 The following records when generated by this procedure during actual declared events shall be maintained by Records Management for the Permanent Plant File in accordance with EN-AD-103 - Document Control and Records Management Programs:

9.1.1 Attachment 1 Detailed Dose Assessment Data Entry Form

9.1.2 URI output reports and maps

9.2 The above records when generated by this procedure during drills or exercises are provided to the Emergency Preparedness Department and maintained as necessary to document required drill / exercise data.

10.0 **ATTACHMENTS**

1. ATTACHMENT 1, DETAILED DOSE ASSESSMENT DATA ENTRY FORM
2. ATTACHMENT 2, PROCESS REDUCTION FACTOR DETERMINATION
3. ATTACHMENT 3, SITE BOUNDARY MAP.
4. ATTACHMENT 4; 2010 POPULATION ESTIMATE EMERGENCY RESPONSE PLANNING AREAS (ERPA MAP)
5. ATTACHMENT 5, AIR SAMPLE AND THYROID DOSE CALCULATIONS
6. ATTACHMENT 6, SUMMING DOSE ASSESSMENT RESULTS
7. ATTACHMENT 7, METEOROLOGICAL DATA LOG
8. ATTACHMENT 8, STACK AND VENT PARAMETERS
9. ATTACHMENT 9, URI PARAMETER GUIDE
10. ATTACHMENT 10, ASSESSMENT RESULTS DISPLAYS, REPORTS AND MISCELLANEOUS CALCULATIONS
11. ATTACHMENT 11, LAKE AND LAND BREEZE FLOWCHART
12. ATTACHMENT 12, URI COMPUTER PROGRAM LOADING INSTRUCTIONS

Attachment 1

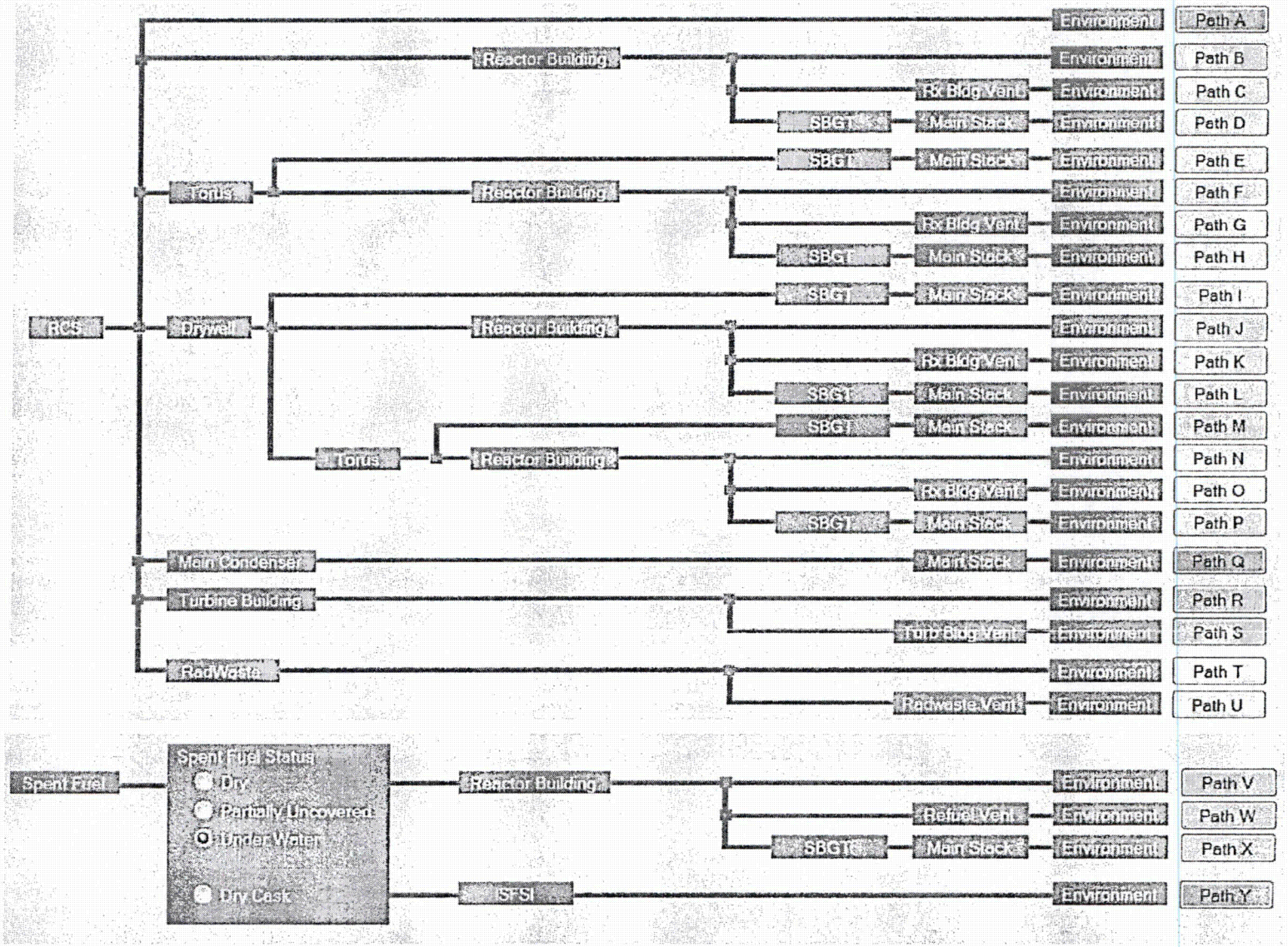
DETAILED DOSE ASSESSMENT DATE ENTRY FORM PAGE 1 OF 3

JAMES A. FITZPATRICK NPP NOTE: Complete One Form For Each Release Point DATE: ___/___/_____ TIME: _____ COMPLETED BY: _____		PRIMARY INFO SOURCE
Source Term and Reactor Status Information		
☐ NORMAL COOLANT	Has the Rx Power Level changed by ≥ 15% / hour since the start of the event (Conditions for Spiking?) ☐ YES / ☐NO Determine spiking factor using "Calculations" tab (chem sample results from Chemistry): Spiking Factor_____	Rx Eng. Operations (EOF Tech Advisor)
☐ REACTOR CORE ACCIDENT	☐ CLAD / ☐MELT	Rx Eng. (EAP44)
☐ SPENT FUEL ACCIDENT	☐ NEW ☐ OLD Date last irradiated _____. ☐ UNMONITORED SPENT FUEL ACCIDENT WITH NO OTHER METHOD APPLICABLE.	Rx Eng Operations (EOF Tech Advisor)
Reactor Status		
☐ REACTOR SHUTDOWN (<2.5%) ☐YES→ ☐NO	REACTOR SHUTDOWN AT: date/time_____ OR TIME AFTER SHUTDOWN: hh:mm _____	RECS Part 1 form Operations (EOF Tech Advisor)
Release Duration		
Estimated Release Duration: _____hrs OR ☐Unknown (4 hours)		EOF ED
Pathways (Ref. Page 3)	**Process Reduction Factor Attributes – Reference Attachment 2 for attributes applicable to the pathway of concern.**	
☐ Path A ☐ Path B ☐ Path C ☐ Path D ☐ Path E ☐ Path F ☐ Path G ☐ Path H ☐ Path I ☐ Path J ☐ Path K ☐ Path L ☐ Path M ☐ Path N ☐ Path O ☐ Path P ☐ Path Q ☐ Path R ☐ Path S ☐ Path T ☐ Path U	Drywell Reductions: (Applies to I, J, K, L, M, N, O, P only) Hold-Up Time: ☐ <2 hours ☐ 2-24 hours ☐ >24 hours ☐ Specific Time: _____hrs Drywell Sprays: ☐OFF ☐ON ☐ Specific Time:_____hrs Torus Reductions: (Applies to E, F, G, H, M, N, O, P only) Hold-Up Time: ☐ <2 hours ☐ 2-24 hours ☐ >24 hours ☐ Specific Time: _____hrs Status: ☐ Subcooled ☐ Saturated ☐ Bypassed Reactor Building Reductions: (Applies to B, C, D, F, G, H, J, K, L, N, O, P, V, W, X only) Hold-Up Time: ☐ <2 hours ☐ 2-24 hours ☐ >24 hours ☐ Specific Time: _____hrs SBGT Status: ☐ Working ☐ Not Working (Applies to C, E, H, J, L, M, P, X only) Turbine Building Reductions: (Applies to R and S only) Hold-Up Time: ☒ <2 hours Rad Waste Building Reductions: (Applies to T and U only) Hold-Up Time: ☒ Specific Time: 0 hrs (zero hours)	TSC Rad Coord. Operations (EOF Tech Advisor)
☐ Path V ☐ Path W ☐ Path X ☐ Path Y	Spent Fuel Status: ☐ Dry ☐Partially Uncovered ☐ Under Water Reactor Building Reductions: Hold-Up Time: ☐ <2 hours ☐ 2-24 hours ☐ >24 hours ☐ Specific Time: _____hrs SBGT Status: ☐ Working ☐ Not Working	

DETAILED DOSE ASSESSMENT DATA ENTRY FORM

Meteorological Information	INFO SOURCE
Met Data Description (check): ☐ Main 200', ☐ Main 100', ☐ Main 30', ☐JAF Backup, ☐Alternate data Wind Speed (mph): _____ Wind Direction (from): _____ Delta T (°F): _____ Stability Class: ____ Precip.: ☐ None, ☐ Light Rain, ☐ Moderate Rain, ☐ Heavy Rain, ☐ Light Snow, ☐ Moderate Snow, ☐ Heavy Snow	Dose Assessor
Assessment Methodology	
IF this is a Monitored Release record as applicable (Section 8.9.2):	
Monitored Release Point: ☐Stack ☐Refuel Floor Vent ☐Rx Building Vent ☐Turb Build Vent ☐Rad Waste Build Vent	Dose Assessor TSC Rad Coord.
Range: HI / LO Release Point Monitor value _____, Units: CPM / mR/hr / CPS (stack only)	
Release Point Flow Rate _____ SCFM (for Stack it should be total flow – not just SBGT flow)	
IF other than Monitored Release is selected, THEN identify Assessment Method below and follow model input request.	
Assessment Method / Procedure Reference ☐Containment Leakage (Section 8.9.3 and Attachment 9 section 1.6.2) ☐RCS Leakage (Section 8.9.4 and Attachment 9 Section 1.6.3) ☐Release Pt. Sample (Section 8.9.5 and Attachment 9 Section 1.6.4) ☐Field Team (Section 8.9.6 and Attachment 9 Section 1.6.5)	As Required: TSC Rad Coord. Operations (EOF Tech Advisor) Offsite Team Coord
Space for Notes:	
Review By (independent validation) _____ / _____ / _____ Name Date Time	

Release Pathway Selection Aide



1.0 HOLDUP TIME DETERMINATION

1.1 IF HOLDUP TIME IS NOT APPLICABLE TO A RELEASE PATHWAY, THEN **enter**
0 HOURS IN "Specific Time".

1.1.1 Drywell / Torus

A. **IF** volume of the Drywell and/or Torus has not remained approximately the same, with significant additions to source term, **THEN** select "*< 2 hours*". This is the normally selected option if fuel damage is on-going or conditions are changing (leakage evident).

B. **IF** volume of the Drywell and/or Torus has remained static with no significant additions to source term **AND** a specific holdup time can be determined, **THEN** select range from options provided **OR** select Specific Time option and enter holdup time in hours (leakage NOT evident).

1.1.2 Reactor Building / Secondary Containment

A. **IF** release is not through a normal ventilation pathway (i.e. blowout panel or hole in the side of the building) **THEN** select "< 2 hours"

B. IF release is through a normal ventilation pathway, **THEN** select a holdup time based on one of the following:

1. **IF** SBGT not running, **THEN** select "*< 2 hours*"
2. **IF** normal ventilation is running **THEN** select "*< 2 hours*"
3. **IF** SBGT running, **THEN** SELECT "*2-24 hours*".

1.1.3 Turbine Building

A. Select "< 2 hours".

2.0 DRYWELL SPRAY STATUS DETERMINATION

2.1 **IF** Spray is not applicable to the actual release pathway, **THEN** select "Off".

2.2 **IF** Spray running, **THEN** select "On".

2.3 **IF** Spray not running or status of Spray cannot be determined, **THEN** select "Off".

2.4 **IF** volume has remained static with no significant additions to source term and a Specific spray time can be determined, **THEN** select appropriate range from options provided **OR** select Specific Time option and enter spray run time in hours. This is not a normally selected option if fuel damage is on-going.

3.0 TORUS / SUPPRESSION POOL STATUS DETERMINATION

3.1 **IF** effluent stream does not pass through Torus / Suppression Pool or is unknown, **THEN** select "*Bypassed*".

3.2 **IF** effluent stream is passing through Torus / Suppression Pool and Torus / Suppression Pool water temperature is > 212°F **THEN** select "*Saturated*", otherwise select "*Subcooled*".

4.0 DRYWELL SPRAY STATUS DETERMINATION

4.1 **IF** Spray is not applicable to the actual release pathway, **THEN** select "Off".

4.2 **IF** Spray running, **THEN** select "On".

4.3 **IF** Spray not running **OR** status of Spray cannot be determined, **THEN** select "Off".

4.4 **IF** volume has remained static with no significant additions to source term **AND** a Specific spray time can be determined, **THEN** select appropriate range from options provided **OR** select Specific Time option and enter spray run time in hours. This is **not** a normally selected option if fuel damage is on-going.

5.0 STANDBY GAS TREATMENT FILTER STATUS DETERMINATION

5.1 **IF** SBGT filter is not applicable to release pathway, **THEN** select "Not Working".

5.2 **IF** SBGT is working **OR** status of filter cannot be determined, **THEN** select "Working".

5.3 **IF** SBGT is not working, **THEN** select "*Not Working*".

6.0 SPENT FUEL STATUS DETERMINATION

NOTE

The Process Reduction Factors for steps 5.1-5.3 are selected as part of the Spent Fuel pathway selection options.

6.1 **IF** spent fuel is fully exposed to air (no steam cooling is occurring) **OR** a Zirc-Fire is suspected, **THEN** select "*Dry*".

6.2 **IF** spent fuel is partially uncovered (steam cooling is occurring), **THEN** select "*Partially Covered*"

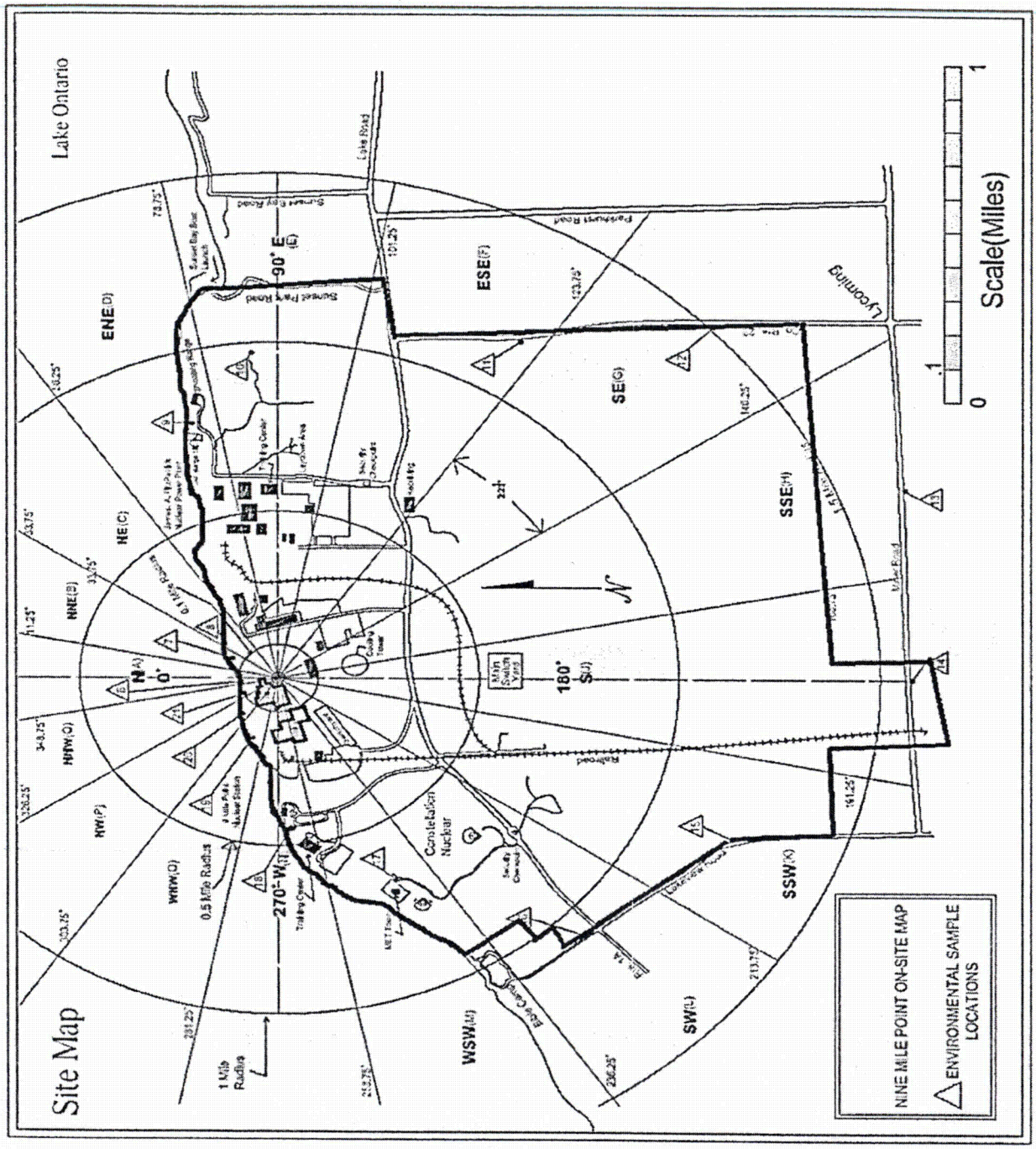
6.3 **IF** spent fuel is fully submerged, **THEN** select "*Under Water*".

6.4 For reactor building hold-up time reductions Goto 1.1.2.

6.5 For Standby Gas Treatment Filter Status Determination Goto 5.0

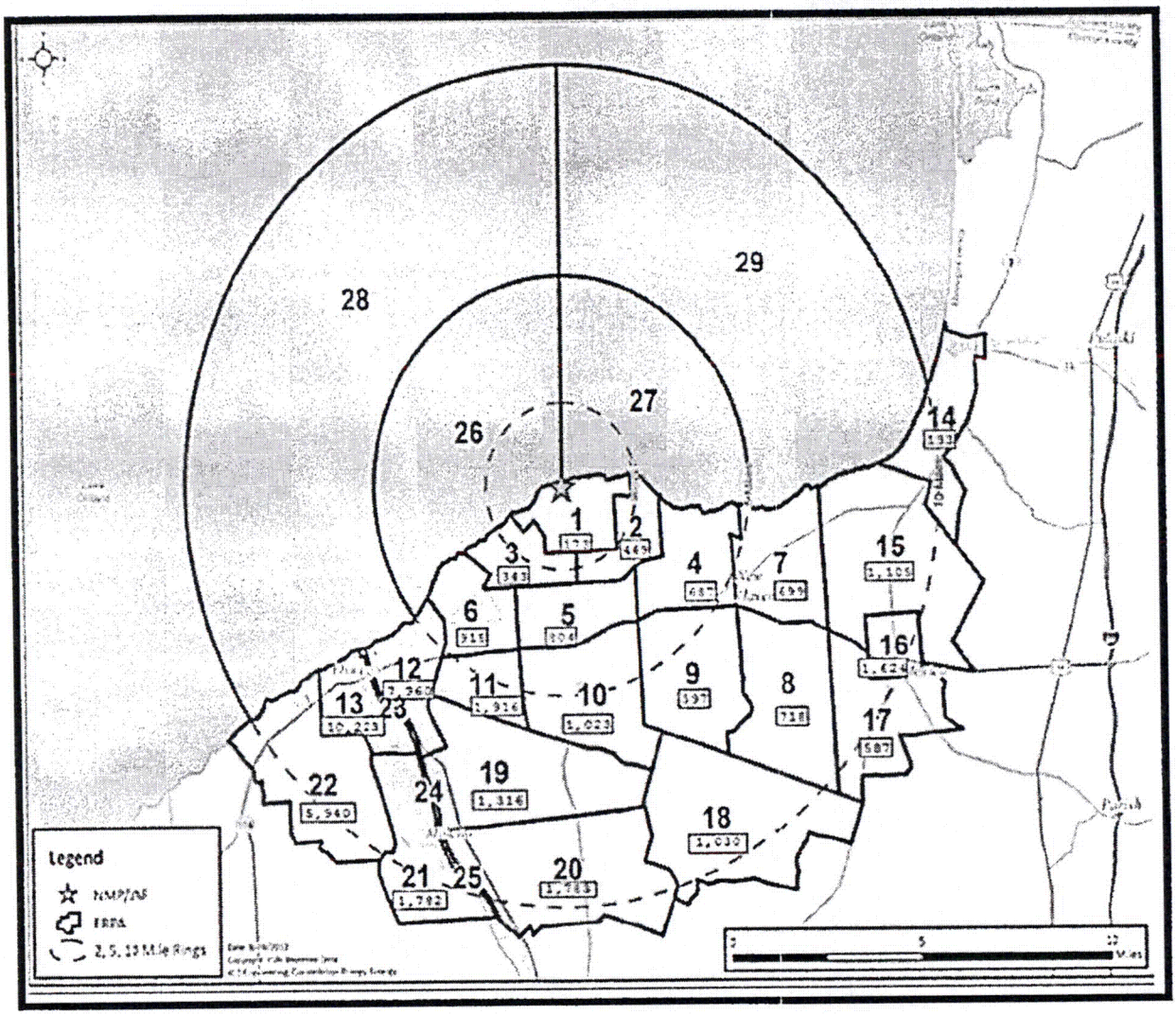
ATTACHMENT 3

SITE BOUNDARY MAP



ATTACHMENT 4

2010 POPULATION ESTIMATES EMERGENCY RESPONSE PLANNING AREAS (ERPA MAP)



ATTACHMENT 5

AIR SAMPLE AND THYROID DOSE CALCULATIONS

1.0 CALCULATIONS

1.1 Obtain Air Sample Counting Results from the Field Team Coordinator.

1.2 Select "Calculations" then "Air Sample Calculations" from menu.

1.3 Particulate Filter

NOTE

Because the Iodine fraction on the particulate filter is assumed to be zero, the calculation for the particulate filter will return a concentration value of 0.0.

1.3.1 **IF** particulate filter is not available **THEN** select "None" from Instrument dropdown.

1.3.2 **IF** particulate filter is available, **THEN** select appropriate instrument from instrument dropdown.

A. **IF** selected instrument type is a Count Rate Meter **THEN**:

1. Enter count rate meter Background Count Rate in CPM
2. Enter particulate Filter Gross Count Rate in CPM

B. **IF** selected instrument type is a Counter (scaler), **THEN**:

1. Enter Background Count Time in minutes
2. Enter Background Counts
3. Enter Filter Count Time in minutes
4. Enter Filter Gross Counts

ATTACHMENT 5

AIR SAMPLE AND THYROID DOSE CALCULATIONS

1.4. Iodine Cartridge

1.1.4 **IF** iodine cartridge is not available **THEN** select "None" from Instrument dropdown.

1.4.2 **IF** iodine cartridge is available, **THEN** select "appropriate instrument" from instrument dropdown.

A. **IF** selected instrument type is a Count Rate Meter **THEN**:

1. Enter count rate meter Background Count Rate in CPM
2. Enter iodine Cartridge Gross Count Rate in CPM

B. **IF** selected instrument type is a Counter (scaler), then:

1. Enter Background Count Time in minutes
2. Enter Background Counts
3. Enter iodine Cartridge Count Time in minutes
4. Enter iodine Cartridge Gross Counts

C.

1.5 **IF** sample returned with flow rate and sample collection time, **THEN** select "Utilize Flow Rate and Sample Collection Times".

1.5.1 Select appropriate flow rate, CFM or LPM.

1.5.2 Enter sample flow rate

1.5.3 Enter he sample collection time in minutes

1.6 **IF** sample was returned with a total volume, **THEN** select "Enter Total Volume"

1.6.1 Select appropriate volume units, Cubic Feet or Liters

1.6.2 Enter total sample flow

ATTACHMENT 5

AIR SAMPLE AND THYROID DOSE CALCULATIONS

1.7 Once all errors have been resolved, particulate filter and iodine cartridge results in µCi/cc will be calculated along with Lower Limit of Detection (LLD)

1.7.1 **IF** sample results are below calculated LLD,**THEN** LLD in corresponding units will be displayed. Result will not be used in calculated total I-131 concentration

1.7.2 **IF** sample results are at or above calculated LLD, **THEN** calculated I-13 I-131 concentration.

1.7.3 press "Transfer to Field Team Calc" button to automatically enter calculated total I-131 concentration in I-131 Conc. textbox on Field Team tab.

1.7.4 **IF** an Optional Estimated Thyroid Dose Calculation is needed, **THEN** enter time team was in plume in hours in "Exposure Time" textbox. The Estimated Thyroid Dose in Rem will be calculated.

1.7.5 Select "Print" to print sample results report.

1.7.6 Provide a copy of the report to Field Team Coordinator and the Rad Assessment Coordinator.

2.0 PRESS CANCEL TO EXIT AND CLOSE FORM.

ATTACHMENT 6

SUMMING DOSE ASSESSMENT RESULTS

In cases where releases are occurring from multiple release points at JAF or from JAF and NMP, dose assessment results can be summed using the instruction in this attachment.

1.0 Limitations and Precautions when using the Summation function

1.1 This is a summing function, not a dose integration tool. No more than 1 dose assessment from any one release point should be used at a time.

1.2 Generally dose assessments should be from the same concurrent time frame. A good rule of thumb would be assessments performed within the same 15 to 30 minute time frame

1.3 By design, dose assessment results used in summations can be from various pathways using different methodologies, source terms and metrological data. Care must be taken so that the same release is not accounted for more than once.

1.4 Dose assessment results files from multiple computers can be summed provided they are from the same dose assessment program.

1.5 Dose assessment results files from multiple units at the site can be summed by accessing the secure SFTP site where the dose assessment results files are saved. Results files for the Nine Mile Units and JAF can only be summed using the browsing option (section 2.5.). URI results files **MUST** be manually saved to the SFTP site for Nine Mile Point access to the files.

2.0 Performing Summation Assessments

2.1 Open the "Summation Form" from the Detailed Assessment main screen as follows:

A. Select the "*Blue Summation Icon*" located at the Top left tool bar.

OR

B. Select "*Calculations*" then "*Simultaneous Release Summations*".

2.2 The current dose projection can be added to the Summation Form by clicking on the "*blue + icon*" located at the Top left tool bar.

ATTACHMENT 6

SUMMING DOSE ASSESSMENT RESULTS

2.3 Determine which additional results files need to be added to the summation by reviewing the individual dose projection files. Results file name are included on the first page of the printed dose assessment report and all have a file extension of URI7.

2.4 Saved results files are added to the summation form by the Browse methods:

A. From the Table on the summation screen, select the "Browse" button for any one of the table rows.

B. The file location **C:\Dose Assessment Results Files\James A FitzPatrick\ MDY** will open, (MDY format i.e., 07212014) the numbers are the date of the projection.

C. Browse to the current date file and open the file with a DOUBLE CLICK.

D. Expand the windows explorer window so that the entire file name can be read. Use the File name and the Date Modified columns to identify the correct file to be added.

> NOTE:
>
> The Name of the projection file can be found on the "Dose Assessment" report on left side below the distance/dose table.

E. Browse to the file of interest and highlight the file then select the "*Open*" button on the browser window or double click on the highlighted file name.

1. The file data will be loaded into the program and the title displayed on the table.
2. Add any additional files that are to be summed.
3. To browse for NMP files goto step 2.5.

ATTACHMENT 6

SUMMING DOSE ASSESSMENT RESULTS

2.5 To Send and Receive URI Results Files between JAF and NMP

The **WinSCP** application is used to upload and download files from the Secure File Transfer Protocol (SFTP) Server for exchanging URI files and data between NMP and JAF for multi-source dose projections.

A. **To** upload a file to the SFTP Server**:**

1. Open the **WinSCP** application on the computer desktop using the shortcut or by selecting the windows "*Start*" icon then "all programs" select the "*WinSCP*" icon from the program list.

2. The log in credentials are as follows (case sensitive):

   a. Host Name: sftp.constellation.com
   b. User Name: ceng-dose
   c. Password: nt&ergy1

3. Select the "*LOGIN* " button.

4. **IF** a "*Continue to an Unknown Server.....*" message screen is displayed **THEN** select the "YES" button.

5. The left hand panel on the screen displays the computer (URI PC), and the right panel shows the SFTP Server. On the left panel, navigate to the directory on the computer C drive\Dose Assessment Results Files\ James A FitzPatrick\Date file (MDY format i.e., 07212014).

6. **SELECT** and drag the file to be uploaded to the right panel (SFTP Server) to an existing JAFITZPATRICK file folder or create a new file folder using the "*New Folder*" icon.

7. A dialog box will ask you to confirm the copy. **IF** asked to "Upload", **THEN** select the "COPY" button.

8. The copied file is now listed on the right panel. The transferred file is now available for download from the SFTP site.

ATTACHMENT 6
SUMMING DOSE ASSESSMENT RESULTS

B. To download a file from the SFTP Server to the URI Summation screen:

1. Open the **WinSCP** application on the desktop, and login.
2. The credentials are as follows (case sensitive):
   a. Host Name: sftp.constellation.com
   b. User Name: ceng-dose
   c. Password: nt&ergy1
3. Select the "Login" button.
4. Select the destination location for the file on your PC on the left hand side C drive\Dose Assessment Results Files\James A FitzPatrick\Date file (MDY format i.e., 07212014).
5. Select the file to be downloaded to your PC from the Right hand panel, and drag it to the Left hand side, the URI PC.
6. A dialog box may ask you to confirm the copy. **IF** asked to "Download" **THEN** select the "download" button.
7. The display will show the file residing in the folder on the URI PC.
8. Return to the summation screen.
9. Browse to the down loaded file of interest and highlight the file then select the "Open" button on the browser window or double click on the highlighted file name.
10. Close the **WinSCP** application on your desktop.

2.6 Check or uncheck the corresponding "Include" checkbox to change which results are included in the calculation.

2.7 Select the corresponding Clear button to remove the file results from the table.

2.8 Select the corresponding "View" button to view the contents of the results file.

2.9 If no unresolved errors occur, the results are automatically calculated.

ATTACHMENT 6

SUMMING DOSE ASSESSMENT RESULTS

3.0 Summation Results

3.1 On the summation table any of the files that are checked as "Include" are automatically summed and the results displayed on the screen. To remove a file from the summation remove the "check" from the include box.

3.2 Print the Dose Assessment Summation Results select the "File" dropdown menu then "Print" or click on the "Printer icon" in the tool bar.

3.3 The Dose Assessment Summation Report can be printed to a Microsoft XPS document file. To print select the "File" dropdown menu then "Print to XPS Document" or click on the "XPS icon" in the tool bar. The XPS file can be attached to e-mail or WebEOC forms for distribution and viewed via Microsoft's Internet Explorer.

3.4 Optional Views and Reports.

A. Dose Projection results may be viewed or printed on a map. From the main menu or toolbar, select "View" then "View Receptor Point Map".

1. Select the 2, 5, or 10 mile map to view.
2. Select the footprint results for either TEDE Dose or CDE Thyroid Dose
3. Select a map Zoom Level.
4. Select the Display Options

a. RASCAL Sector Results – Draws the 36 NRC sectors on the map which represents the close in doses to ~ 2.25 miles. RASCAL sectors are 10° each, split into 8 distance segments. Sector 1 starts at 5° and arcs in a clockwise direction.

b. RASCAL Puff Results – Draws the 41 x 41 grids on the map which represents the doses beyond 2.25 miles for a 10 mile calculation or all distances for a 50 mile calculation. Column 1 is on the left with row 1 on the bottom.

ATTACHMENT 6

SUMMING DOSE ASSESSMENT RESULTS

c. Sectors – Displays the classic 16, 22.5° sectors.

d. Mile Circles – Displays the 2, 5 and 10 mile distances for a 10 mile calculation or 10, 25 and 50 mile distances for a 50 mile calculation.

e. Receptor Points – Displays the preset points of interest. Additional information can be obtained by double clicking each point as needed.

f. Show Balloon – Displays an information balloon when the mouse is dragged across the map.

5. Select "Print Current View" to print the contents of the map displayed in the window to the default printer.

6. SELECT "Print View *to XPS*" to print the contents of the map displayed in the window to a Microsoft XPS document file. The XPS file can be attached to e-mail or WebEOC forms for distribution and viewed via Microsoft's Internet Explorer.

3.5 To export the plume graphic to a Google Earth file, Select "*Export*" then "*Google Earth*" from the main menu.

3.6 Print the summation results and provide the results to the Emergency Director for comparison to the Emergency Action Levels (EALs) and the current Protective Action Recommendation.

ATTACHMENT 7

<u>METEOROLOGICAL DATA WORKSHEET</u>

Date/Time	Release Height (circle one)	Source of Data (circle one)	Wind Direction (degrees)	Wind Speed (mph)	Stability Class
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
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	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			
	Elevated / Ground	EIS / Strip Chart / Other			

TABLE 1 – RELEASE POINT PARAMETERS

Release Point	Preferred Met Data	Release Height (feet)	Height Description	Design Flow Rate CFM	Low Range Rad Monitor Off-scale
Stack (one dilution fan)	200' Main	384	Elevated	6,600	1E6 CPS
Stack (one dilution fan and one SBGT train)	200' Main	384	Elevated	12,000	
Reactor Bldg Vent (below refuel floor)	30' Main	174	Ground	68,000	1E6 CPM
Refuel Floor Vent	30' Main	174	Ground	77,000	1E6 CPM
Turbine Bldg Vent	30' Main	174	Ground	118,000	1E6 CPM
Radwaste Bldg Vent	30' Main	112	Ground	36,000	1E6 CPM
Unmonitored	30' Main	33*	Ground	Estimated	N/A
***URI / RASCAL assumes a release height of 10 meter for unmonitored ground level releases**					

Table 2 – Met Data Source Preferences on the following page.

ATTACHMENT 8

STACK AND VENT PARAMETERS

TABLE 2 – MET DATA SOURCE PREFERENCES

Parameter	Hierarchy	Elevated Release	Ground Release
Wind Speed & Direction	Primary	200' Main	30' Main
	Substitute	100' Main	
		JAF Backup	
		30' Main	200' Main
Stability	Primary	200' ΔT	100' ΔT
	Substitute	100' ΔT	200' ΔT
		200' σθ	30' σθ
		100' σθ	
		JAF Backup σθ	
		30' σθ	200' σθ

1.0 GROUPINGS / OPTIONS

1.1 **Source Term Group** – this option allows the user to select the source term for the event.

1.1.1 **Normal Coolant** – The "Normal Coolant" option is selected IF there is no damage to the core. This causes URI to utilize a source term similar to normal reactor coolant concentrations as the basis for source term.

1.1.2 **Norm Coolant with Spiking** – In addition to selecting the "Normal Coolant" option, the user can select the "Spiking Factor" option. This option should be selected when the plant shutdown was quick or 'hard' such a reactor trip or rapid depressurization which may cause certain radionuclides typically cesiums and halogens to significantly increase in concentration in the coolant following the shutdown. Noble gas concentrations in the reactor coolant are not affected by spiking conditions. A hard shutdown may be assumed if the plant was shut down rate of greater than 15 % of reactor power per hour. The Coolant spiking factor allows URI to increase the normal coolant activity by a default factor of 30 and can accept user enter spiking factors up to a maximum value of 1000. The spiking factor can be determined by chemistry samples of the reactor coolant at any time. Changes to the spiking factor should be verified through Chemistry or Reactor Engineering when possible.

1.1.3 **Reactor Core Accident** – "Reactor Core Accident" is selected if there is or suspected to be damage to the fuel assemblies which would release core inventory to the reactor coolant system.

A. The "Clad" damage option of the "reactor core accident" option is selected if core conditions have caused the fuel pin cladding to fail but the core temperature has not become sufficiently high to cause melting of the ceramic fuel matrix itself. Selecting this option causes the URI to utilize the core inventory mix with clad damage core release factors as the basis for source term.

B. The "Melt" option of the reactor core accident is selected if core conditions have resulted in core temperatures that would be expected to cause melting of the ceramic fuel matrix itself. This selection causes URI to utilize the core inventory mix with core melt release factors as the basis for source term. Reactor Engineering should be consulted before using this factor.

ATTACHMENT 9

URI PARAMETER GUIDE

1.1.4 **Spent** Fuel Accident - The "Spent Fuel Accident" option is selected if the incident involves damage to spent fuel in a depressurized condition. The age of the fuel since discharge ("New" or "Old") is used to decay the activity in the fuel assembly(s) involved in the incident.

A. The "New" option uses a source term representative of spent fuel that has been irradiated within 6 months of the event. Reactor Engineering or TSC Engineering should be consulted when using this factor.

B. The "Old" option uses a source term representative of spent fuel that has not been irradiated within 6 months of the event. Reactor Engineering should be consulted when using this factor.

1.2 **Meteorological Data Group** – this option allows the user to select and enter the meteorological data into the URI which defines the dispersion for the calculation. URI defaults to a pre-determined site meteorological source based on release pathway (i.e., 200 ft or 30 ft). These should not be changed unless data for the selected source is not available. Meteorological data is obtained as described in EAP-42, "Obtaining Meteorological Data". Fifteen minute averages are use as input data.

1.2.1 Only ONE onsite tower location (200 ft , 30 ft or alternate) may be selected at a time.

1.2.2 More than one offsite tower site may be selected. If a tower option is selected then meteorological data for that tower is required. Care should be taken when using a meteorological source away from the site due to the effects on the projections further out from the site.

1.2.3 The "Alternate Data" option on the meteorological data entry box is only selected if onsite meteorological tower data in not available and data from offsite sources such as the National Weather Service (NWS) is used. URI assumes that the geographical source of the data is onsite.

1.2.4 Wind Speed – Wind speed is typically obtained from the onsite meteorological tower.

1.2.5 Wind Direction – Wind direction is typically obtained from the onsite meteorological tower. User assistance is available by double clicking in the wind direction box which opens a wind rose graphic. Select the wind direction FROM by clicking on one of the sixteen directions.

1.2.6 Atmospheric stability can be entered as a stability class of A, B, C, D, E, F or G. If you are using the Sigma Theta stability, **Do NOT** enter a Delta T value. IF a Delta T value is entered, URI will automatically enter a stability class based on the Delta Temp value. To remove the Delta T value, unselect the meteorological site used then reselect.

To view the description of the stability classes along with the Sigma Theta ranges associated with the stability class, check the "use" box for the desired met tower, then double click on the stability class "letter box" which opens a table graphic displaying stability class descriptions and sigma theta ranges.

If the stability class is not available then stability class can be determined using EAP-42, "Obtaining Meteorological Data"

1.2.7 Precipitation affects the downwind dose by washing out Specific isotopes from the plume. Because washout can have an effect on the iodine concentration available for inhalation the precipitation parameter should be based on real time observations when selecting other than "none". Use the drop down menu to select the appropriate condition. No other conditions are allowed other than those listed.

1.3 **Reactor Status Group** – this option is used to modify the mix available for release based on the decay of each individual isotope in the mix.

1.3.1 Reactor Shutdown - The user enters the date and time that the reactor was shutdown/tripped.

1.3.2 Last Irradiated – The user enters the date and time that the spent fuel was last irradiated. Obtain information from Reactor Annalist or TSC Engineers.

1.4 **Release Duration Group** - This option allows the user to input the projected release duration. The default value is 4 hours. The source term is applied from the current time forward for the duration specified, then the release source is turned off by adding a source term data line of all zero values (performed internally).

ATTACHMENT 9

URI PARAMETER GUIDE

1.5 **Selected Pathway Options Group** - this option allows the user to select the pathway for the event. Pathways may or may not be available depending on the selections from the Source Term grouping. (e.g. the spent fuel pathways will be inactive IF Reactor Core Accident is selected).

1.5.1 Pathways – this option allows the user to select the most appropriate release pathway for the event (i.e. Path A-O). Only one pathway may be selected at a time. For an event were multiple pathways are active, the user must sum the release data or use field team data to correct projections.

A. **Pathway A** – Activity released directly to the atmosphere from reactor coolant bypassing BOTH primary and secondary containment (example RCS blowing down to the CST).

B. **Pathway B** – Activity released directly into Reactor Building Bypassing primary containment (example leak at RWCU pump) with Reactor Building LEAKING directly to the environment.

C. **Pathway C** - Activity released into the reactor building bypassing primary containment (example RWCU pump seal failure) and activity being released through normal Reactor Building ventilation

D. **Pathway D** - Activity released into the reactor building bypassing primary containment (example RWCU pump seal failure) and activity being released through Stand by Gas Treatment.

E. **Pathway E** - Activity released directly into the Torus bypassing the drywell (example main steam safeties open) and activity being released directly from the torus through Stand by Gas Treatment ventilation.

F. **Pathway F** – Activity released into the Torus NOT into drywell first (example safeties lifted) with leakage of Torus into Reactor Building (example stuck open vacuum breaker) with Reactor Building LEAKAGE directly to the environment.

G. **Pathway G** - Activity released directly into the Torus bypassing the drywell (example main steam safeties open) and then activity leaking/escaping from the torus into the Reactor Building (example vacuum breaker leakage) and activity being released through normal Reactor Building ventilation.

H. **Pathway H** - Activity released directly into the Torus bypassing the drywell (example main steam safeties open) and then activity leaking/escaping from the torus into the Reactor Building (example vacuum breaker leakage) and activity being released through Stand by Gas Treatment ventilation .

I. **Pathway I** - Activity released into the Drywell (example RCS pipe break in drywell) and activity being released directly from the Drywell without passing through the torus first through Stand by Gas Treatment ventilation.

J. **Pathway J** – Activity released into the Drywell without blow down to Torus with Drywell leaking into the Reactor Building (example Airlock seal failure) with Reactor Building LEAKAGE directly to the environment.

K. **Pathway K** - Activity released into the drywell (example RCS pipe break in drywell) and then activity leaking/escaping from the Drywell into the Reactor Building (example airlock or penetration leakage) and activity being released through normal Reactor Building ventilation.

L. **Pathway L** - Activity released into the drywell (example RCS pipe break in drywell) and then activity leaking/escaping from the Drywell into the Reactor Building (example airlock or penetration leakage) and activity being released through Stand by Gas Treatment ventilation.

M. **Pathway M** - Activity released into the Drywell (example RCS pipe break in drywell) with blow-down into the torus and activity being released through the torus through Stand by Gas Treatment ventilation.

N. **Pathway N** – Activity released into Drywell with blowdown into the Torus and Torus leaking into the Reactor Building (example stuck open vacuum breaker) with Reactor Building LEAKAGE directly to the environment.

O. **Pathway O** - Activity released into the drywell (example RCS pipe break in drywell) with blow-down into the torus and then activity leaking/escaping from the torus (example stuck open vacuum breaker) into the Reactor Building and activity being released through normal Reactor Building ventilation.

P. **Pathway P** - Activity released into the drywell (example RCS pipe break in drywell) with blow-down into the torus and then activity leaking/escaping from the torus (example stuck open vacuum breaker) into the Reactor Building and activity being released through Stand by Gas Treatment ventilation.

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Q. **Pathway Q** - Activity released through steam to the condenser, with condenser in service and under vacuum with activity released through condenser off-gas to the Main Stack.

R. **Pathway R** – Activity released by steam into the Turbine Building NOT to the condenser with Turbine Building LEAKAGE directly to the environment.

S. **Pathway S** - Activity released by steam into the Turbine Building with activity vented to the atmosphere through normal turbine building monitored ventilation.

T. **Pathway T** – Activity released into the Radwaste Building (example from RWCU letdown) with Radwaste Building LEAKAGE directly to the environment.

U. **Pathway U** - Activity released into the radwaste building with ventilation venting to the environment through the Radwaste Vent. This is for core activity, not radwaste activation / fission product mixes.

V. **Pathway V** - Activity released from spent fuel in the fuel pool (example mechanical damage or loss of water in pool) into the into the Reactor Building and/or Refuel floor area with building LEAKAGE directly to the environment (example damage to roof).

W. **Pathway W** - Activity released from spent fuel in the fuel pool (example mechanical damage or loss of water in pool) into the Reactor Building and/or Refuel floor area with activity being released through normal Reactor Building /refuel floor ventilation.

X. **Pathway X** - Activity released from spent fuel in the fuel pool (example mechanical damage or loss of water in pool) into the Reactor Building and/or Refuel floor area with activity being released through Stand by Gas Treatment ventilation.

Y. **Pathway Y** – Release from damage to assemblies in dry cask outdoors. Release direct to the environment.

1.5.2 Process Reduction Factors (PRF) - These options allows the user to select the PRFs based of the pathway section. The Process Reduction Factor is used to modify the estimate of the amount of activity that is available for release to the environment to determine the source term – the activity that is actually released. The PRF allows the calculation to take into account the various possible reduction mechanisms (active and passive engineering controls) between the points where the radioactivity is first available to be released and the point of release to the environment. These include such factors as filtration, removal by sprays, scrubbing by passage through water, and fallout or plate-out on surfaces within buildings or structures based on hold up times in buildings or containment volumes. Guidance for selecting PRF values is contained in Attachment 2. The following PRFs are used by the program:

A. Drywell Reductions

1. Hold Up Time-Allows the user to select the time that the activity has been held up in the containment since released from the reactor coolant system (i.e. <2 Hours, 2 – 24 Hours, > 24 Hours, Specific Time).
2. Sprays – Allows the user to select IF containment spray has been initiated (i.e. OFF, ON, Specific Time).

B. Torus Reductions

1. Hold Up Time-Allows the user to select the time that the activity has been held up in the torus since released from the reactor coolant system (i.e., < 2 Hours, 2 – 24 Hours, > 24 Hours, Specific Time).
2. Status – Allows the user to select the torus status.
   a. Subcooled
   b. Saturated
   c. Bypassed

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URI PARAMETER GUIDE

C. Reactor Building Reductions

1. Hold Up Time-Allows the user to select the time that the activity has been held up in the Reactor Building since released from the reactor coolant system (i.e., < 2 Hours, 2 – 24 Hours, > 24 Hours, Specific Time).
2. SBGT Status – Allows the user to select IF the SBGT system filters are in operation and functioning as expected (i.e., Working, Not working)

D. Turbine Building Reductions:

1. Hold Up Time-Allows the user to select the time that the activity has been held up in the Turbine Building since released from the reactor coolant system (i.e. <2 Hours, 2 – 24 Hours, > 24 Hours, Specific Time).

E. Turbine Building Reductions:

1. Hold Up Time-Allows the user to select the time that the activity has been held up in the Turbine Building since released from the reactor coolant system (i.e. <2 Hours, 2 – 24 Hours, > 24 Hours, Specific Time).

F. Radwaste Building Reductions:

1. Hold Up Time-Allows the user to select the time that the activity has been held up in the Radwaste Building since released from the reactor coolant system (i.e. <2 Hours, 2 – 24 Hours, > 24 Hours, Specific Time).

1.6 Release Tabs – These tabs allow the user to select the appropriate release rate format for the release pathway.

1.6.1 Monitored Release Tab - is used when the release source data from installed effluent monitors (Stack and Vents) is available and the monitors are providing usable data

A. Select the desired monitor from the available monitor list.

B. Enter monitor reading in the designated units.

C. Release Point Flow Rate.

1.6.2 Containment Leakage Tab – is used when the release pathway does not include normal plant effluent monitors, supports assessment of source term using the Containment High Range Radiation Monitors (CRM) and those monitors are providing usable data. This group also supports developing source term information from assumptions about plant conditions with no plant radiation or effluent data.

A. Method – This option allows selection of a source term that applies to a containment release directly to the environment. The source term selected in this option must correspond with the source term selected in the Source Term Group.

1. Normal Coolant No Spiking – This assumes normal coolant activities as the source term. This option is only selectable IF the normal coolant option has been selected in the source term grouping.
2. Normal Coolant with Spiking – This assumes normal coolant activities multiplied by a factor of 30 as the source term. This option is only selectable IF the normal coolant with spiking option has been selected in the source term grouping.
3. Percent Fuel Damage – This option may only be selected IF the "Reactor Core Accident" option is selected in the source term grouping. The percent damage is applied to the total activity available for release from the core in either the clad or melt scenario, as selected in the source term grouping. This establishes the magnitude of the activity available for release.
4. Containment Radiation Monitors – The Containment radiation monitors (high range monitors) option may also be available for the core damage source term. The magnitude of the activity available for release from the containment is scaled based on the containment radiation monitors.

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URI PARAMETER GUIDE

B. Release Mode – this option allow the user to select the type of containment leakage. The Release Mode option will default to the design basis leak rate of containment established in the program setup. The user may change this value.

1. Leakage – Input the amount of containment leakage in percent per day. Range is 0 – 100 percent.
2. Failure To Isolate – assumes that the entire activity available for release in the containment atmosphere will be released in the period defined in the database. The value for JAF is 24 hours.
3. Catastrophic Failure – Catastrophic failure assumes that the entire activity available for release in the containment atmosphere will be release in 1 hour.
4. Calculated Containment Leak Rate – This option allows the user to enter a Specific/calculated flow rate.

1.6.3 RCS Leakage – this option is used when the release pathway does not include normal plant effluent monitors and supports developing source term information from assumptions about plant conditions with no plant radiation or effluent data.

A. Method – This option allows selection of a source term to apply for RCS leakage directly to the environment. Method selections will be available / unavailable based on selections in the source term grouping.

1. Normal Coolant No Spiking - This assumes normal coolant activities as the source term. This option is only selectable if the normal coolant option has been selected in the source term grouping.
2. Normal Coolant with Spiking – This assumes normal coolant activities multiplied by a factor (user supplied) as the source term. This option is only selectable IF the normal coolant with spiking option has been selected in the source term grouping.
3. Percent Fuel Damage – This option may only be selected if the core damage option is selected in the source term grouping. The percent damage is applied to the total activity available for release from the core in either the clad or melt scenario, as selected in the source term grouping. This establishes the magnitude of the activity available for release.

B. Release Mode – this option allows the user to input a known RCS leak rate or select unknown leak rate.

1. Unknown Leak Rate – This field will default to the release of the entire reactor coolant system in a period defined in the unit setup (typically in 24 hours).
2. Calculated RCS Leak Rate – This allows the user to input a RCS leak rate in gpm.

1.6.4 Release Point Sample – This option is used when there is a valid sample collected from the effluent release point. The release point sample option does not scale the release magnitude, apply process reduction factors, or apply assumed mixes. It uses only the inputted data. Therefore, the sample data should include noble gas, iodine, and particulate release information. Sample results are inputted using the units uCi/cc and a path flow rate in SCFM.

A. Flow Rate (SCFM) –Input the flow rate of the release pathway in CFM.

B. Isotope / uCi/cc – Input the uCi/cc activity for the isotopes listed. Not all isotopes need a value.

C. A list of 33 isotopes is provided in the isotope input selection box. Enter the observed concentrations of each identified isotope. Isotopes that were not identified in the samples should be left as '0'.

1.6.5 Field Team – This option is used to estimate the source term and to calculate a complete dose projection based on readings obtained from monitoring teams in the field. This option allows the user to input field team data into the model. Caution should be taken when using this option for projections since accuracy is dependent on how near the field team is to plume centerline. URI assumes that surveys/samples are taken at or close to the plume centerline, exceeding PAR limits will not be highlighted when using field team data.

A. Analysis Basis – These options allow the user to input the field team survey results.

1. Survey – This radio button is selected by default when the Field Team option is selected.
2. Downwind (Miles) – This allows the user to input sample distance from the plant in miles.
3. Exposure Rate (mR/hr) – This allows the user to input the gamma reading at the sample point.

ATTACHMENT 9

URI PARAMETER GUIDE

4. I-131 Concentration (uCi/cc) – This allows the user to input the I-131 concentration at the sample point. This data should be obtained from the Offsite Team Coordinator. IF no data is available, then insert "0" uCi/cc.
5. Survey Time – This allows the user to input the time the survey was taken.

B. Travel Information –The travel time is calculated from the wind speed and distance downwind. The release time is calculated from the activity measured in relation to release rates. There is no user input into these fields.

The Source term and dose projections are scaled based on the observed measurements. URI assumes IF only a gamma measurement is used, then all values are scaled from that reading. IF a gamma and an iodine sample are obtained, the gamma is used to scale doses from noble gases and the iodine is used to scale the iodine and particulate doses for both CDE Thyroid and TEDE.

1.6.6 Group Release Rates (GRR) –This METHOD Tab is NOT applicable at JAF and is grayed out.

1.7 The Process Assessment Button

1.7.1 Whenever any input field is changed on any of the groupings, pathway selection, or the tabs, the Process Assessment button will be displayed over top of the results from the previous assessment.

1.7.2 When all new input selections are completed, select the Process Assessment button bar. A green progress bar will be shown and when the computations are completed, the new results will be displayed and the Process Assessment button bar will be removed.

1.7.3 IF all inputs are not complete or are not within defined bounds the following indicators will be present:

A. There will be a red dot next to the invalid value

B. There will be a message (Calculation cannot be completed until all errors are resolved) in the lower left corner of window.

C. The Process Assessment button will have a message (Calculation cannot be completed until all errors are resolved) and the Process Assessment button bar will not function

ATTACHMENT 10

ASSESSMENT RESULTS DISPLAYS, REPORTS AND MISCELLANEOUS CALCULATIONS

1.0 MAIN SCREEN: URI RESULTS DISPLAY

1.1 Results are presented for the 7 standard RASCAL distances that are outside of the farthest site boundary out to 10 mile plus an additional line for the furthest distance > PAG if applicable. The six standard distances for the 50 mile assessment are displayed. Results for distances closer to the site than the farthest site boundary are not shown. The green line after the SB row denotes where offsite dose results begin.

1.2 TEDE or CDE (JAF uses child thyroid) results that exceed the EAL value for SAE will be highlighted orange to indicate that the dose limit has been exceeded.

1.3 TEDE or CDE results that exceed the EPA PAG dose values (1 Rem TEDE, 5 Rem CDE(Thy)) will be highlighted in RED.

1.4 Results in URI are reported for the calculation region (sector / distance slice or puff grid) and are not peak values at a Specific geographical point.

1.5 Results columns

1.5.1 Exposure rate is the RATE (mR/hr) value that would be observed on a gamma measuring device

1.5.2 External is the dose commitment for the duration of the exposure from the plume (mrem or rem)

1.5.3 Inhalation is the dose commitment to the whole body from internally deposited radionuclides (mrem or rem)

1.5.4 Deposition is the integrated external dose from radionuclides deposited on the ground. This integration is performed for a period of 4 days following termination of the release, regardless of the release duration (mrem or rem).

1.5.5 TEDE is the sum of the external, inhalation, and deposition doses (mRem).

1.5.6 CDE thyroid is the dose to the thyroid from internally deposited radionuclides. The child thyroid dose (mRem) is used at JAF.

1.6 Release Rates - A summary of the total release rate of noble gases, iodines, and particulates is shown at the bottom right corner of the URI screen.

1.7 Emergency Action Level Classification - The EAL classification, based on the dose projections, is shown just below the dose table or the map depending on the URI mode used. Only the Site Area Emergency and the General Emergency classification are applicable at JAF for offsite dose based EALs. These classifications are based on the dose projections and will not reflect the emergency status of the plant for EALs that are not based on dose to the public.

ATTACHMENT 10

ASSESSMENT RESULTS DISPLAYS, REPORTS AND MISCELLANEOUS CALCULATIONS

1.8 Readings to PAG's - The monitor readings required to reach the PAGs at the site boundary, 2 miles, and 5 miles are shown in the Readings to PAG grouping at the bottom right of URI screen. These values represent the monitor readings that would have to exist to reach the TEDE or CDE Thyroid PAG at the distances shown with the current dispersion conditions. The monitor readings to PAG calculation only applies to the effluent and containment radiation monitor.

1.9 PAG Distance (Miles) – Shows the distance at which PAGs have been exceeded and is located in the upper right corner of the URI screen PAR display.

1.10 Globe Icon – Located under the "Monitored Release" tab at top of screen will pop up the "Evacuation Area Overview". This graphic displays of the areas of the EPZ projected to exceed the PAG guidelines (1 Rem TEDE, 5 Rem Child Thyroid), which is normally the evacuated zones.

1.11 The program does not make protective action recommendations. The "Evacuation Area Overview" should be used to assess protective actions based on reference to other procedures.

2.0 REPORTS

2.1 The PRINT icon in the center top, just below the Monitored Release tab provides hard-copy printout or XPS document output of the Dose Assessment Report or Receptor Point Report. The print to XPS document will store the report on the hard drive.

2.2 The dose assessment report includes the information shown on the Input/ results page, the PAR display, and the detailed isotopic source term.

2.3 The print Preview icon displays the same reports without producing hard copy printouts or XPS document files.

3.0 PLUME MAP

3.1 The View receptor point locations icon (10 Mile EPZ Map) located in the icon group in the upper left of URI screen provides a graphical, color coded map display of the results.

3.2 Numerous display options are available. Select these options by clicking the radio button or checkbox.

3.3 The plume display is also available through the "View" tab on the menu bar.

3.4 Time to thresholds - The time required to reach predefined thresholds (for example the PAG limit) can be displayed using the view menu and selecting "Time to Thresholds".

4.0 ADDITIONAL CALCULATIONS AND REPORTS

4.1 Other calculations and reports are available through the Calculations menu

4.1.1 Air Sample Calculations – Tool to calculate the iodine concentration from a field air samples. The Air sample calculation form is also available from the calculator icon at the upper left.

4.1.2 Conversion Calculations – Tool that allows the user to perform several conversion calculations. Most useful to convert uCi/cc to uCi/sec based on CFM flow.

4.1.3 Distances and Bearing – Tool that calculates the distance and compass direction between any two user input points.

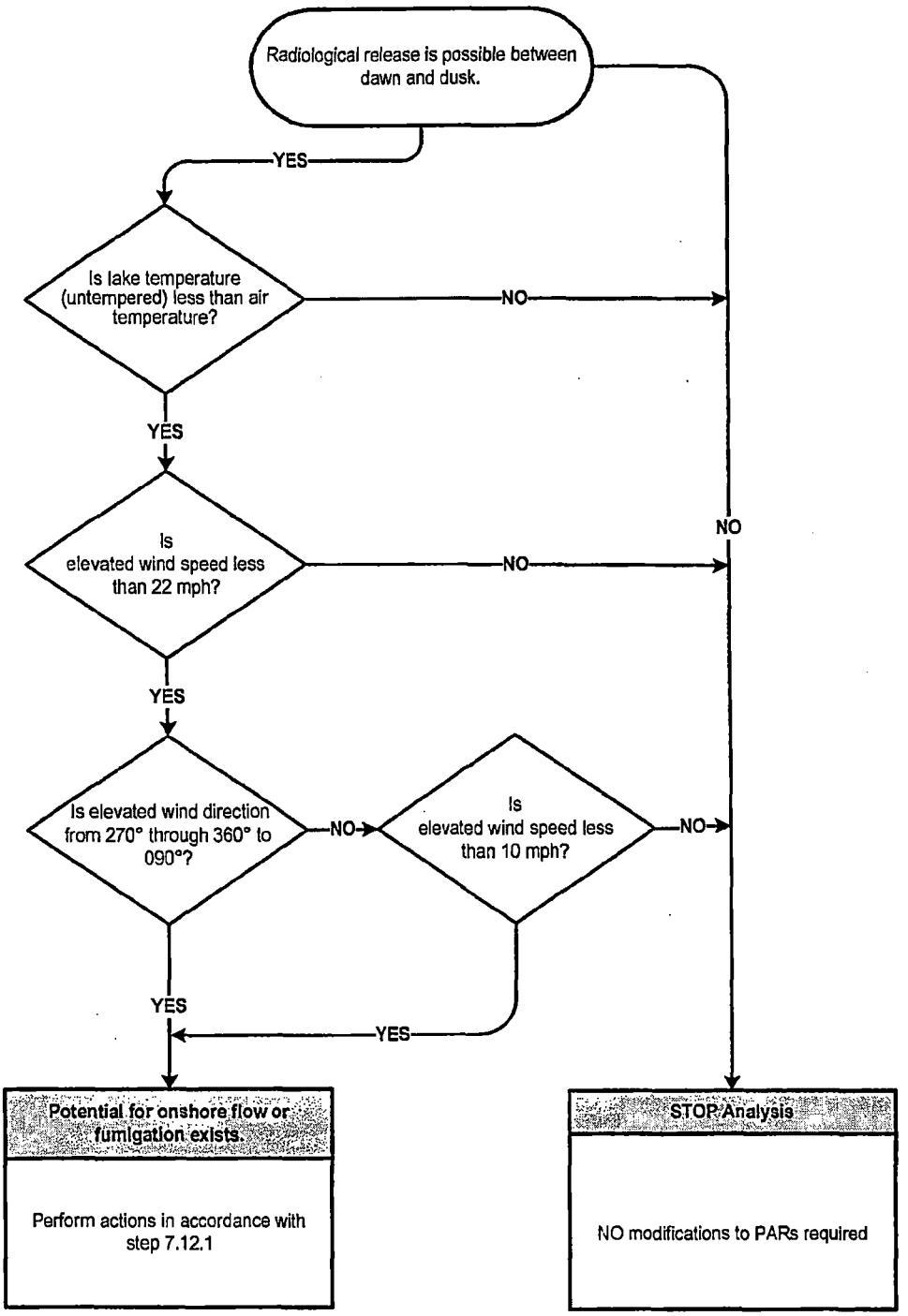
4.1.4 EDE to TEDE Ratios – Table that shows the EDE/TEDE ration with Iodine and the EDE/TEDE ratio without Iodine to calculate the field team TEDE dose based on SRD reading.

A. EDE X ratio = TEDE dose

4.1.5 Source Term Data – Tool that displays the calculated release rate (source term) for individual isotopes for the current dose projection.

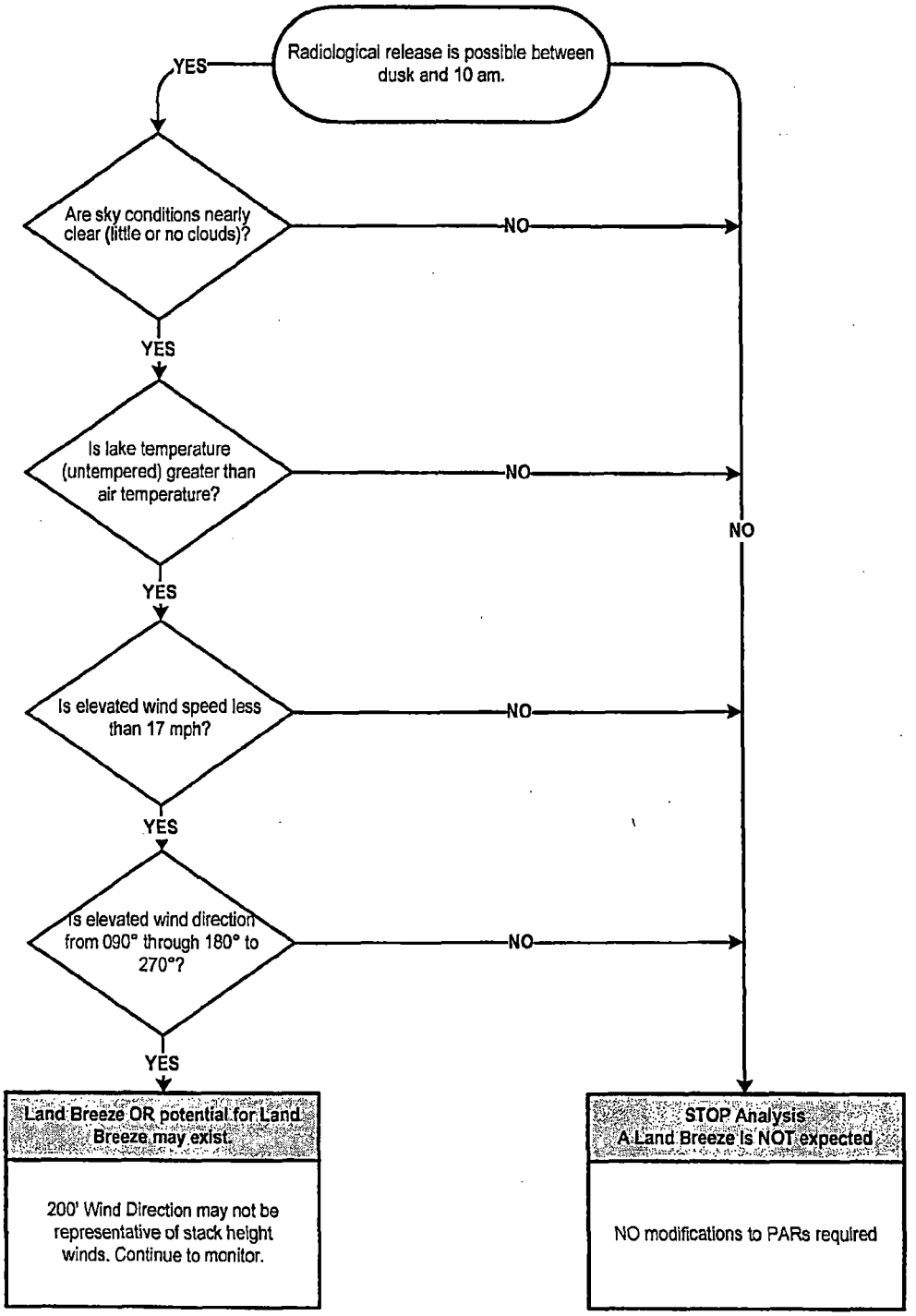
ATTACHMENT 11

LAKE AND LAND BREEZE FLOWCHART



ATTACHMENT 11

LAKE AND LAND BREEZE FLOWCHART



ATTACHMENT 12

URI Computer Program Loading Instructions

1.0 In the event the URI computer program does not run when initiated, the following instructions are provided to allow for the loading of the program. Loading of the program should be performed by IT personnel when they are available. If IT is not available the user should attempt to go to another computer that has the URI software loaded and attempt to run it from there before attempting to load the software on another computer.

2.0 Instructions for loading the URI program

2.1 Locate the backup URI program CD disk or flash drive in the facility.

2.2 Load the disk/flash drive and open the URI Program file.

2.3 Using windows explorer copy the two **.DLL** files listed below to the "C:\windows\system32" folder.

2.3.1 **DFORMD.DLL** and **DFORRT.DLL** (NOTE: These DLL's do not need to be registered for URI to run).

2.4 Locate the JAF URI program file on the CD/flash drive.

2.5 Copy the entire JAF URI program folder to the "C" drive on the target computer. IF the folder already exists then it is recommended that the folder be deleted and replaced with the folder on the CD disk/flash drive.

2.6 Open the JAF URI program folder on the C drive using windows explorer to view the contents. Start the program by double clicking the URI executable (application) file on the target computer.

2.7 A test assessment run must be run to ensure all the files are in place to complete the calculation and printing can be performed. It is recommended that this be performed by someone who is not logged in with administrative rights to the computer.

3.0 IF the program is being installed by IT, then all common shortcuts to the program should be verified as time permits.

Procedure/Document Number: EAP-4B	Revision: 1
Equipment/Facility/Other: N/A	
Title: Detailed Dose Assessment	

1. Editorial adjustment such as spelling, grammar, structure, bullet adjustments for added deleted sections, etc.
2. Section 3.1 - delete "General" and change to "an" emergency has been declared and the EOF is operational.
3. Delete Section 5.4 TSC Dose Assessment Staff – alignment to the Fleet Standard ERO removes TSC Dose Assessment positions. Dose assessment is performed initially from the Control Room per EAP-4A and then transfers directly to the EOF when operational.
    a. Removed all reference to TSC performing dose assessment functions throughout the procedure.
        i. Section 1.1 reference to TSC deleted.
        ii. Section 5.3 reference to TSC deleted.
        iii. Section 7.1 deleted.
4. Deleted from section 5.5: "The RC is responsible for offsite dose assessment at the TSC until the EOF is staffed." Alignment to the Fleet Standard ERO removes TSC Dose Assessment positions. Dose assessment is performed initially from the Control Room per EAP-4A and then transfers directly to the EOF when operational.
5. Added Section 5.5.1: "The RC is responsible to support the EOF Dose Assessment group by determining the release pathway and providing that information to the EOF Dose Assessment group."
    a. Added Section 8.5.1 to provide direction to request the RC to determine the release pathway utilizing Attachment 1 page 3, Release Pathway Selection Aide.
6. Added Section 5.6: TSC Reactor Engineer (RxE): is responsible to the EOF Dose Assessment group to develop core damage estimates consistent with EAP-44, Core Damage Estimation, for use in the URI dose assessment model.
7. Revised section 7.3 to reflect recording met data in WebEOC or on the Meteorological Data Worksheet – either is applicable.
8. Revised Section 7.4 to clarify conditions that would warrant re-performing dose projections and removed the "approximately 15 minute" criteria.
9. Added section 8.1.7 to clarify expectations for completing Detailed Dose Assessment Data Input Form Attachment 1 and paperwork requirements for URI runs that will used for decision making – i.e. classifications and/or PARs.
10. Added clarifying information to section 8.4.3.C – this information clarifies the spent fuel option and is already include in Step 1.1.1 of Attachment 9.

11. Delete Section 8.5.3 – the following step more clearly defines action required related to process reduction factor – this deletion removes duplication while providing clarity. 12. Added a note to section 8.5.4 to reinforce step 8.5.4 information. 13. Added word "- direction" to step 8.6.1.B.3 to clarify the step with no intent change. 14. Section 8.9.1 added order of priority guidance when, for "Assessment Methodology" selection, multiple Methods are available. This is for improved human factors – reduces decision making by providing clear instruction. 15. Sections 8.9.3.A.1.a and 8.9.4.A.1 added "Rx Engineer" to clarify who to obtain information from. 16. Added Note to Section 8.9.6.A: EAP-5.3 attachments provide distances from the center of the NMP/JAF site for various sample locations. The URI software provides more detailed algorithms that may be used to determine distances for sample points from the JAF station. 17. Human factors improvements to Attachment 1: rearranged the form to better align to the URI model inputs and order, added several procedure section references and added a screen shot of the URI Pathway Selection screen. 18. Revised Attachment 2 section 1.1.1 – to clarify terminology and remove superfluous wording with no change in intent. 19. Removed Attachment 3 – the form is not required and is not necessary. Human factors to prevent transcription errors of data. Other form numbering adjusted accordingly. 20. Attachment 5 – deleted reference to exposure meter for air sample calculations – there is no option in URI for exposure meter input for air sample calculations therefore this option is not used and may cause confusion. Provided clarifying wording on instrument selection to prevent duplication with no intent change. 21. Revised Attachment 6 step 3.6 to have the user print the results from URI rather logging results on an attachment. Human factors – remove the possibility of transcription errors. 22. Changed Shift Manager to Emergency Director on Attachment 6, Section 3.6 to reflect the position that actually performs the function. 23. Revised Attachment 8 to include effluent monitor pathway rad monitor scale as a reference.	☐YES 50.54(q)(3) Evaluation is NOT required. Enter justification below and complete Part VI.	☒ NO Continue to next part

Justification:

☐ Bounding document attached (optional)

Part III. Applicability of Other Regulatory Change Control Processes

Check if any other regulatory change processes control the proposed activity.(Refer to EN-LI-100)

NOTE: For example, when a design change is the proposed activity, consequential actions may include changes to other documents which have a different change control process and are **NOT** to be included in this 50.54(q)(3) Screening.

APPLICABILITY CONCLUSION

☒ If there are no controlling change processes, continue the 50.54(q)(3) Screening.
☐ One or more controlling change processes are selected, however, some portion of the activity involves the emergency plan or affects the implementation of the emergency plan; continue the 50.54(q)(3) Screening for that portion of the activity. Identify the applicable controlling change processes below.
☐ One or more controlling change processes are selected and fully bounds all aspects of the activity. 50.54(q)(3) Evaluation is NOT required. Identify controlling change processes below and complete Part VI.

CONTROLLING CHANGE PROCESSES

The process is controlled by 50.54q.

Part IV. Editorial Change Is this activity an editorial or typographical change such as formatting, paragraph numbering, spelling, or punctuation that does not change intent? **Justification:** **Item 1 is an editorial change (miscellaneous spelling, grammar, structure, bullet adjustments for added deleted sections, etc,) – this requires no further screening. NO is checked because the other items are not editorial and require screening - items 2-23 will be screened.**	☐YES 50.54(q)(3) Evaluation is NOT required. Enter justification and complete Part VI.	☒ NO Continue to next part

Procedure/Document Number: EAP-4B	Revision: 1
Equipment/Facility/Other: N/A	
Title: Detailed Dose Assessment	
Part V. Emergency Planning Element/Function Screen (Associated 10 CFR 50.47(b) planning standard function identified in brackets) Does this activity affect any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II?	
1. Responsibility for emergency response is assigned. [1]	☒
2. The response organization has the staff to respond and to augment staff on a continuing basis (24/7 staffing) in accordance with the emergency plan. [1]	☐
3. The process ensures that on shift emergency response responsibilities are staffed and assigned. [2]	☐
4. The process for timely augmentation of onshift staff is established and maintained. [2]	☐
5. Arrangements for requesting and using off site assistance have been made. [3]	☐
6. State and local staff can be accommodated at the EOF in accordance with the emergency plan. [3]	☐
7. A standard scheme of emergency classification and action levels is in use. [4]	☐
8. Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes after declaration of an emergency and providing follow-up notifications. [5]	☐
9. Administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway. [5]	☐
10. The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter. [5]	☐
11. Systems are established for prompt communication among principal emergency response organizations. [6]	☐
12. Systems are established for prompt communication to emergency response personnel. [6]	☐
13. Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ). [7]	☐
14. Coordinated dissemination of public information during emergencies is established. [7]	☐
15. Adequate facilities are maintained to support emergency response. [8]	☐
16. Adequate equipment is maintained to support emergency response. [8]	☐
17. Methods, systems, and equipment for assessment of radioactive releases are in use. [9]	☒
18. A range of public PARs is available for implementation during emergencies. [10]	☐
19. Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities. [10]	☐
20. A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.[10]	☐

Procedure/Document Number:EAP-4B	Revision: 1	
Equipment/Facility/Other: N/A		
Title: Detailed Dose Assessment		
21. The resources for controlling radiological exposures for emergency workers are established. [11]		☐
22. Arrangements are made for medical services for contaminated, injured individuals. [12]		☐
23. Plans for recovery and reentry are developed. [13]		☐
24. A drill and exercise program (including radiological, medical, health physics and other program areas) is established. [14]		☐
25. Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses. [14]		☐
26. Identified weaknesses are corrected. [14]		☐
27. Training is provided to emergency responders. [15]		☐
28. Responsibility for emergency plan development and review is established. [16]		☐
29. Planners responsible for emergency plan development and maintenance are properly trained. [16]		☐

APPLICABILITY CONCLUSION

☐ If no Part V criteria are checked, a 50.54(q)(3) Evaluation is NOT required; document the basis for conclusion below and complete Part VI.

☒ If any Part V criteria are checked, complete Part VI and perform a 50.54(q)(3) Evaluation.

BASIS FOR CONCLUSION

See the attached EAP-4B Revision 1 Screening Matrix for the basis for the conclusion that no further evaluation is required for the changes listed.

Part VI. Signatures:

Preparer Name (Print) Pete Cullinan	Preparer Signature	Date: 12/15/15
(Optional) Reviewer Name (Print)	Reviewer Signature	Date:
Reviewer Name (Print) TIMOTHY F. GARVEY Nuclear EP Project Manager	Reviewer Signature	Date: 12/15/15
Approver Name (Print) Pete Cullinan (acting) EP manager or designee	Approver Signature	Date: 12/15/15

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
1	Title Page	Editorial adjustment such as spelling, grammar, structure, bullet adjustments for added deleted sections, etc.	YES	NO – Spelling, grammar, structure, bullet adjustments for added/deleted sections, etc.
2	Section 3.1	Section 3.1 - delete "General" and change to "an" emergency has been declared and the EOF is operational.	NO	NO – The change more accurately reflects the applicability of the procedure and its current use which is during any declared emergency when the EOF is Operational (note dose assessment remains a control room function until relieved by the EOF per procedure EAP-4A). This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
3	Sections: 1.1 5.3 5.4 7.1	Delete Section 5.4 TSC Dose Assessment Staff – alignment to the Fleet Standard ERO removes TSC Dose Assessment positions. Dose assessment is performed initially from the Control Room per EAP-4A and then transfers directly to the EOF when operational. 1. Removed all reference to TSC performing dose assessment functions throughout the procedure. a. Section 1.1 reference to TSC deleted. b. Section 5.3 reference to TSC deleted. c. Section 7.1 reference to TSC deleted.	NO	NO - The removal of responsibility for the TSC to perform dose assessment and release rate determination activities was previously removed and evaluated for Emergency Plan Section 6 revision 35 with no reduction in effectiveness, therefore this change screens out.
4	Section 5.5	Deleted from section 5.5: "The RC is responsible for offsite dose assessment at the TSC until the EOF is staffed." Alignment to the Fleet Standard ERO removes TSC Dose Assessment positions. Dose assessment is performed initially from the Control Room per EAP-4A	NO	NO - The removal of responsibility for the TSC to perform dose assessment and release rate determination activities was previously removed and evaluated for Emergency Plan Section 6 revision 35

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
		and then transfers directly to the EOF when operational.		with no reduction in effectiveness, therefore this change screens out.
5	Section 5.5.1	Added Section 5.5.1: "The RC is responsible to support the EOF Dose Assessment group by determining the release pathway and providing that information to the EOF Dose Assessment group." 1. Added Section 8.5.1 to provide direction to request the RC to determine the release pathway utilizing Attachment 1 page 3, Release Pathway Selection Aide.	NO	NO – The EOF personnel currently use the TSC as a technical resource for answering questions related to the emergency response including dose assessment information. This change provides a clearer direction on who the EOF dose assessment group can ask for specific technical questions rather than attempting to determine the correct position to ask at the time of the issue. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
6 15	Section 5.6 Sections 8.9.3.A.1.a and 8.9.4.A.1	Added Section 5.6: TSC Reactor Engineer (RxE): is responsible to the EOF Dose Assessment group to develop core damage estimates consistent with EAP-44, Core Damage Estimation, for use in the URI dose assessment model. Sections 8.9.3.A.1.a and 8.9.4.A.1 added "Rx Engineer" to clarify who to obtain information from.	NO	NO – The Reactor Engineer is responsible to perform Core Damage estimation per EAP-44. This change provides a clearer direction on who the EOF dose assessment group should ask for Core Damage related questions consistent with their training rather than attempting to determine the correct position to ask at the time of the issue. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				for this change.
7	Section 7.3	Revised section 7.3 to reflect recording met data in WebEOC or on the Meteorological Data Worksheet – either is applicable.	NO	NO – Currently the procedure has the Met data recorded on the Meteorological Data Worksheet attachment, this change provide flexibility to allow it to be recorded in WebEOC which reduces the likelihood of transcription errors and allows more personnel to access the data. This is a human performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
8	Section 7.4	Revised Section 7.4 to clarify conditions that would warrant re-performing dose projections and removed the "approximately 15 minute" criteria.	NO	NO – Currently the procedures states to perform a dose projection approximately every 15 minutes – this based on 15 minute met data updates. This change provides clarification that more accurately reflects a range of conditions that would warrant a new dose projection to be performed based on changing conditions including but not limited to met data changes. This is a human performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				for this change.
9	Section 8.1.7	Added section 8.1.7 to clarify expectations for completing Detailed Dose Assessment Data Input Form Attachment 1 and paperwork requirements for URI runs that will used for decision making – i.e. classifications and/or PARs.	NO	NO – This change clarifies existing expectations for the use of the Detailed Dose Assessment Data Input form when performing dose model runs that will be used for decision making related to Emergency Classification and PAR development – specifically it states when a form may be used and how it can be used. This is a human performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
10	Section 8.4.3.C	Added clarifying information to section 8.4.3.C – this information clarifies the spent fuel option and is already include in Step 1.1.1 of Attachment 9.	NO	NO –This change incorporates clarifying information related to the Spent Fuel Accident that is currently contained elsewhere in a procedural attachment to the body of the procedure text. This is a human performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
11	Section 8.5.3	Delete Section 8.5.3 – the following step more clearly defines action required related to process reduction factor	NO	NO – The deletion of this step removes duplication and possible confusion from

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
		– this deletion removes duplication while providing clarity.		two steps in sequence related to process reduction factors – the removed step indicates default values will be provided which can cause confusion – the remaining step directs verifying settings are correct for plant conditions which is the desired behavior. This is a human performance improvement to reduce confusion from two successive steps which provide the same information. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
12	Section 8.5.4	Added a note to section 8.5.4 to reinforce step 8.5.4 information.	NO	NO – Addition of the note draws attention to the following step for clarification. The note does not add an action – but reinforces the need to validate Process Reduction Factors as the step states. This is a human performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
13	Section 8.6.1.B.3	Added word "- direction" to step 8.6.1.B.3 to clarify the step with no intent change.	NO	NO – Addition of the word "- direction" improves the readability of the step no intent change. This is a human

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
14	Section 8.9.1	Section 8.9.1 added order of priority guidance when, for "Assessment Methodology" selection, multiple Methods are available. This is for improved human factors – reduces decision making by providing clear instruction.	NO	NO – The change provides and order of priority of existing methods used in the model when multiple sources are available. This provides consistency on procedure implementation and removes potential confusion. This does not change the dose assessment process or the methodologies available. This is a human performance improvement to provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
16	Section 8.9.6.A	Added Note to Section 8.9.6.A: EAP-5.3 attachments provide distances from the center of the NMP/JAF site for various sample locations. The URI software provides more detailed algorithms that may be used to determine distances for sample points from the JAF station.	NO	NO – this change adds a note which provides a reference to EAP-5.3 for relative distances in the EPX and also provides reference to URI having more detailed methods of determining distances. This does not change the dose assessment process or the methodologies available – EAP-5.3 was previously available and remains available as does URI. This is a human performance improvement to

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				provide clarity for the procedure user. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
17	Attach. 1	Human factors improvements to Attachment 1: rearranged the form to better align to the URI model inputs and order, added several procedure section references and added a screen shot of the URI Pathway Selection screen.	NO	NO – The changes made to attachment 1 were based on user feedback to streamline the form and make it consistent with the procedural text in order, format and wording. The addition of a "screen shot" of the URI Release Pathways provides a visual tool to the user that aides in determining release pathway when interfacing with other individuals. These changes are for human performance improvement to provide clarity for the procedure user and a tool the more clearly reflects the procedure content. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
18	Attach. 2	Revised Attachment 2 section 1.1.1 – to clarify terminology and remove superfluous wording with no change in intent.	NO	NO – This change removes unnecessary wording from the section with not intent change, and clarifies wording that has been create confusion for the users with not intent change. These changes are for human performance improvement to provide clarity for the procedure user and

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				a tool the more clearly reflects the procedure content. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
19	Attach. 3	Removed Attachment 3 – the form is not required and is not necessary. Human factors to prevent transcription errors of data. Other form numbering adjusted accordingly.	NO	NO – Attachment 3 was removed based on the information being available on the URI output form that is routinely printed. Transcribing information to the deleted form from the URI model is error likely and unnecessary. These changes are for human performance improvement to reduce the likelihood of transcription errors and reduce the number of forms required by the procedure when not necessary. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
20	Attach. 5	Attachment 5 – deleted reference to exposure meter for air sample calculations – there is no option in URI for exposure meter input for air sample calculations therefore this option is not used and may cause confusion. Provided clarifying wording on instrument selection to prevent duplication with no intent change.	NO	NO – The removal of the reference to exposure meter readings for air sample calculations is based on JAF not using exposure meters for reading air samples. There is no option in URI for this type of input and it is not a process practiced at JAF, thus it could lead to confusion by the procedure user. These changes are for human performance improvement to

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				reduce the likelihood of confusion regarding inputs that are not used at JAF, nor available in URI. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
21	Attach. 6 Step 3.6	Revised Attachment 6 step 3.6 to have the user print the results from URI rather logging results on an attachment. Human factors – remove the possibility of transcription errors.	NO	NO – The change directs the user to print the URI output results rather than transcribe to a separate form – thus reducing the likelihood of transcription errors. The URI output provides the necessary information. These changes are for human performance improvement to reduce the likelihood of transcription errors. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.
22	Attach. 6	Changed Shift Manager to Emergency Director on Attachment 6, Section 3.6 to reflect the position that actually performs the function.	NO	NO – The change corrects the title from Shift Manager to ED for the person whom summed results are provided to. This is a carry over from another procedure from initial development. The procedure is only applicable in the EOF and therefore the ED would be the reciepient not the SM. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further

Change No	Page/Step	Change Description	Editorial Change Per EN-AD-101?	Effect on 10 CFR 50.47(b) Planning Standards or NUREG0654 program elements? Justify if NO.
				evaluation will be performed for this change.
23	Attach. 8	Revised Attachment 8 to include effluent monitor pathway rad monitor scale as a reference.	NO	NO – This change provides a reference on the stack and vent release parameter table that allows the user to have a ready reference to the low range instrument off-scale range. This information is for reference when assessing if the low range instruments are offscale high rather than needing to query others as to the scale of the instruments. This change does not modify, delete or add any ERO functions and does not change the process or intent. No further evaluation will be performed for this change.

ENTERGY NUCLEAR NORTHEAST
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCUMENT TRANSMITTAL AND RECEIPT ACKNOWLEDGEMENT FORM

TO: **EP Admin**
DEPT.: Emergency Planning
LOCATION: **USNRC Document Control Center, Washington DC/RockvilleMD**

SPECIAL NOTES: JAFP Memo & EN-LI-106 form required. Include 10CFR50.54(q) Screen ~~and Evaluation~~ (EN-EP-305 Attach 9.1 & 9.2)

CONTROL MANUAL NUMBER **34**

FROM: KELLY SAWYER
DEPT.: ADMINISTRATIVE SERVICES
LOCATION: JAF
DATE: December 15, 2015

APPLICABLE MANUAL: EP PROCEDURE

DOCUMENT NUMBER	DOCUMENT TITLE	REV	EFFECTIVE DATE
SAP-24	LOSS OF EMERGENCY PREPAREDNESS CAPABILITIES	0	12/18/2015
UPDATE LIST	EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 3	N/A	12/18/2015

INSTRUCTIONS:

1. Insert the attached revised documents, and withdraw any noted WITHDRAWN documents from your controlled copy.
2. **DISCARD ALL SUPERCEDED DOCUMENTS, as applicable. DISCARD THIS TRANSMITTAL.**

NOTE
Failure to incorporate these documents into your controlled manual will result in cancellation of the subject controlled documents.

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 3
UPDATE LIST

Date of Issue: 12/18/2015

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
N/A	TABLE OF CONTENTS	REV. 26	05/15	N/A
EAP-27	ESTIMATION OF POPULATION DOSE WITHIN 10 MILE EMERGENCY PLANNING ZONE	REV. 13	05/15	Reference
EAP-29	EOF VENTILATION ISOLATION DURING AN EMERGENCY	REV. 7	08/13	Informational
EAP-30	EMERGENCY TERMINATION AND TRANSITION TO RECOVERY	REV. 4	07/11	Informational
EAP-34	ACCEPTANCE OF ENVIRONMENTAL SAMPLES AT THE EOF/EL DURING AN EMERGENCY	REV. 5	08/13	Informational
EAP-35	EOF TLD ISSUANCE DURING AN EMERGENCY	REV. 8	08/13	Informational
EAP-36	ENVIRONMENTAL LABORATORY USE DURING AN EMERGENCY	REV. 6	05/13	Informational
EAP-42	OBTAINING METEOROLOGICAL DATA	REV. 25	12/14	Informational
EAP-43	EMERGENCY FACILITIES LONG TERM STAFFING	REV. 70	02/15	Informational
EAP-44	CORE DAMAGE ESTIMATION	REV. 8	07/12	Informational
EAP-45	EMERGENCY RESPONSE DATA SYSTEM (ERDS CONFIGURATION CONTROL PROGRAM)	REV. 9	04/15	Informational
EAP-46	SUPPLEMENTAL ERO ACTIONS	REV. 2	02/15	Reference
SAP-1	MAINTAINING EMERGENCY PREPAREDNESS	REV. 24	12/14	Informational
SAP-2	EMERGENCY EQUIPMENT INVENTORY	REV. 55	6/15	Reference
SAP-3	EMERGENCY COMMUNICATIONS TESTING	REV. 85	10/14	Reference
SAP-8	PROMPT NOTIFICATION SYSTEM FAILURE/SIREN SYSTEM FALSE ACTIVATION	REV. 19	07/15	Informational
SAP-10	METEOROLOGICAL MONITORING SYSTEM SURVEILLANCE	REV. 16	03/15	Reference
SAP-17	EMERGENCY RESPONSE DATA SYSTEM (ERDS) QUARTERLY TESTING	REV. 11	11/11	Informational
SAP-20	EMERGENCY PLAN ASSIGNMENTS	REV. 36	03/15	Informational
SAP-23	EQUIPMENT IMPORTANT TO EMERGENCY PREPAREDNESS	REV. 1	12/14	Informational
SAP-24	LOSS OF EMERGENCY PREPAREDNESS CAPABILITIES	REV. 0	12/20	Informational

CONTROLLED

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

LOSS OF EMERGENCY PREPAREDNESS CAPABILITIES
SAP-24
REVISION 0

EFFECTIVE DATE: December 18, 2015

**********	**********
* INFORMATIONAL USE *	* QUALITY RELATED *
**********	**********
**********	
* ADMINISTRATIVE *	CONTROLLED
**********	

PERIODIC REVIEW DUE DATE: DECEMBER 2020

TABLE OF CONTENTS

1.0 PURPOSE

1.1 To provide a uniform approach to performing NRC Reportability Assessments for events that would result in a major loss of emergency assessment capability, offsite response capability, or offsite communications capability as required by 10 CFR 50.72(b)(3)(xiii).

1.2 Information contained in this procedure is based on guidance obtained from NUREG 1022, Event Report Guidelines 10 CFR 50.72 and 50.73, Rev.3 and NEI 13-01, Reportable Action Levels for Loss of Emergency Preparedness Capabilities, Rev. 0.

2.0 TERMS AND DEFINITIONS

2.1 **Alert and Notification System (ANS):** The system that demonstrates compliance with the public alerting and notification planning standard described in 10 CFR 50.47(b)(5) and the associated requirements of section IV.D of 10 CFR 50,Appendix E.

2.2 **Alternate Facility:** A temporary location that may serve as Technical Support Center (TSC) or Emergency Operations Facility (EOF) in support of a planned work activity. An acceptable ALTERNATE FACILITY must have sufficient capability to support effective direction and control of an emergency response; however, it need not meet the same design or operating requirements applied to a normally used Emergency Response Facility (e.g. it may not possess a protected ventilation system).

2.3 **Backup Emergency Response Facility (ERF)**: A facility that may serve as the TSC or EOF in the event that the primary facility is unavailable, as described in the site emergency plan or a procedure described in the emergency plan. An acceptable BACKUP ERF must meet the requirements of 10 CFR 50, Appendix E, sections IV.E.8.a and 8.c, and be functionally equivalent to the primary facility.

2.4 **Compensatory Measure:** A temporary means, established as part of a planned activity, to perform a given emergency response function during a period when the normally used METHODS are unavailable such that, when implemented, there is a reasonable expectation that the function would be accomplished during an actual emergency, albeit in a possibly degraded manner. A COMPENSATORY MEASURE need not meet the same design or operating requirements as the normally used METHODS but must be sufficient to support effective implementation

of the site emergency plan. Also refer to the related term "VIABLE."

2.5 **Dose Assessment/Radiological Assessment**: An evaluation of plant parameters and radiological data performed to determine potential or actual offsite doses during an emergency.

2.6 **Emergency Assessment**: The evaluation of plant information such as operational and radiological indications and data, and reports from onsite and offsite sources, to determine the consequences of an accident or other emergency-related event, and the appropriate measures for mitigation and protection of the public.

2.7 **Emergency Response Facility (ERF)**: A licensee facility that demonstrates compliance with planning standard 10 CFR 50.47(b)(8) and is staffed by members of the licensee's EMERGENCY RESPONSE ORGANIZATION during an emergency.

2.8 **Initiating Condition (IC)**: An event or condition that aligns with the definition of one of the four emergency classification levels by virtue of the potential or actual effects or consequences, as described in the site emergency plan or an implementing procedure described in the Emergency Plan. An IC provides one of more EALs which, when met, will require an emergency declaration. ICs are characterized by alpha numeric identifiers such as AG1, HA2, or FS1.

2.9 **Method**: A means that could be employed to perform an emergency response function as described in the site emergency plan or an implementing procedure described in the emergency plan. Site emergency plans and implementing procedures typically describe primary and one or more alternate Methods for performing a given function. Provided that at least one Method is available, then the ability to perform the associated function has **not** been lost. Note that for the case of EALs, the alternate Method must be recognized within the applicable EAL or EAL basis to maintain the associated function.

2.10 **Offsite Response Organization (ORO)**: Those state, local and tribal agencies with primary responsibility for coordinating and implanting offsite emergency measures.

2.11 **Planned/Unplanned**: The criteria for Reportability distinguishes between losses which are planned or unplanned. A planned loss is one that results from a

scheduled work activity, such as component maintenance, testing, modification or replacement. An unplanned loss would typically involve the failure of a structure or piece of equipment.

2.12 **Reportable Action Level (RAL)**: A predetermined, site specific, observable threshold that, when met or exceeded, requires notification of the associated event to the NRC in accordance with 10 CFR 50.72(b)(3)(xiii).

2.13 **Restoration Time**: The time available for restoring a lost structure or piece of equipment or service. Where allowed, Restoration Times are specified in the RALs.

2.14 **Viable Compensatory Measure**: A compensatory measure that (1) can restore a required function in a reasonably comparable manner **and** (2) is proceduralized prior to an event. Proceduralized means that the necessary instructions to perform a function exist in a document (e.g. a procedure, a user aid, a night or standing order, etc.) that will be followed by response personnel should an emergency occur. Further, individuals expected to implement the Compensatory Measure must be aware of the measure, in advance of its potential or actual implementation. A Viable Compensatory Measure does **not** include reliance upon "skill-of-the-craft" or individual judgment.

2.14.1 A Viable Compensatory Measure is implemented as part of a planned activity. It need **not** meet the same design or operating requirements as the normally used Methods; however, its effectiveness should be sufficient to ensure that the supported emergency response function would be accomplished during an actual emergency, albeit in a possibly degraded matter.

2.14.2 It is recognized that the performance of a Viable Compensatory Measure may require more time to complete than a normally used Method(s)(e.g., performance of a sample analysis vs. a radiation monitor reading). The fact that the normally used Method(s) is not available does **not** automatically mean that the associated Emergency Assessment capability has been lost. The time necessary to implement a Viable Compensatory Measure should not be unreasonably long and minimized to the degree practical.

3.0 RESPONSIBILITIES

3.1 The Shift Manager is responsible for the final determination regarding Reportability of EP conditions.

3.2 Exelon Corporate Emergency Preparedness (EP) Siren Specialist is responsible for:

3.2.1 Notifying the Shift Manager and/or JAF Control Room verbally by phone once notified of a Reportable siren outage by the siren contractor.

3.2.2 Notifying the following stakeholders by email (or other electronic means) once notified of a Reportable siren outage by the siren contractor:

A. JAF EP Manager(s) or EP Coordinator(s)

B. Affected state and county emergency response organizations.

4.0 MAIN BODY

4.1 General

4.1.1 Three Reportable Action Levels (RALs) are considered for a major loss of Emergency Preparedness Capability and thus must be reported to the NRC in accordance with 10 CFR 50.72(b)(3)(xiii) are:

A. Emergency Assessment capability (Section 5.0)

B. Offsite Response capability (Section 6.0)

C. Offsite Communications capability (Section 7.0)

4.2 Reporting Requirement

Note: Supporting Information and examples relating to each of the Reportability thresholds is contained in Attachment 1 **and** should be reviewed when considering Reportability.

4.2.1 **REVIEW** EP Reportability Action Levels in sections 5,6, and 7 to determine whether a Reportability threshold has been met.

4.2.2 **NOTIFY** the NRC Operations Center via the ENS within 8 hours of the occurrence of any

major loss of emergency assessment, offsite response of offsite communications capability that occurred within 3 years of the date of discovery [10 CFR 50.72(b)(3)(xiii)].

5.0 EMERGENCY ASSESSMENT CAPABILITY REPORTABILITY THRESHOLDS

5.1 **Loss of Emergency Classification Capability - REPORT** if any of the conditions below are satisfied:

5.1.1 **Unplanned Event**

A. Loss of a structure or equipment, including indications, display systems and annunciators that prevent the evaluation of all EALs for an emergency Initiating Condition (IC).

5.1.2 **Planned Event**

A. Loss of a structure or equipment, including indications, display systems and annunciators that prevents the evaluation of all EALs for an emergency Initiating Condition for greater than 24 hours **and** either of the following.

1. **No** Viable Compensatory Measure is in place.

Or

2. With a Viable Compensatory Measure in place, lost structures or equipment necessary to evaluate at least one EAL are **not** expected to be **or** is **not** restored within 72 hours from the start of the outage.

5.2 **Loss of Dose Assessment Capability - REPORT** if any of the conditions below are satisfied:

5.2.1 **Unplanned Event**

A. Loss of a structure or equipment that would prevent the performance of Dose Assessment for any of the site specific monitored release paths.

5.2.2 **Planned Event**

A. Loss of a structure or equipment that would prevent the performance of Dose Assessment for

any of the site specific monitored release paths for greater than 24 hours **and** either of the following:

1. **No** Viable Compensatory Measure is in place.

   OR

2. With a Viable Compensatory Measure in place, the lost structure or equipment is **not** expected to be **or** is **not** restored within 72 hours from the start of the outage.

5.3 **Loss of Emergency Response Facilities and Equipment - REPORT** if any of the conditions below are satisfied:

Restoration Time

ERF	Restoration Time
Control Room	None
Technical Support Center	60 Minutes
Emergency Operations Facility	60 Minutes

5.3.1 **Unplanned Loss**

A. Loss of a structure or equipment that would prevent the performance of Emergency Assessment in the JAF CONTROL ROOM, TSC **or** EOF **and** the capability to perform Emergency Assessment was **not** restored within the Restoration Time specified above.

AND

B. The lost Emergency Assessment capability cannot be performed at a Backup Emergency Response Facility

5.3.2 **Planned Loss**

A. Loss of a structure or equipment, for greater than 24 hours, which would prevent the performance of Emergency Assessment in the JAF CONTROL ROOM, TSC **or** EOF.

AND

B. Either of the following:

1. With **no** Viable Compensatory Measure in place, the capability to perform Emergency Assessment **cannot** be restored within the Restoration Time specified above **and** the lost Emergency Assessment capability cannot be performed at an Alternate Facility.

OR

2. With a Viable Compensatory Measure in place, the lost structure or equipment is **not** expected to be **or** is **not** restored within 72 hours from the start of the outage.

AND

C. The lost Emergency Assessment capability cannot be performed at a Backup Emergency Response Facility.

6. MAJOR LOSS OF OFFSITE RESPONSE CAPABILITY REPORTABILITY THRESHOLDS

Note: Impediments to evacuation such as fog, snow, and ice, should be generally **not** be reported if they are within the respective capabilities of the licensee, state or local officials to resolve or mitigate. Rather, the reporting requirement is intended to apply to more significant events such as the conditions around the Turkey Point Nuclear Plant after Hurricane Andrew struck in 1992 or the conditions around the Cooper Nuclear Station during the Midwest floods of 1993. During this type of event, a licensee should periodically gather and assess information available from the Offsite Response Organizations and other sources to determine if a loss offsite response capability has occurred.

6.1 **Natural Hazards - REPORT** if any of the conditions below are satisfied.

6.1.1 The occurrence of a significant natural hazard (e.g., earthquake, hurricane, tornado, flood, major winter storms, etc.) **or** other event of similar scope and impact.

AND

6.1.2 The hazard or event results in any of the following:

A. An offsite Response Organization has provided information that they are unable to implement protective measures for the public as described in their emergency plan if an actual emergency were to occur (e.g., key evacuation routes are impassable, loss of response infrastructure, etc.).

OR

B. ERO personnel coming from offsite locations could **not** report to their onsite response locations within 60 minutes if an actual emergency were to occur.

OR

C. The TSC, OSC, or EOF could **not** be activated within 60 minutes if an actual emergency were to occur.

OR

D. Any of the local offsite support agencies would be unable to access the site if their assistance were to be requested.

6.2 **Alert and Notification Systems - REPORT** if any of the conditions below are satisfied.

6.2.1 Actions for reporting outages of ANS equipment can be found in SAP-8.

7. LOSS OF OFFSITE COMMUNICATION SYSTEMS REPORTABILITY THRESHOLDS

Communication System Function	Primary Method	Backup Method(s)	Applicable ERF Restoration Time		
			JAF CONTROL ROOM	TSC	EOF
ENS	Dedicated ENS Line	Commercial Telephone System	None	60 Min	60 Min
HPN	Dedicated HPN Line	Commercial Telephone System	N/A	60 Min	60 Min
State / local Communication	Dedicated State/local Notification Line (RECS)	Commercial Telephone System Facility Satellite Phone	None	60 Min	60 Min
ERO Notification	Automated System Web Activation (Everbridge)	Telephone call to automated callout system Telephone call to automated call out agent Site Pager system	Cannot be restored within 15 minutes		
Inter Facility Communication Dedicated ERF Lines	Emergency Directors Hotline	Commercial Telephone Bridge line	None	60 Min	60 Min
Field Team Communication	JAF VHF Radio	Cell Phone	N/A	60 Min	60 Min

7.1 **REPORT** if any of the conditions below are satisfied:

Note: Restoration Times are not credited for Unplanned Events with respect to loss of communication systems.

7.1.1 Unplanned Event

A. The Primary **and** all Backup Methods for any one of the Offsite Communication Systems above for any listed facility are lost.

7.1.2 Planned Event

A. The Primary **and** all Backup Methods for any one of the Offsite Communication System above for any listed facility are lost **and** any of the following:

1. With **no** Viable Compensatory Measure in place, at least on Method could **not** be restored to service within the applicable ERF Restoration Time following an emergency declaration should one occur.

OR

2. With a Viable Compensatory Measure, at least one Method is **not or** is **not** expected to be restored within 72 hours from the start of the outage.

8. **DOCUMENTATION**

None

9. **REFERENCES**

9.1 Title 10, Part 50.72 of the Code of Federal Regulations (CFR), Immediate Notification Requirements for Operating Nuclear Power Reactors.

9.2 NUREG 1022, Event Report Guidelines 10 CFR 50.72 and 50.73.

9.3 SAP-8, Alert and Notification System Problem Reporting

9.4 NEI 13-01, Reportable Action Levels for Loss of Emergency Preparedness Capabilities, Rev 0, dated October 2013.

10. **ATTACHMENT**

1. SUPPORT INFORMATION

SUPPORT INFORMATION

I. Major Loss of Emergency Assessment Capability Reportable Events

Loss of Emergency Classification Capability

- General - This Reportable Event addresses a major loss of Emergency Assessment capability such that a response function necessary for determining accident or event consequences, and appropriate measures for mitigation and protection of the public, would be significantly impaired if an emergency were to occur. A report would be required for an ongoing condition that meets the criteria in one of the RALs, as well as such a condition that occurred within 3 years of the date of discovery.

  A degraded capability will exist when a Method(s) used to perform an Emergency Assessment function is unavailable but the reporting criteria contained in the applicable RALs are not met. A degraded Emergency Assessment capability should not be reported. Examples of a degraded condition are provided below.

- Scope - The loss of Emergency Classification capability addresses the capability to obtain parameter values or information necessary for evaluation of the EAL thresholds for a given IC, such that an emergency could **not** be declared per that IC.

- Emergency Assessment: Emergency Assessment consists of the evaluation of plant information to determine the consequences of an accident / other emergency related event as well as the appropriate measures for mitigation and protection of the public.

SUPPORT INFORMATION

- o Plant information in this context consists of operational and radiological indications and data, and reports from onsite and offsite sources.

- o Examples of the type of Emergency Assessment which may be performed at Emergency Response Facilities may include:

  - Dose Assessment
  - PAR determination
  - Engineering Assessment (including Core Damage Assessment)
  - Field Team Assessments
  - Release in Progress Assessment,
  - Management and Coordination of Emergency Response,
  - Assessment and Coordination of repair activities, and
  - Assessment of protective actions for onsite personnel.

- Multiple EALs under the same IC - In cases where multiple EALs are provided for the IC, the loss of the capability to evaluate one or more of them constitutes a degraded capability so long as one or more of them can still be evaluated, and an emergency could be declared per that IC. The exception occurs when the IC contains several unrelated EAL such as the case of Hazards IC.

  For example:

  - o An IC with multiple EALs that assess the same condition: A site has an IC for high RCS radioactivity with two EALs - one based on a letdown monitor reading and one based on a sample analysis. The monitor is removed from service for maintenance. This event represents a degraded condition because the IC can still be evaluated using the sample analysis data; it is **not** reportable. If a concurrent failure were to occur that prevented the collection or

analysis of an RCS sample, **then** both EALs could **not** be evaluated and, thus, the IC could **not** be evaluated. This event would be reportable. (Note, in this example, the letdown monitor would still need to be assessed against impacts to other assessment conditions such as Dose Assessment).

- o An IC with multiple EALs that assess different conditions: A site has an IC for natural or manmade hazards with 4 EALs - one for high wind speed, one for a seismic event, one for an explosion and one for flooding (i.e., only one EAL for assessing each condition). The seismic monitoring system suffers a failure such that the one seismic-related EAL cannot be evaluated. This event would be reportable because the remaining EALs under the IC assess conditions that are unrelated to a seismic event. Other methods to evaluate the earthquake cannot be credited unless it is specifically described in the Emergency Plan EALs.

- Radiation Monitors - Given that the readings from certain radiation monitors may be used to perform both EAL Classification and Dose Assessment, the loss of a radiation monitor should be assessed for both criteria.

- Consideration of the Fission Product Barrier Matrix - Each IC in the Fission Product Barrier Table has multiple fission product barrier thresholds. Each of these thresholds should be treated as an EAL for reporting evaluation purposes.

- Time to Complete Assessment - It is recognized that the assessment of some EALs may require more time than others to complete (e.g., performance of a sample analysis vs. a radiation monitor reading). The time necessary to perform an EAL assessment is **not** a factor in determining whether a loss is reportable.

SUPPORT INFORMATION

- Crediting other Methods outside the JAF CONTROL ROOM for Unplanned Events - The criterion(ia) for initiating a Method to assess an EAL using indications available from sources outside the Control Room should be proceduralized; initiation of the Method should **not** be dependent upon "skill-of-the-craft" or individual judgment. For example, consider a site with two EALs related to the plant vent - one using a radiation monitor reading and the other using the results of an effluent sample analysis. The criteria for requiring initiation of the plant vent sampling process should be defined in a procedure including the sample frequency.

Loss of Dose Assessment Capability

- Scope - The loss of Dose Assessment capability addresses the loss of a structure or equipment that provides the parameter values or information necessary for performing a Dose Assessment for a given assessment option (i.e., release pathway) during an emergency.

- Multiple Methods - In cases where multiple Methods for obtaining data or information are provided in procedure guidance for given assessment option/type, the loss of one or more Methods constitutes a degraded capability so long as one or more of them can still be performed.

- Radiation Monitors - Given that certain radiation monitor readings are specified in EALs, the loss of a radiation monitor should also be assessed against its impact to EAL Classification.

- Timing of Other Methods - It is recognized that some backup/alternate Methods used to provide data and information for a Dose Assessment may require more time than others to complete (e.g., performance of a sample analysis vs. a radiation monitor reading). The time necessary to implement a

backup/alternate Method is **not** a factor in determining whether a loss is reportable.

Loss of Emergency Response Facilities and Equipment

- Scope - The loss of Emergency Response Facilities and Equipment addresses an unplanned or planned loss of a structure or equipment that results in the inability to perform Emergency Assessment at an Emergency Response Facility.

- Loss of Function - The loss of the Emergency Response Facility and Equipment should **not** be assumed to have occurred simply because a structure or equipment design parameter is exceeded or feature nonfunctional. Rather, the decision should be based on whether or not ERO personnel could effectively perform Emergency Assessment functions within the facility, using the equipment and data available. This decision should consider both the ability to activate the facility as well as the capability for protracted operation under emergency conditions.

  The following should be considered when evaluating a reported or planned degradation to determine if a loss of the Emergency Response Facility and Equipment has occurred:

  - o Structural integrity, Lighting, Power sources
  - o Data acquisition, computation and display systems; including those used for Dose Assessment (dose projection) purposes.
  - o Heating, Ventilation and Air Conditioning (HVAC) systems and components. ERF temperatures may be assessed for habitability any assessment method.
  - o Emergency Ventilation and Habitability systems and components (e.g., HEPA or charcoal filters).

SUPPORT INFORMATION

- o Unique design features necessary for facility operation (e.g., flooding protection).
- o Any other item that could render an Emergency Assessment function unavailable.

- Radiation Monitors with Multiple Detectors - In cases where a radiation monitor has multiple detectors and related channels that provide input data for performing a Emergency Classification of an EAL, and an unplanned failure occurs that removes a detector or channel from service, a loss of Emergency Classification capability is considered to have occurred only if the data range of the remaining available detectors and channels is **not** sufficient to support the evaluation of all EALs associated with that release assessment option/type (e.g., a low-range channel that cannot read a General Emergency-related release rate or concentration from the plant vent), and there is no other data collection Method available.

- Procedures for other Methods - The criterion(ia) for initiating a Dose Assessment Method using indications available from sources outside the Control Room should be proceduralized; initiation of the Method should **not** be dependent upon "skill-of-the-craft" or individual judgment. For example, consider a site with two Methods to obtain a plant vent effluent release concentration - one using a radiation monitor reading and the other using the results of an effluent sample analysis. The criteria for requiring initiation of the plant vent sampling process should be defined in a procedure.

- Release Pathways - Release pathways that could be evaluated during an emergency are described in the site emergency plan or an implementing procedure. For example, a site-specific list of Release pathways for a hypothetical 2-loop pressurized water reactor might include:

SUPPORT INFORMATION

- o Plant Vent Stack, Fuel Storage Building Vent, Main Steam Line A, Main Steam Line B, Containment, Unmonitored.

II. Major Loss of Offsite Response Capability

The Reportable Event addresses a major loss of offsite response capability that could prevent the on-shift staff from obtaining needed response assistance or offsite officials from implementing key functions needed for protection of the public if an emergency were to occur.

The loss of an individual structure or piece of equipment that supports performance of the offsite response capability is reportable only to the extent that it meets an RAL threshold; a degraded capability caused by a failure or planned activity should not be reported. A report would be required for an ongoing condition that meets one the RALs above, as well as such a condition that occurred within 3 years of the date of discovery.

NATURAL HAZARDS

- Natural Hazards - Because a significant natural hazard is an unplanned event, no allowed outage duration or Restoration Times are specified.

- Responsible ORO - an ORO agency should be one with primary responsibility for coordinating and implementing offsite emergency measures.

- Fog, Snow, Ice - Impediments to evacuation such as fog, snow, and ice, should generally **not** be reported if they are within the respective capabilities of the licensee, state, or local officials to resolve or mitigate. Rather, the reporting requirement is intended to apply to more significant events such as the conditions around the Turkey Point Nuclear Plant after Hurricane Andrew struck in 1992 or the conditions around the Cooper Nuclear Station during the Midwest floods of 1993.

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During this type of event, a licensee should periodically gather and assess information available from Offsite Response Organizations and other sources to determine if a loss offsite response capability has occurred. Winter snow storms that might briefly delay facility activation would result in a degraded function and would not generally be Reportable; however, major storms that result in closure of roadways where access to the ERFs would not be possible, would generally be Reportable.

SIRENS / ANS

- Loss of ANS/Sirens - the unplanned and planned loss cases have been combined. The one-hour condition duration reflects guidance provided in NUREG-1022. Because the FEMA-approved backup alerting Method(s) does **not** meet the performance criteria of 10 CFR 50, Appendix E, Section IV.D.3, a time limit of 24hours has been applied. If this threshold is met, the subsequent report will allow the NRC to discuss the situation with FEMA and determine if additional actions are necessary.

- Population Impact - this criterion reflects the primary ANS equipment, or combinations of equipment, that, in the event of their failure, would result in the loss of the capability to alert a large segment of the population in the EPZ. For purposes of developing this list, "a large segment of the population in the EPZ" should be taken to mean approximately 25% of the total EPZ population.

  Depending upon the site-specific ANS design and EPZ characteristics (e.g., topography, population density/distribution, etc.), the criterion "approximately 25% of the total EPZ population" may or may **not** correlate to 25% of the sirens. To further illustrate this point, consider that a loss of 10% of the sirens in high population density area could be more significant than a loss of 25% of the sirens in a low population density area. Simply averaging the

number of EPZ sirens over the EPZ total population will generally be unacceptable.

- Time of Discovery for ANS/Siren Outage - An unplanned outage would typically be initiated by the failure of a structure or piece of equipment. The specified durations begin when the failure occurred, if firm evidence of the failure time exists. This includes instances where a failure time is logged by an automated diagnostics and reporting technology for subsequent and periodic review by personnel (e.g., a data logger that captures routine siren feedback results). Absent firm evidence of a failure time, the specified durations begin with the time-of-discovery.

Major Loss of Offsite Communications Capability

- Scope - Loss of Offsite Communication Systems addresses a major loss of offsite communications capability that could prevent a licensee from performing required communications with federal, state, and local officials; or between the site and ERO personnel at offsite locations. A report would be required for an ongoing condition that meets the criteria of the RAL, as well as such a condition that occurred within 3 years of the date of discovery.

SUPPORT INFORMATION

If an Emergency Response Facility has two Methods for maintaining communications with an Offsite Response Organization, **then** an unplanned event involving a simultaneous loss of both methods would be reportable. The loss of either Method alone represents a degraded condition, and thus should **not** be Reported.

- Restoration Time - Since the Control Room is always activated, a Restoration Time does **not** apply to this facility.

- ERDS - ERDS was implemented as a supplement to the ENS in accordance with Appendix E of 10 CFR 50. The ERDS provides the NRC with the information necessary for performance of its oversight function. The loss of ERDS cannot impair a licensee's emergency response or communications capabilities during an emergency; therefore, a failure of the ERDS does **not** constitute a major loss of offsite communication capability and should **not** be reported.

- NRC Equipment Issues - Although a notification may **not** be required under 10 CFR

  50.72(b)(3)(xiii) in the event of a loss of the ENS, HPN, or ERDS, the NRC Operations Center should be informed of any failure of NRC-supplied communications equipment so that the NRC may arrange for repair. The commercial telephone number 301-816-5100 may be used to inform the NRC Operations Center of a failed piece of equipment. At the time the failure is reported, the licensee should be prepared to supply the following information to expedite repair: (1) name of contact at location of failure, (2) commercial phone number of contact, (3) location of contact (i.e., street address, building number, room number, etc., and (4) any other information that would expedite repair.

SUPPORT INFORMATION

Reportability Examples

- **Loss of TSC Emergency Ventilation and HVAC** - The emergent loss of TSC Emergency Ventilation would typically be Reportable after the 60 minute Restoration Time. Reportability is based on the loss of a protective action function provided by the Emergency Ventilation filtration system and the inability to perform Emergency Assessments should a radiological emergency event occur requiring the system to be in service. The loss of "normal" HVAC systems would not normally be Reportable until temperatures reach a point where the facility is considered uninhabitable (ref. SA-AA-111, Heat Stress Control of SAAA-2114, Winter Safety).

- **Loss of a Seismic Monitor** - A site has an IC for natural or manmade hazards with 4 EALs - one for high wind speed, one for a seismic event, one for an explosion and one for flooding (i.e., only one EAL for assessing each condition). The seismic monitoring system suffers a failure such that the one seismic-related EAL cannot be evaluated. This event would be reportable because the remaining EALs under the IC assess conditions that are unrelated to a seismic event. Other instruments/methods to evaluate the earthquake cannot be credited unless the method is specifically described in the Emergency Plan EALs.

- **Loss of Area Rad Monitors** - A site utilizes Area Radiation Monitors to classify an EAL RU2. The threshold is *"UNPLANNED VALID Area Radiation Monitor readings or survey results indicate rise by a factor of **1000** over NORMAL LEVELS"*. Loss of an Area Rad Monitors would not be Reportable since the EAL also recognizes Surveys to maintain the function. For this example to be non-Reportable; however, existing procedural guidance must be available to implement surveys upon loss of the Area Rad Monitor.

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- **Loss of Fire Detection Equipment** – A site utilizes fire detection equipment for EAL IC HA3, *FIRE in any Table H2 area **not** extinguished in **< 15 minutes** of Control Room notification or verification of a Control Room FIRE alarm.* The loss of fire detection equipment would not be reportable. Notification of a fire can be the result of either fire detection equipment or through observation by plant personnel. Site-specific access training requires plant personnel to report conditions such as this to the control room. As such, loss of the fire detection equipment is not considered a loss of function.

  Loss of a Fission Product Barrier instrument – A PWR site has a Fission Product Barrier table which represents the 3 fission product barriers (Fuel Clad, RCS, Containment). Each barrier has two columns within the Table, one for Loss of the Barrier and one for Potential Loss of the Barrier. For the Fuel Clad Barrier, the "Loss" column contains three thresholds.

  - RCS Activity/Containment Radiation
  - Containment Rad Monitor
  - Reactor Coolant Activity >300uCi/gm

  The loss of the Core Exit Thermocouple, for example, would not be Reportable because there are other thresholds within the column to assess the Loss of Fuel Clad Barrier Function. The loss would not be Reportable until all thresholds parameter sources within a FPB Table column were lost.

- **Loss of PA Speakers** – PA speakers are not considered under loss of Emergency Assessment capability, loss of Offsite Response capability, or loss of Offsite Communications capability in NEI 13-01 and therefore would not be Reportable.

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- **Loss of Dedicated State/local Notification (e.g. RECS)**-If the RECS line experiences an emergent failure, the loss would not be Reportable as long as existing procedures recognize the commercial telephone system as a backup Method and the backup Method is available.

- **Loss of TSC Power** - A TSC has two Methods for supplying electrical power an offsite power source and a backup generator capable of powering all loads needed for the performance of Emergency Assessment functions. An unplanned event involving a loss of power to the Emergency Response Facility would be reportable only if both the offsite power source and the backup power generator are simultaneously unavailable, and the other criteria are met. The unavailability of the offsite power source alone, or the backup power generator alone, represents a degraded condition and would **not** be Reported.

- **Loss of ERDS** - ERDS was implemented as a supplement to the ENS in accordance with -Appendix E of 10 CFR 50. The ERDS provides the NRC with the information necessary for performance of its oversight function. The loss of ERDS cannot impair a licensee's emergency response or communications capabilities during an emergency; therefore, a failure of the ERDS does not constitute a major loss of offsite communication capability and would not be reported.

- **Loss of EPDS/SPDS** - Procedures describe one Method for providing plant data to Emergency Response Facilities as the Emergency Plant Data System (EPDS) and another Method that relies upon manual actions (e.g., use of a communicator). An unplanned event involving a loss of the EPDS would be reportable only if the ability to perform the manual Method was simultaneously unavailable. The unavailability of the EPDS alone represents a degraded condition and should not be Reported.

SUPPORT INFORMATION

- **Loss of MET Tower Wind Speed Instrumentation for EAL Classification** - A site experiences a loss of a Wind Speed indication on the Primary Met tower. High Wind indication is an EAL threshold for HA4, Hazards. The Reportability of this condition is dependent on whether a specific instruments or methods to obtain data are identified in the EAL or basis.

  If the licensee's approved EAL threshold language and bases DO NOT identify the instrument displaying the wind speed expressed in the EAL, then whatever procedurally defined source for the wind speed value could be used to declare the EAL. As long as there was an available source for the wind speed value, then the assessment capability is not LOST and the condition is not Reportable.

  If all identified methods to obtain wind speed are unavailable, then the loss would be the basis for determining Reportability.

  Note that engineering judgment comes into play when assessing the various sources of the wind speed value. The NRC might not find a wind speed source 50 miles away from the site to be representative of the conditions at the site. See also Loss of Dose Assessment since Met Tower instrumentation is also utilized for Dose Assessment.

- **Effluent Radiation Monitors (Classification and Dose Assessment)**

  Example 1 (Classification) - A site utilizes an Effluent Radiation monitor to classify the EALs associated with the Abnormal Rad Level / Radiological Effluent ICs (i.e., RU1, RA1, RS1 & RG1). The GE and SAE ICs contain 3 separate EAL thresholds (one each based on Rad Monitor indication,

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Dose Assessment and Field surveys). The UE and SAE, however contain only 2 related IC thresholds.

- *VALID reading on any Table R1 Effluent Monitor*
- *Confirmed sample analyses for gaseous or liquid releases.*

The loss of the Effluent Rad Monitor would not be Reportable as long as the capability exists to classify using one of the IC thresholds (e.g., to obtain and analyze a sample from the effluent flow path). Additionally, procedural guidance must exist prior to the failure to establish periodic or event driven sampling.

Example 2 (Dose Assessment) - A site has an offsite dose assessment process that employs three options/types - plant vent, main steam line and containment source term. Each option/type has two performance Methods described in the site emergency plan and/or an implementing procedure described in the emergency plan. Likewise, the site possesses two Methods for obtaining the meteorological data necessary to perform a Dose Assessment for any release option/type. The plant vent monitor has two detectors and associated channels, a low-range and a high-range; the low-range can provide data supporting emergency classifications up to Alert level, and the high-range from the Site Area Emergency through the General Emergency level.

SUPPORT INFORMATION

Case 1: The high-range channel fails (becomes nonfunctional) while the low range channel remains in service. The low-range channel is **not** an acceptable Method to compensate for the loss of the high-range channel because it cannot provide data throughout the range necessary to evaluate all emergency classification levels. The site's backup Method, which uses a "grab"/manual effluent sample process, is available to provide the data normally provided by the high-range channel. This event represents a degraded capability and should **not** be reportable because the plant vent assessment option/type can still be evaluated for all emergency classification levels. Absent the availability of the backup Method, the event as described to this point would be reportable.

Case 2: Continued from Case 1 - The plant vent low-range channel also fails (becomes nonfunctional); however, the "grab"/manual effluent sample process is available to provide this data as well. This event represents a degraded capability and should **not** be reportable because the plant vent assessment option/type can still be evaluated for all emergency classification levels.

Case 3: Continued from Case 2 - The backup Method that relies upon a "grab"/manual effluent sample process becomes unavailable due to the failure of the required analysis equipment; both described Methods for obtaining radiological data necessary for performing a Dose Assessment using the plant vent assessment option/type are now unavailable. This condition represents a loss of Emergency Assessment capability and would be reportable.

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Case 4: For this station, the plant vent assessment option/type relies upon 3 meteorological data inputs - wind speed, wind direction and •T. The designated wind speed instrument on the primary meteorological tower (the primary Method) becomes nonfunctional while the corresponding instrument on the backup tower (the backup Method) remains in service. This event represents a degraded capability and should **not** be reportable.

Case 5: Continued from Case 4 - The wind speed instrument on the backup meteorological tower becomes nonfunctional; the backup Method for obtaining this data is now also lost. All described Methods for obtaining upper wind speed, which is meteorological data necessary for performing a Dose Assessment using the plant vent assessment option/type, are now unavailable. This condition represents a loss of Emergency Assessment capability and would be reportable.

10CFR50.54(q) SCREENING

Procedure/Document Number: SAP-24	**Revision:** 0

Equipment/Facility/Other: JAF

Title: Loss of Emergency Preparedness Capabilities

Part I. Description of Activity Being Reviewed (event or action, or series of actions that may result in a change to the emergency plan or affect the implementation of the emergency plan)

The activity being reviewed is the implementation of a new procedure (SAP-24) whose purpose is to provide direction when 10CFR50 72 is applicable Specifically, this new procedure contains actions that should be carried out when 10CFR50 72 is applicable

Part II. Activity Previously Reviewed? Is this activity fully bounded by an NRC approved 10 CFR 50 90 submittal or Alert and Notification System Design Report? If YES, identify bounding source document number/approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below	☐ YES 50 54(q)(3) Evaluation is NOT required Enter justification below and complete Part VI	☒ NO Continue to next part

Justification

☐ Bounding document attached (optional)

Part III. Applicability of Other Regulatory Change Control Processes

Check if any other regulatory change processes control the proposed activity (Refer to EN-LI-100)

NOTE For example, when a design change is the proposed activity, consequential actions may include changes to other documents which have a different change control process and are **NOT** to be included in this 50 54(q)(3) Screening

APPLICABILITY CONCLUSION

☒ If there are no controlling change processes, continue the 50 54(q)(3) Screening

☐ One or more controlling change processes are selected, however, some portion of the activity involves the emergency plan or affects the implementation of the emergency plan, continue the 50 54(q)(3) Screening for that portion of the activity Identify the applicable controlling change processes below

☐ One or more controlling change processes are selected and fully bounds all aspects of the activity 50 54(q)(3) Evaluation is NOT required Identify controlling change processes below and complete Part VI

CONTROLLING CHANGE PROCESSES

10CFR50 54 Q

Part IV. Editorial Change Is this activity an editorial or typographical change such as formatting, paragraph numbering, spelling, or punctuation that does not change intent? **Justification:**	☐ YES 50 54(q)(3) Evaluation is NOT required Enter justification and complete Part VI	☒ NO Continue to next part

Procedure/Document Number: SAP-24	**Revision:** 0	
Equipment/Facility/Other: JAF		
Title: Loss of Emergency Preparedness Capabilities		
Part V. Emergency Planning Element/Function Screen (Associated 10 CFR 50 47(b) planning standard function identified in brackets) Does this activity affect any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II?		
1	Responsibility for emergency response is assigned [1]	☐
2	The response organization has the staff to respond and to augment staff on a continuing basis (24/7 staffing) in accordance with the emergency plan [1]	☐
3	The process ensures that on shift emergency response responsibilities are staffed and assigned [2]	☐
4	The process for timely augmentation of onshift staff is established and maintained [2]	☐
5	Arrangements for requesting and using off site assistance have been made [3]	☐
6	State and local staff can be accommodated at the EOF in accordance with the emergency plan [3]	☐
7	A standard scheme of emergency classification and action levels is in use [4]	☐
8	Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes after declaration of an emergency and providing follow-up notifications [5]	☐
9	Administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway [5]	☐
10	The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter [5]	☐
11	Systems are established for prompt communication among principal emergency response organizations [6]	☐
12	Systems are established for prompt communication to emergency response personnel [6]	☐
13	Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ) [7]	☐
14	Coordinated dissemination of public information during emergencies is established [7]	☐
15	Adequate facilities are maintained to support emergency response [8]	☐
16	Adequate equipment is maintained to support emergency response [8]	☐
17	Methods, systems, and equipment for assessment of radioactive releases are in use [9]	☐
18	A range of public PARs is available for implementation during emergencies [10]	☐
19	Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities [10]	☐
20	A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events [10]	☐

Procedure/Document Number: SAP-24	Revision: 0	
Equipment/Facility/Other: JAF		
Title: Loss of Emergency Preparedness Capabilities		
21 The resources for controlling radiological exposures for emergency workers are established [11]		☐
22 Arrangements are made for medical services for contaminated, injured individuals. [12]		☐
23 Plans for recovery and reentry are developed. [13]		☐
24. A drill and exercise program (including radiological, medical, health physics and other program areas) is established [14]		☐
25 Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses [14]		☐
26 Identified weaknesses are corrected [14]		☐
27 Training is provided to emergency responders [15]		☐
28 Responsibility for emergency plan development and review is established [16]		☐
29. Planners responsible for emergency plan development and maintenance are properly trained [16]		☐

APPLICABILITY CONCLUSION

☒ *If no Part V criteria are checked, a 50 54(q)(3) Evaluation is NOT required, document the basis for conclusion below and complete Part VI*

☐ *If any Part V criteria are checked, complete Part VI and perform a 50 54(q)(3) Evaluation*

BASIS FOR CONCLUSION

This new procedure (SAP-24) provides direction when 10CFR50 72 is applicable This procedure directs personnel of immediate notification requirements when there is a loss of emergency preparedness capabilities This procedure does not reflect a change in description, facilities or equipment or change a process This procedure does not result in a change to the JAF Emergency Plan Therefore, no further evaluation is required

Part VI. Signatures:

Preparer Name (Print) Mellonie J Blauvelt	Preparer Signature MJBlauvelt	Date 12/07/2015
(Optional) Reviewer Name (Print)	Reviewer Signature N/A	Date
Reviewer Name (Print) Timothy F. Garvey Nuclear EP Project Manager	Reviewer Signature Tim Garvey	Date 12/14/15
Approver Name (Print) ~~James D. Jones~~ EP manager or designee	Approver Signature acting R. Cullman	Date 12/15/15

ENTERGY NUCLEAR NORTHEAST
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCUMENT TRANSMITTAL AND RECEIPT ACKNOWLEDGEMENT FORM

TO: **EP Admin**
DEPT.: Emergency Planning
LOCATION: **USNRC Document Control Center, Washington DC/RockvilleMD**

SPECIAL NOTES: JAFP Memo & EN-LI-106 form required. Include 10CFR50.54(q) Screen ~~and Evaluation~~ (EN-EP-305 Attach 9.1 & 9.2)

CONTROL MANUAL NUMBER **34**

FROM: PATTI PONZI
DEPT.: ADMINISTRATIVE SERVICES
LOCATION: JAF
DATE: December 17, 2015

APPLICABLE MANUAL: EPLAN PROCEDURE

DOCUMENT NUMBER	DOCUMENT TITLE	REV	EFFECTIVE DATE
EAP-16.2	JOINT INFORMATION CENTER OPERATION	16	12/18/2015

INSTRUCTIONS:

1. Insert the attached revised documents, and withdraw any noted WITHDRAWN documents from your controlled copy.
2. **DISCARD ALL SUPERCEDED DOCUMENTS, as applicable. DISCARD THIS TRANSMITTAL.**

NOTE
Failure to incorporate these documents into your controlled manual will result in cancellation of the subject controlled documents.

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2
UPDATE LIST

Date of Issue: 12/18/2015

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
N/A	TABLE OF CONTENTS	REV. 22	05/15	Informational
IAP-1	EMERGENCY PLAN IMPLEMENTATION CHECKLIST	REV. 45	02/15	Informational
IAP-2	CLASSIFICATION OF EMERGENCY CONDITIONS	REV. 34 FLOWCHART REV. 10	12/14	Informational
EAP-1.1	OFFSITE NOTIFICATIONS	REV. 72	02/15	Informational
EAP-2	PERSONNEL INJURY	REV. 33	05/15	Informational
EAP-3	FIRE	REV. 26	01/13	Informational
EAP-4	WITHDRAWN (12/14)			
EAP-4A	ONSHIFT DOSE ASSESSMENT	REV. 0	12/14	Informational
EAP-4B	DETAILED DOSE ASSESSMENT	REV. 1	12/14	Informational
EAP-4C	PROTECTIVE ACTION RECOMMENDATIONS	REV. 0	12/14	Informational
EAP-4.1	RELEASE RATE DETERMINATION	REV. 24	02/15	Informational
EAP-5.1	DELETED (02/94)			
EAP-5.2	DELETED (04/91)			
EAP-5.3	ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING	REV. 21	08/15	Informational
EAP-6	IN-PLANT EMERGENCY SURVEY/ENTRY	REV. 19	02/14	Informational
EAP-7.1	DELETED (02/94)			
EAP-7.2	DELETED (02/94)			
EAP-8	PERSONNEL ACCOUNTABILITY	REV. 74	02/15	Informational
EAP-9	SEARCH AND RESCUE OPERATIONS	REV. 13	02/15	Informational
EAP-10	PROTECTED AREA EVACUATION	REV. 22	02/15	Informational
EAP-11	SITE EVACUATION	REV. 23	02/15	Informational
EAP-12	DOSE ESTIMATED FROM AN ACCIDENTAL RELEASE OF RADIOACTIVE MATERIAL TO LAKE ONTARIO	REV. 13	02/14	Informational
EAP-13	DAMAGE CONTROL	REV. 22	07/15	Informational

UPDATE LIST

Date of Issue: 12/18/2015

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
EAP-14.1	WITHDRAWN (02/23/05)			
EAP-14.2	WITHDRAWN (02/23/15)			
EAP-14.5	WITHDRAWN (02/23/15)			
EAP-14.6	HABITABILITY OF THE EMERGENCY FACILITIES	REV. 18	03/14	Informational
EAP-14.7	REMOTE ASSEMBLY AREA ACTIVATION	REV. 3	02/15	Reference
EAP-14.8	ALTERNATE TSC/SC ACTIVATION AND OPERATION	REV. 1	08/15	Reference
EAP-15	EMERGENCY RADIATION EXPOSURE CRITERIA AND CONTROL	REV. 13	07/15	Informational
EAP-16	PUBLIC INFORMATION PROCEDURE	REV. 9	03/14	Informational
EAP-16.2	JOINT INFORMATION CENTER OPERATION	REV. 16	02/15	Informational
EAP-17	EMERGENCY ORGANIZATION STAFFING	REV. 124	09/15	Informational
EAP-18	DELETED (12/93)			
EAP-19	EMERGENCY USE OF POTASSIUM IODINE (KI)	REV. 29	10/13	Informational
EAP-20	POST ACCIDENT SAMPLE, OFFSITE SHIPMENT AND ANALYSIS	REV. 11	04/14	Informational
EAP-21	DELETED (12/85)			
EAP-22	DELETED (02/98)			
EAP-23	EMERGENCY ACCESS CONTROL	REV. 15	08/15	Informational
EAP-24	EOF VEHICLE AND PERSONNEL DECONTAMINATION	REV. 11	12/14	Informational
EAP-25	DELETED (02/94)			

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

JOINT INFORMATION CENTER OPERATION
EAP-16.2
REVISION 16

EFFECTIVE DATE: 12/18/2015

**********	**********
* *	* *
* INFORMATIONAL USE *	* QUALITY RELATED *
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* *	
* ADMINISTRATIVE *	
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**********	CONTROLLED

PERIODIC REVIEW DUE DATE: DEC 2020

REVISION SUMMARY SHEET

FULL REVISION 16

Change 1: Deleting references to positions that no longer exist.
ITEM 1: Delete all references to the EOF Security Coordinator.
ITEM 2: Remove Section 5.3.4 - Security - "The JIC Logistics Coordinator should contact the EOF Security Coordinator (593-5880) to request JIC security support".
ITEM 3: Attachment 4 - JIC Activation Checklist - remove item number 1 - Contact the EOF Security Coordinator (593-5880) to request JIC security support.
ITEM 4: Attachment 4 - Item 13 - change title from EOF Purchasing Staff to EOF Admin/logistics Coordinator.

Change 2: Deleting references to the environmental lab that no longer exists.
ITEM 5: Developmental references - delete 2.2.4 - EAP-37 - Security of the Emergency Operations Facility (EOF) and Environmental Laboratory (EL) during drills, exercises and actual events.

Change 3: Changing operational instructions for Audio/Visual equipment.
ITEM 6: Attachment 8 - Startup, number 2 change green button to black.
ITEM 7: Attachment 8 - Shutdown, number 1 change green button to black.

Change 4: Enhancements
ITEM 8: Attachment 4 - JIC ACTIVATION CHECKLIST - add "inquiry response coordinator" to list of required individuals
ITEM 9: Section 2.2.4 - Change JIC Director to JIC Manager.

TABLE OF CONTENTS

1.0 **PURPOSE**

Provide guidance and define actions necessary to ensure coordination with Public Information Officers representing Oswego County, New York State and federal agencies in providing the public with timely and accurate information on plant conditions during a plant emergency.

NOTE 1: The Company Spokesperson or JAFNPP Emergency Director may, at their own discretion, direct the use of other procedures or forms and/or may deviate from this procedure as necessary to ensure fulfillment of the JIC mission.

NOTE 2: The JIC Mission is three fold:

- Provide timely information to the media through media briefings and news releases.
- Develop and disseminate emergency advisories to the public in the 10-mile Emergency Planning Zone (EPZ) through the Emergency Alert System (EAS). These advisories are restricted to official notification of protective actions recommended by governmental officials for the general public within the 10-mile EPZ. (Controlled by outside agencies)
- To conduct media response, media monitoring, and public inquiry response operations to ensure the public receives accurate and timely information.

2.0 **REFERENCES**

2.1 **Performance References**

None

2.2 **Developmental References**

2.2.1 IAP-2 - CLASSIFICATION OF EMERGENCY CONDITIONS

2.2.2 NUREG-0654, Rev 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

2.2.3 NMP-JAF JIC Procedures 03 (Document created by County Officials describing JIC processes)

2.2.4 CR-JAF-2005-4714, Incorporate the expectation that the JIC Manager approves the JIC second shift roster.

2.2.5 CR-JAF-2009-01881/CA-2

A. Revise EAP-16.2 to allow flexibility in determining if an initial press release will be issued prior to JIC activation.

B. Revise EAP-16.2 to add a step to issue an early news release, if one has not already been issued by the Communications Specialist.

3.0 **INITIATING EVENTS**

3.1 Declaration of an emergency, per IAP-2 - CLASSIFICATION OF EMERGENCY CONDITIONS.

3.2 Directed activation by the Shift Manager(SM) or Emergency Director.

4.0 **RESPONSIBILITIES**

4.1 **Emergency Director (ED)**

4.1.1 Reviews briefing notes and news releases for technical concurrence and acknowledgement.

4.2 **Company Spokesperson**

4.2.1 The Company Spokesperson is responsible for the coordination and approval of all information prior to release to the media and public.

4.2.2 The Company Spokesperson and Technical Advisor are to review FitzPatrick's radiological conditions (Part I's) before holding a news conference or reporting to the media to assure most accurate and up-to-date information is reported.

4.2.3 Coordinate information with public information spokesperson for local, state, and federal agencies.

A. Security and law enforcement related questions should be directed to the local enforcement spokesperson present (e.g. Sheriff, State Police, FBI, etc).

B. Attachment 11, SECURITY/LAW ENFORCEMENT PHRASES TO AVOID, should be used to aid in developing news releases, speaker notes for press briefings, and when anticipating media questions during briefings.

4.2.4 Supervise preparation of briefing notes and support material (i.e. diagrams) for media briefings.

4.2.5 Preside at media briefings.

4.2.6 Coordinate media interviews with the JIC Media Liaison in response to media inquiries.

4.2.7 Conduct routine interviews.

4.2.8 Ensure accuracy, timeliness and completeness of news releases.

4.2.9 Approve briefing notes and news releases for distribution.

4.2.10 Conduct periodic facility briefs with JIC staff.

4.3 JIC Manager

4.3.1 The JIC Manager is responsible to the Company Spokesperson for the supervision and direction of JIC operations involved with the flow of information from the plant to the JIC staff.

NOTE: If the JIC Manager position is not filled, the Company Spokesperson assumes JIC Manager responsibilities.

4.3.2 Maintain overall command and control of JIC operations, including public inquiry functions.

4.3.3 Designate an Information Coordinator.

4.3.4 Designate an Inquiry Response Coordinator.

4.3.5 Designate an Assistant JIC Manager.

4.3.6 Designate a JIC Media Liaison.

4.3.7 Assist the JIC Media Liaison with informing media representatives of scheduled media briefings.

4.3.8 Designate a person to act as the JIC State and County Liaison (if required).

4.3.9 Supervise preparation of news releases.

4.3.10 Maintain communications and coordinate activities between the JIC and Entergy Nuclear Northeast offices and facilities.

4.3.11 Coordinate information and briefings with federal, state and local emergency preparedness groups located at the JIC.

4.3.12 Supervise activities of the JIC Logistics Coordinator and approve the second shift staffing chart (Attachment 5-STAFFING CHART).

4.3.13 Ensure required staffing for JIC activation.

4.3.14 Coordinate facility briefs with JIC staff (as needed).

4.3.15 When JIC activities are terminated, ensure logs and paperwork are provided to Emergency Planning for permanent file.

4.4 JIC Technical Advisor

4.4.1 The JIC Technical Advisor is responsible to the Company Spokesperson for the technical accuracy of information received at the JIC prior to use by JIC staff.

4.4.2 The Company Spokesperson and JIC Technical Advisor are to review Fitzpatrick's radiological conditions (Part I's) before holding a news conference or reporting to the media to assure most accurate and up-to-date information is reported.

4.4.3 Attend media briefings as requested by the Company Spokesperson to assist Company Spokesperson with technical information presented to the news media.

4.4.4 Review as requested, news releases and briefing notes for technical accuracy.

4.4.5 Provide information concerning the incident and plant operations for use by personnel during pre-briefings and media briefings.

4.4.6 Obtain and review plant information with Company Spokesperson, JIC Manager and JIC staff ensuring all are kept up to date (use technical information line or travel to EOF as necessary).

4.4.7 Assist the Company Spokesperson with identifying and organizing topics for the next media briefing.

A. Security and law enforcement related questions should be directed to the local enforcement spokesperson present (e.g. Sheriff, State Police, FBI, etc).

B. Attachment 11, SECURITY/LAW ENFORCEMENT PHRASES TO AVOID, should be used to aid in developing news releases, speaker notes for press briefings, and when anticipating media questions during briefings.

4.4.8 Attend pre-briefings to assist with technical issues.

4.4.9 Obtain responses to reporters' questions, which remained unanswered during media briefings.

4.4.10 Ensure the Company Spokesperson is notified of event termination.

4.4.11 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.5 **JIC Technical Assistant**

4.5.1 The JIC Technical Assistant is responsible to the JIC Manager for obtaining information on plant status and events.

4.5.2 Assist the Technical Advisor to ensure technical accuracy of information received.

4.5.3 Maintain a chronological log of significant events for posting in the utility workroom.

4.5.4 Develop approximate trending plots of key plant parameters (i.e.: reactor pressure, reactor water level, building radiation levels and stack release rates) as requested.

4.5.5 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.6 **JIC Media Liaison**

4.6.1 The JIC Media Liaison is responsible to the JIC Manager for hosting JIC news media.

4.6.2 Interact with JIC news media to determine and respond to their need for background information and support services.

4.6.3 Ensure the availability of news releases, briefing summaries, Emergency Alert System messages, press kits and other materials.

4.6.4 Identify and welcome media representatives to the JIC.

4.6.5 Brief the Company spokesperson on the media present at the JIC and their information needs.

4.6.6 Provide assistance by briefing reporters on past media briefings, showing them their work areas and distributing copies of available information.

4.6.7 Provide to the JIC Manager/Company Spokesperson for use in Pre-briefings any media requests and/or the presence of news media at the JIC.

4.6.8 Announce the time for the next scheduled media briefing and provide background information to reporters and photographers (including Public Inquiry number: 315-592-3720).

4.6.9 Coordinate interviews between reporters and JIC staff, including, but not exclusive to the Company Spokesperson.

4.6.10 Relay requests for media interviews to the federal, state or county spokespeople.

4.6.11 Record questions asked by the media requiring follow up and deliver to the Spokesperson after the briefing.

4.6.12 After each media briefing, determine whether reporters need assistance in obtaining additional information.

4.6.13 Direct media information requests, if appropriate, to the third party technical experts.

4.6.14 Responsible to the JIC Logistics Coordinator for coordinating operation and use of JIC video and photo services. Refer to Attachment 8 for guidance.

4.6.15 Record all media briefings conducted at the JIC, for permanent record.

4.6.16 Provide duplication and playback capability for recordings of earlier media briefings.

4.6.17 Assist off-air monitoring of radio and television news broadcasts and bulletins concerning the emergency.

4.6.18 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.6.19 Provide video/CD/visual aids for Company Spokesperson and Technical Advisor.

4.7 **Press Release Writer**

4.7.1 The Press Release Writer is responsible to the JIC Manager for the development of all Entergy news releases as directed.

4.7.2 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.8 **JIC Log Keeper**

4.8.1 The JIC Log Keeper is responsible to the JIC Manager for the development of briefing notes as directed.

4.8.2 Generate notice to the media for:

- JIC Activation
- Event Termination

4.8.3 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.9 **Logistics Coordinator**

4.9.1 The JIC Logistics Coordinator is responsible to the JIC Manager for directing all activities and functions at the JIC not directly involved with information flow from the plant to the news media.

4.9.2 Supervise administrative functions such as:

- Registration
- Clerical services
- Security
- Setup and maintenance of JIC facilities
- Final distribution of approved news releases

4.9.3 Ensure copies of news releases and other requested materials are provided to the JIC Media Liaison.

4.9.4 Supervise recording and photographic services.

4.9.5 Coordinate auxiliary services such as travel, lodging and food services.

4.9.6 Request Oswego County personnel in the JIC to provide JIC security support. Prior to Local Law Enforcement arriving, assign two JIC staff to ensure only blue or yellow-badged staff enter the pre-brief area and the back entrance to the Media Briefing room.

4.9.7 Ensure completion of Attachment 5-STAFFING CHART.

4.9.8 Report JIC operational readiness to the JIC Manager.

4.9.9 Ensure completion of Attachment 10-DEACTIVATION CHECKLIST, after termination of JIC activities.

4.10 **Clerical**

4.10.1 Clerical staff are responsible to the JIC Logistics Coordinator for performing assigned tasks including the following:

- Typing and word processing support
- Photocopy and facsimile support
- Distribution of news releases and supporting materials
- JIC Registration

4.10.2 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.10.3 If clerical support is not available, then request additional JIC personnel be contacted and requested to report to the JIC via the JIC Logistics Coordinator.

4.11 **Security**

4.11.1 Security personnel are assigned when requested and are responsible to the JIC Logistics Coordinator for ensuring completion of JIC security needs.

4.12 **Inquiry Response Coordinator**

4.12.1 The Inquiry Response Coordinator is responsible to the JIC Manager for coordinating public and media inquiry response and media monitoring.

4.12.2 Ensure all public inquiry associated actions are logged.

4.12.3 Ensure audio and video broadcasts applicable to the event are recorded.

4.12.4 Ensure Public Inquiry, Media Inquiry and Media Monitoring areas are activated (should use Attachment 7-INQUIRY RESPONSE COORDINATOR CHECKLIST).

4.12.5 Ensure all media reports are documented using Attachment 9, PUBLIC INQUIRY-MEDIA RESPONSE INQUIRY AND OFFAIR MONITOR FORM.

4.12.6 Provide immediate feedback to the JIC Manager and/or Information Coordinator of any inaccurate or incorrect reports.

4.12.7 Obtain and place in safe-keeping recordings of inaccurate media coverage (for post emergency/event review), including printed Internet pages.

4.12.8 Ensure Public/Media Inquiry Team is adequately staffed with personnel from JAF, Nine Mile, State and County to support the following:

- Public Inquiry
- Media Monitoring
- Media Inquiry

4.12.9 Ensure Public/Media Inquiry team members are provided with information and materials to adequately answer inquiries.

4.12.10 Ensure corrections to inaccurate reports are provided. This may include the following actions:

- Notifying the Company Spokesperson or Information Coordinator for inclusion into upcoming briefings, **OR**
- Contacting the responsible station or publication directly

4.12.11 Ensure the "Public Inquiry" telephone number is announced at all media briefings.

4.12.12 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.13 **Public Inquiry Staff**

4.13.1 Public Inquiry Staff are responsible to the Inquiry Response Coordinator for completing assigned tasks.

4.13.2 Assist Inquiry Response Coordinator as directed with all public inquiry associated actions.

4.13.3 When JIC activities are terminated, ensure all logs, status boards and paperwork forwarded to JIC Manager for inclusion in the permanent plant file.

4.14 **Communications Staff**

4.14.1 Assist in responsibility for all notifications to the news media in the event of a declared emergency.

4.14.2 May be assigned to act as the JIC Manager or Company Spokesperson.

4.14.3 Prior to JIC activation, prepare news releases as directed by the Emergency Director.

4.15 **Emergency Preparedness Manager**

4.15.1 Ensure the JIC staff, facilities and procedures are maintained in accordance with the JAF Emergency Plan.

4.16 **Information Coordinator**

4.16.1 The Information Coordinator reports to the JIC Manager. Responsibilities include:

A. Provide news bulletins / press releases for distribution

B. Supervise media monitoring and response activities.

C. Supervise public response activities.

D. Establish and maintain frequent contact with the communications personnel in the corporate office or CEC/CSC (Corporate Emergency Center/Corporate Support Center).

5.0 **PROCEDURE**

5.1 **JIC Pre-Activation**

5.1.1 JAF Communications Specialist or designee will be notified of a declared emergency by normal ERO notification methods (pager, automated telephone call) or by a call via other company methods.

5.1.2 The Communications Specialist or designee should perform the following prior to JIC activation as appropriate:

NOTE: A news release is not required to be developed/disseminated during rapidly changing conditions that cause JIC activation shortly after initial event declaration. A news release is appropriate for declared events that result in not activating the JIC for a prolonged period.

A. Develop a news release appropriate to the event.

1. Boilerplate news release examples are provided in Attachment 3 - NEWS RELEASE EXAMPLES.

B. Obtain approval (verbal OR written) of the news release content from the Emergency Director.

C. Distribute the news release to the media as appropriate.

D. If appropriate, inform Communications On-call Representative they will be responsible for all news media inquiries until the JIC is declared operational.

E. If the event is terminated, then perform appropriate notifications.

F. If appropriate, provide information to local and state officials.

5.2 JIC Activation

5.2.1 The JIC shall be activated upon declaration of an Alert emergency classification or higher, or any event the ED expects to attract significant media attention.

5.2.2 The Company Spokesperson/JIC Manager should determine if an initial News Release was developed and distributed by the Communications Specialist or designee.

A. **IF** no initial News Release was developed and distributed, **THEN** develop and distribute an initial News Release in accordance with section 5.4.

5.2.3 If the JIC is activated for causes other than a declared emergency, the JIC Manager shall ensure the SM is notified.

5.2.4 The JIC Manager should travel to the JIC and ensure the JIC activation commences.

5.2.5 The JIC Manager shall verify the JIC is staffed with the following positions:

REQUIRED (JIC Manager or ED may alter requirement)

- Company Spokesperson (may also act as JIC Manager)
- JIC Manager
- Technical Advisor
- JIC Logistics Coordinator
- Information Coordinator
- JIC Media Liaison
- JIC Log Keeper
- JIC Technical Assistant
- Press Release Writer
- Media Monitoring
- Inquiry Response Coordinator
- Public Inquiry Responders

DESIGNATED

- Assistant JIC Manager
- Additional Media Monitoring Staff
- Additional Media Inquiry Staff
- Additional Public Inquiry Staff

ADDITIONAL STAFF

- Clerical staff
- Security

5.2.6 Filling an ERO vacancy during JIC activation:

A. If an ERO position is not filled during the ERF activation/operation, the facility manager (if possible, the non on call facility managers) should take the following action to fill the vacancy to ensure the facility can perform its assigned function and the facility can be made operational within the time requirements established in the site's emergency plan.

NOTE:

Vacant positions can be filled using ERO members from other emergency response facilities.

B. If possible, select a person to fill the position with any individual qualified for that position. This person does not need to be the on-duty person. In an all-call activation, the first responder to arrive for a position should take the position until the on-duty person arrives.

- If possible, fill the position with a person previously qualified for the vacant position. This fill-in person may have a new ERO position for which there is adequate ERO staffing.
- If possible, select a person from the extra ERO members reporting that are responsible for performing the facility function (i.e. dose assessment, communication, administrative support, etc.) as the vacant position.
- If possible, the person selected should be from a higher position in the reporting chain of the vacant position (i.e. Engineering Coordinator to fill for a Mechanical/Electrical/I&C Engineer, Emergency Plant Manager to fill for a TSC Manager, EOF Manager to fill for an EOF Communicator, etc.)

- If none of the above steps are possible, fill the position with a person who is technically qualified to perform the assigned task and can use the position book, checklist, etc. as their guide. As an example, a maintenance supervisor not yet qualified in the ERO could be assigned as the Maintenance Team Coordinator. Although this last approach is the least desirable, the goal is to activate the respective ERF ASAP to support mitigation of the event.

C. Once a person is selected to fill the vacant position, perform the following:

- Ensure the person filling the vacancy understands their new duties by having them review the position binder, checklist, etc.
- Ensure the person filling the vacancy is wearing the appropriate badge.
- Ensure the person filling the vacancy understands their new role in the ERO.
- Ensure the facility lead is aware of the actions taken to fill the vacancy.
- Contact the Admin. & Logistics Coordinator in the EOF and instruct them to locate someone from the vacant position and have them report immediately to the facility.

D. If the vacant ERO position is the facility manager position, then this responsibility would become the facility leads responsibility. This responsibility can be delegated.

5.2.7 All JIC doors, with exception of the main door, shall remain locked or guarded.

5.2.8 Pre-briefing areas shall be provided with personnel assigned to ensure privacy of Pre-briefing sessions (only blue and yellow badged staff allowed into Pre-briefing area).

5.2.9 JIC Logistics Coordinator ensures actions to activate JIC. Use Attachment 4, JIC ACTIVATION CHECKLIST as a guide.

5.3 JIC Operation

5.3.1 Registration

A. Every individual requesting entry to the JIC must present photo identification.

B. Licensee, county, state and federal employees must have picture identification issued by the county, state or federal agency.

NOTE: During drills or exercises, drill controllers and observers require only "Drill" badges.

NOTE: It is important to ensure that necessary EOF or JIC staff members are able to move between facilities using the side doors to provide support to the JIC during an emergency. EOF and JIC staff can travel between buildings after they have initially signed in to one or the other building and have proper identification. For EOF staff entering the JIC through the side door, they need only display their Entergy or NMP badge, or other Authorized Access Control I.D. Card.

C. Appropriately colored badges shall be issued to each individual entering the JIC, with the holder's name indicated on the badge:

- Blue - observers and visitors
- Pink - media: a separate log (pink) should be kept for print, radio and television media
- Yellow - all JIC staff

D. If a question arises regarding authorization of an individual, the JIC Logistics Coordinator shall be contacted.

E. Press kits and media manuals shall be placed in media Briefing Room, Press Telephone Room and Public Inquiry Room.

F. Personnel leaving the JIC shall return their assigned JIC badge to the registration desk and sign out of the respective registration log.

5.3.2 **Public Inquiry, Media Inquiry and Media Monitoring**

NOTE 1: Ensure information provided comes from news releases, EAS (Emergency Alert System) messages and media briefings.

NOTE 2: Any message agreed upon by the state, county, or licensee may be used, thus providing the ability to address specific incorrect or inaccurate information.

A. **Public Inquiry**

1. Inquiries shall be logged using Attachment 9 - PUBLIC INQUIRY - MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM and monitored for trends.

2. During facility activation, Public Inquiry staff can use the following prepared message guidance until more detailed information becomes available:

   a. "You have reached the Joint Information Center. My name is _____. We have activated this call line due to an event at the James A. FitzPatrick Nuclear Power Plant. Information regarding this event will be available shortly. Your call is important to us. Please call back so we can provide you with up to date information when it becomes available. If you are located within the 10 mile Emergency Planning Zone surrounding the plant, review the information in your emergency response public information calendar and tune in to a local TV or radio station for additional information."

3. The JIC Manager shall be notified of inquiry trends.

4. Authorized statements and answers to questions shall be provided based on approved information available at the time (i.e.: approved news releases, annual reports, etc.).

5. Phones should be answered by saying "Joint Information Center, may I help you?"

6. Only materials and information provided by the Inquiry Response Coordinator should be used to respond to inquiries.

7. Only factual information relative to the caller's questions or concerns should be provided.

8. If unsure how to best answer a caller's question, contact the Inquiry Response Coordinator.

9. Completed Attachment 9 - PUBLIC INQUIRY - MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM sheets shall be submitted to the Inquiry Response Coordinator as they are completed.

B. **Media Inquiry**

1. Inquiries shall be logged using Attachment 9 - PUBLIC INQUIRY - MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM and monitored for trends.

2. During facility activation, Media Inquiry staff can use the following prepared message until more detailed information becomes available:

   a. "You have reached the Joint Information Center. My name is _____. We have activated this call line due to an event at the James A. FitzPatrick Nuclear Power Plant. Information regarding this event will be available shortly. Your call is important to us. Please call back so we can provide you with up to date information when it becomes available. If you are located within the 10 mile Emergency Planning Zone surrounding the plant, review the information in your emergency response public information calendar and tune in to a local TV or radio station for additional information."

3. The JIC Manager shall be notified of inquiry trends.

4. Authorized statements and answers to questions shall be provided based on approved information available at the time (i.e. approved news releases, annual reports, etc.).

5. Inquiries requiring further elaboration or special response shall be referred to the appropriate source. If the appropriate sources are unavailable, a return call should be offered, "as soon as feasible." Do not make guarantees to meet deadlines.

6. One copy of all response logs shall be provided to the NY State PIO (Public Information Officer) when present at JIC.

C. **Media Monitoring**

1. JIC recording equipment shall be used to monitor and record audio and video news broadcasts and bulletins carried by radio and television stations.

2. The Internet shall be monitored for news applicable to the event. Applicable Internet news shall be printed. Typical web sites include:

   - www.cnn.com
   - www.cbs.com
   - www.abc.com
   - www.msnbc.com
   - www.nbc.com
   - www.foxnews.com

3. All reports identified as applicable to the event (broadcasts, newspaper, internet, etc.) shall be logged on Attachment 9 - PUBLIC INQUIRY - MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM.

4. All reports shall be reviewed for accuracy.

5. Review and monitor off-air monitoring and recording capability to ensure every opportunity for prompt identification of inaccurate or incorrect information is utilized.

6. All reports requiring correction shall be brought to the attention of the Inquiry Response Coordinator.

7. Newspapers should be reviewed to identify articles pertaining to the events at the plant.

8. Applicable newspaper articles should be retained for permanent plant file.

5.3.3 **Audio-Visual**

All media briefings at the JIC shall be recorded to provide a permanent record of the event.

5.4 **News Releases**

NOTE: During a security related event it is important to ensure that no safeguards, security response related, or Local Law Enforcement related response actions are included in news releases. Including this type of information for dissemination to the public through the media could adversely affect the emergency response and could provide details to members of a hostile force through normal media dissemination. Additionally, during security related events we do not discuss the number of adversaries, number or type of responders, or the attack methods and results, this information could be useful to the hostile individuals. Attachment 11, SECURITY/LAW ENFORCEMENT PHRASES TO AVOID, should be used to aid in developing news releases, speaker notes for press briefings, and when anticipating media questions during briefings. Attachment 12, HOSTILE ACTION EVENT NEWS RELEASE EXAMPLES, provides example news releases.

5.4.1 News releases are developed at the direction of the Company Spokesperson.

5.4.2 News releases are used for immediate release pertinent written information for circumstances where waiting for a media briefing is not prudent. Examples include:

A. A change in Emergency Classification.

B. Release of radioactivity outside the site boundary in excess of regulatory limits.

C. Personnel radiation exposures exceeding regulatory limits.

D. A fatality or serious injury.

E. Emergency event termination.

NOTE: Security and Law Enforcement response action related information should be reviewed by the JIC Local Law Enforcement representatives in addition to the Emergency Director prior to being distributed to the media.

5.4.3 News releases should include the following:

A. Current date and time (indicates final approval prior to distribution.

B. A sequential news release number.

C. Present emergency classification, the time the classification was declared and the reason for the classification.

1. Attachment 11, Security/Law Enforcement Phrases To Avoid, should be used to aid in developing news releases, speaker notes for press briefings, and when anticipating media questions during briefings.

D. Other pertinent information.

E. News releases should be closed with -30- or "end".

5.4.4 News releases should be developed on company letterhead and formatted per Attachment 3 - NEWS RELEASE EXAMPLES, or Attachment 12, HOSTILE ACTION EVENT NEWS RELEASE EXAMPLES.

5.4.5 IF a UE is declared and the JIC is NOT activated, THEN the site Communications Specialist will obtain ED review and approval of press releases as follows:

A. IF the site Communications Specialist is on-site, THEN approval may be obtained via face to face interaction with the ED.

B. IF the site Communications Specialist IS NOT on-site, THEN approval may be obtained by sending a copy of the press release to the TSC Log Keeper via fax or email, and directing that individual to present it to the ED for review and approval.

5.4.6 IF the JIC has been activated AND the ED is not at the EOF, THEN approval of press releases and briefing notes will be obtained by providing a copy to the TSC Logkeeper (or other available TSC postion) via fax or email, and directing that individual to present it to the ED for review and approval. Refer to EAP-14.1, TSC Activation, for TSC contact information.

5.5 Media Briefings

NOTE 1: As a goal, media briefings should commence within approximately 45 minutes following the decision to hold the brief. However, circumstances may require further coordination with government agencies that could delay the briefings.

NOTE 2: During a security related event it is important to ensure that no safeguards, security response related, or Local Law Enforcement related response actions are included in Media Briefings. Including this type of information for dissemination to the public through the media could adversely affect the emergency response and could provide details to members of a hostile force through normal media dissemination. Additionally, during security related events we do not discuss the number of adversaries, number or type of responders, or the attack methods and results, this information could be useful to the hostile individuals. Attachment 11, Security/Law Enforcement Phrases To Avoid, should be used to aid in developing news releases, speaker notes for press briefings, and when anticipating media questions during briefings.

5.5.1 Preparation

A. Briefing Notes

1. Briefing notes should be formatted per Attachment 2 - BRIEFING NOTES EXAMPLE.
2. The Company Spokesperson or JIC Manager should work with the Technical Advisor and the JIC Log Keeper to ensure briefing notes contain the following information as applicable:
   - Emergency classification, standard definition of classification and time of declaration
   - Plant status
   - Abnormal radiological conditions
   - Major actions and activities
   - Sequential briefing number

3. Prior to using briefing notes in a media briefing, the Company Spokesperson ensures the following:
   - Technical accuracy
   - Clarification of undefined acronyms or highly technical terms
   - Review by State and County representatives when present at JIC
   - Review by the Emergency Director
   - Review and approval by Company Spokesperson
   - Review by Local Law Enforcement representative if present (During Security/Law Enforcement related events only)

NOTE 1: As a goal, media briefings should commence within approximately 45 minutes following the decision to hold the brief. However, circumstances may require further coordination with government agencies that could delay the briefings.

NOTE 2: Security and Law Enforcement response action related information should be reviewed by the JIC Local Law Enforcement representatives in addition to the Emergency Director prior to being distributed to the media.

5.5.2 **Pre-Briefing**

A. Prior to conducting a media briefing, a Pre-briefing shall be held.

B. The State PIO facilitates the Pre-briefing when present at JIC.

C. Attendees from Entergy should include the following:
   - Company Spokesperson
   - JIC Manager
   - Technical Advisor
   - Inquiry Response Coordinator
   - JIC Media Liaison
   - Others as requested

1. Media briefing format, flow and topics of discussion will be established, outlined and agreed upon for a timely, accurate and professional media briefing.

2. Media briefings will be based on "news" - change since the last briefing.

3. Media briefing speakers shall be identified and prepared.

NOTE 1: As a goal, media briefings should commence within approximately 45 minutes following the decision to hold the brief. However, circumstances may require further coordination with government agencies that could delay the briefings.

5.5.3 **Presentation**

A. Media briefings are held as circumstances dictate.

1. If a significant event occurs or critical information becomes available, a media briefing may be called by the State or County PIO or the Company Spokesperson.

2. The party desiring the media briefing will notify the JIC Manager.

3. The JIC Manager will ensure notification of other parties, and coordinate a Pre-briefing.

B. Prior to conducting a media briefing, a Pre-briefing shall be held.

C. A media briefing should be structured to answer the following questions:

- What has happened?
- What effect will it have on the public?
- What protective actions are required?
- What other actions are being taken?

5.5.4 **Interruptions**

A. Media briefings may be interrupted for instances of "breaking news" such as changes in ECL (Emergency Classification Level), changes in radiological releases, impending EAS messages, etc.

B. If an interruption is required, the following will be announced:

> "We need to close this briefing so our spokespeople can be updated with the most current information. We will be back with you as soon as possible."

C. The time for the next media briefing will be announced as soon as possible; however, no longer than 30 minutes from the time of interruption.

5.5.5 **Delays**

A. If a media briefing must be delayed from its originally announced time, the JIC Manager or JIC Media Liaison will announce to the media the following:

> "Our spokespeople are currently being updated on the situation. The next briefing will be delayed a short time so they may bring you the most current information. The briefing will be held at *(time)*."

B. A media briefing should not be delayed more than 30 minutes from its original scheduled time.

5.6 **Termination of JIC Activities**

5.6.1 All JIC staff shall assist by clearing their assigned workstations and returning the JIC to a de-activated status.

5.6.2 The JIC Manager shall ensure completion of Attachment 10 - DEACTIVATION CHECKLIST.

6.0 RECORDS RETENTION

NOTE: This section is only applicable if records are generated during an actual emergency.

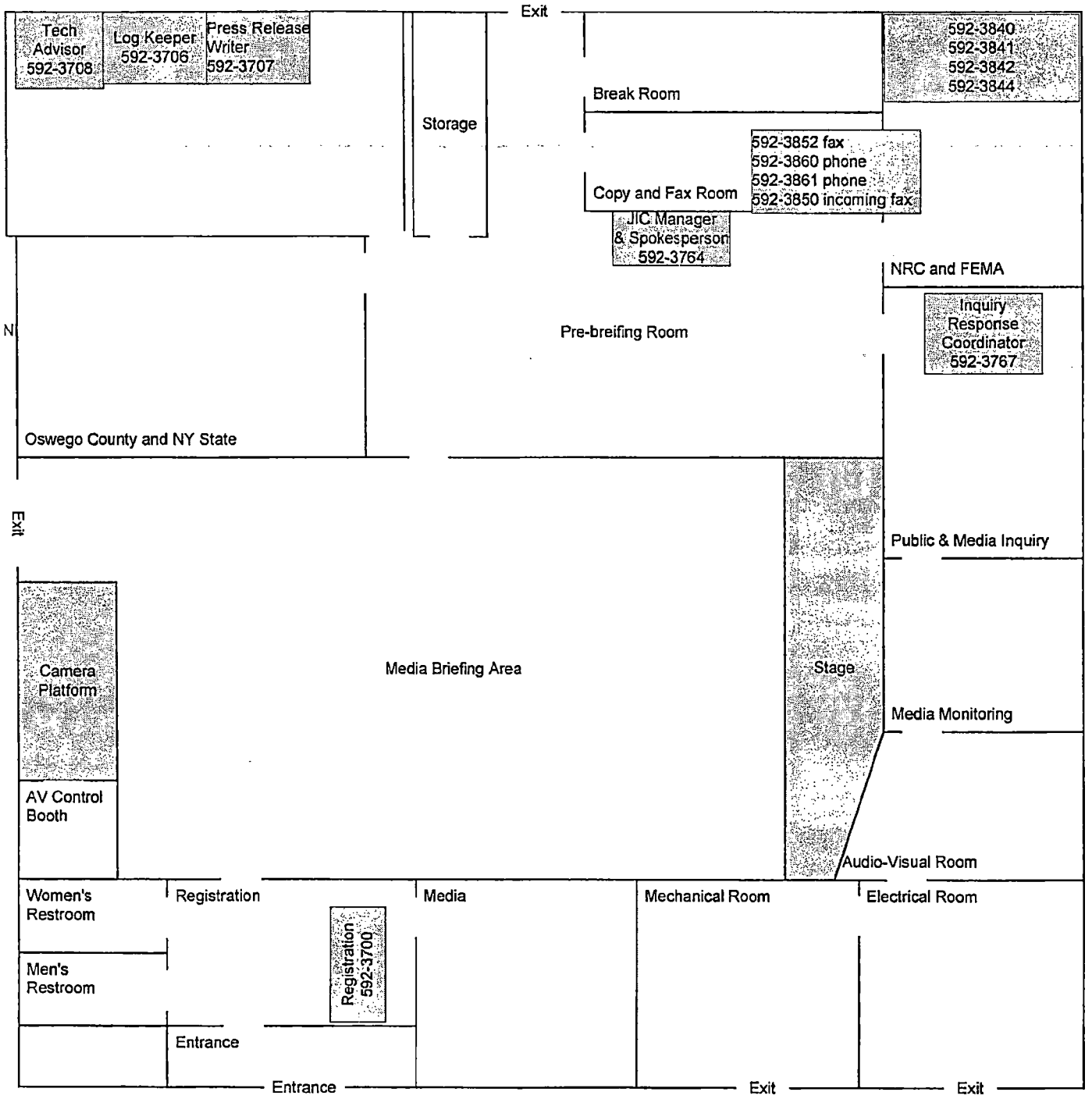
6.1 The records generated by this procedure shall be maintained for the Permanent Plant File, including all completed attachments.

7.0 ATTACHMENTS

1. JIC FLOOR PLAN
2. BRIEFING NOTES EXAMPLE
3. NEWS RELEASE EXAMPLES
4. JIC ACTIVATION CHECKLIST
5. STAFFING CHART
6. REGISTRATION CHECKLIST
7. INQUIRY RESPONSE COORDINATOR CHECKLIST
8. AUDIO-VISUAL CONTROL BOOTH & MEDIA BRIEFING ROOM CHECKLIST
9. PUBLIC INQUIRY - MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM
10. DEACTIVATION CHECKLIST
11. SECURITY/LAW ENFORCEMENT PHRASES TO AVOID
12. HOSTILE ACTION EVENT NEWS RELEASE EXAMPLES

ATTACHMENT 1 Page 1 of 1

JIC FLOOR PLAN



BRIEFING NOTES EXAMPLE

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
James A. FitzPatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel: 315-342-3840

July 2, 2007
BRIEFING NOTES

Finalized by: _____
(Spokesperson/Manager)

Briefing Number: 2

Classification

An Alert, the second lowest of four classifications for events at nuclear power plants was declared at 9:17 AM, due to a natural gas odor detected in the screenhouse of the plant. Plant Status

Plant Status

- Alert classification follows an Unusual Event classification declared at 8:16 AM due to a fire in the turbine building
- Natural gas odor has been eliminated
- Fire was extinguished within 15 minutes of discovery
- No impact to employees or the public
- As precaution, facility emergency response teams have been activated

Radiological Conditions

No radiological release above limits

Public Inquire Number: 315-592-3720

BRIEFING NOTES EXAMPLE

☐ **THIS IS A DRILL, THIS IS A DRILL**

☐ **THIS IS NOT A DRILL, THIS IS NOT A DRILL**

My name is _____, and I'm one of the spokespersons for Entergy Nuclear, operator of the James A. FitzPatrick Nuclear Power Plant which is located approximately 10 miles north of this location in Lycoming, NY.

With me on the podium is _____

(Introduce the other podium guests by name and organization)

Oswego County:

_____

NY State: _____

FEMA: _____

NRC: _____

Technical Advisor:

Also, in the room is _____ who is acting as the JIC Media Liaison today. He/She will assist you with any logistical issues related to the facility.

The purpose of this briefing is to bring you up-to-date with the event currently in-progress at the James A. FitzPatrick station which is located approximately 10 miles to our north on the shore of Lake Ontario.

I would like to remind everyone that the Joint Information Center is the official location for the dissemination of information related to the event occurring at the FitzPatrick Station. I would also like to remind the members of the press that they serve a very important function in assuring the timely dissemination of accurate information to the public.

I will provide a briefing summary the current plant condition at the James A. FitzPatrick Plant which will be followed by information presented by the representatives of Oswego County, New York State, (USNRC), (FEMA), (_____), (_____).

SAFETY AND HEALTH of the GENERAL PUBLIC and OUR EMPLOYEES

In support of the main goal of protecting public health and safety, many of the actions that are taken in a radiological emergency response by public safety officials are precautionary and reflect a very conservative decision making process.

BRIEFING NOTES EXAMPLE

Following this briefing, there will be time available to answer any questions you may have.

At _____ am/pm James A. FitzPatrick declared a _____ as required by procedure due to

_____

_____

_____

_____

_____

_____

_____

☐ Unusual Event (NUE) which is the lowest emergency event classification in accordance with the 4 NRC recognized Emergency Event Classifications. An NUE is defined as events are in process or have occurred which indicate potential degradation in the level of safety of the plant.

This classification is based on _____

☐ Alert which is the second lowest emergency event classification in accordance with the 4 NRC recognized Emergency Event Classifications. An ALERT is defined as events are in process or have occurred which involve an actual or potential substantial degradation in the level of safety of the plant.

This classification is based on _____

☐ Site Area Emergency which is the second highest emergency event classification in accordance with the 4 NRC recognized Emergency Event Classifications. A Site Area Emergency is defined as events in process or which have occurred that result in actual or likely major failures of plant functions needed for protection of the public.

This classification is based on _____

BRIEFING NOTES EXAMPLE

☐ General Emergency which is the highest emergency event classification in accordance with the 4 NRC recognized Emergency Event Classifications. A General Emergency is involves actual or imminent substantial core damage or melting of reactor fuel with the potential for loss or containment integrity.

This classification is based on_____

The plant is presently at _____ % power level and plant technicians are in the process of

_____

_____

_____

and investigating the cause.

RADIOLOGICAL RELEASE STATUS

☐ There has been **NO** Radiological Release as the result of this event.

☐ There has been a Minor Radiological Release **BELOW** Federally approved operating limits as the result of this event.

☐ There has been a Small Radiological Release **ABOVE** Federally approved operating limits as the result of this event.

☐ There has been a Significant Radiological Release **ABOVE** Federally approved operating limits as the result of this event.

BRIEFING NOTES EXAMPLE

Plant Status (from Briefing Notes)

Plant personnel are responding to this event in accordance with plant procedures.

BRIEFING NOTES EXAMPLE

********** **Introduce Next Speaker** **********

REMINDER

I would like to remind everyone that the response to this event is in accordance with procedures which have been developed based upon over 20 years of planning. The procedures have been extensively reviewed by the USNRC and the station has periodically practiced and drilled for such an event.

I would also like to remind everyone that our primary consideration during our response to this event is the protection of the **Safety and Health of the General Public and Our Employees**.

I would also like to remind the members of the media that the purpose of the JIC is to provide members of the media timely and accurate information regarding the current event. We ask that you assist us in responding to this event by disseminating the information provide and also that you correct and inaccurate or misleading information which we may identify.

I'll finally point you to the Public Inquiry Number (592-3720) which we ask that you disseminate. Members of the Public are encouraged to call this number if they have questions regarding the event or information which is been distributed regarding this event.

QUESTIONS

We'll now open the floor for questions.

I'll ask that you identify yourself by name and affiliation.

CLOSING

That concludes the briefing.

The next briefing will occur in approximately 60 minutes.

If conditions change such that an earlier briefing is needed, the Medial Liaison will make an announcement advising of the change.

☐ **THIS IS A DRILL, THIS IS A DRILL**

☐ **THIS IS NOT A DRILL, THIS IS NOT A DRILL**

NEWS RELEASE EXAMPLES

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
James A. FitzPatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel: 315-342-3840

News Release

Date: [Click here and insert date as Month day, year]
[Insert time after final approval]

For Release: Immediate --#[Click here and insert number]

Contact: Tammy Holden: 315-349-6681 or 315-297-6775 (Media Inquiry)
OR
Joint News Center: 315-592-3740 (Media Inquiry)

Unusual Event Declared at James A. FitzPatrick Nuclear Station

Lycoming, NY – Entergy Nuclear Northeast declared an unusual event at its James A. FitzPatrick Nuclear Power Plant [Insert day of week] due to [Insert explanation].

An unusual event is the lowest of the four classifications of incidents at nuclear power plants.

[Insert additional text]

The U.S. Nuclear Regulatory Commission, state and county officials were notified.

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

-30-

Entergy Nuclear's address is www.entergy.nuclear.com

NEWS RELEASE EXAMPLES

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
James A. FitzPatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel: 315-342-3840

Date: [Click here and insert date as Month day, year]
[Insert time after final approval]

News Release

For Release: Immediate --#[Click here and insert number]

Contact: Joint News Center: 315-592-3740 (Media Inquiry)

Alert Declared at James A. FitzPatrick Nuclear Station

Lycoming, NY – Entergy Nuclear Northeast declared an alert at its James A. FitzPatrick Nuclear Power Plant [Insert day of week] due to [Insert explanation].

An alert is the second (in order of increasing severity) of the four classifications of incidents at nuclear power plants.

[Insert additional text]

The U.S. Nuclear Regulatory Commission, state and county officials were notified.

The Public Inquiry phone number is 315-592-3720

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

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Entergy Nuclear's address is www.entergy.nuclear.com

NEWS RELEASE EXAMPLES

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
James A. FitzPatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel: 315-342-3840

Date: [Click here and insert date as Month day, year]
[Insert time after final approval]

News Release

For Release: Immediate --#[Click here and insert number]

Contact: Joint News Center: 315-592-3740 (Media Inquiry)

Site Area Emergency Declared at James A. FitzPatrick Nuclear Station

Lycoming, NY – Entergy Nuclear Northeast declared an site area emergency at its James A. FitzPatrick Nuclear Power Plant [Insert day of week] due to [Insert explanation].

A site area emergency is the third (in order of increasing severity) of the four classifications of incidents at nuclear power plants.

[Insert additional text]

The U.S. Nuclear Regulatory Commission, state and county officials were notified.

The Public Inquiry phone number is 315-592-3720

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

-30-

Entergy Nuclear's address is www.entergy.nuclear.com

NEWS RELEASE EXAMPLES

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
James A. FitzPatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel: 315-342-3840

Date: [Click here and insert date as Month day, year]
[Insert time after final approval]

News Release

For Release: Immediate --#[Click here and insert number]

Contact: Joint News Center: 315-592-3740 (Media Inquiry)

General Emergency Declared at James A. FitzPatrick Nuclear Station

Lycoming, NY – Entergy Nuclear Northeast declared a general emergency at its James A. FitzPatrick Nuclear Power Plant [Insert day of week] due to [Insert explanation].

A general emergency is the highest of the four classifications of incidents at nuclear power plants.

[Insert additional text]

The U.S. Nuclear Regulatory Commission, state and county officials were notified.

The Public Inquiry phone number is 315-592-3720

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

-30-

Entergy Nuclear's address is www.entergy.nuclear.com

JIC ACTIVATION CHECKLIST

Complete	N/A		
		1.	Assign two JIC staff to ensure only blue or yellow badged staff enter the Pre-brief area and the back entrance to the media briefing room.
☐	☐	2.	Ensure registration desk staffed and registration is conducted per ATTACHMENT 6 - REGISTRATION CHECKLIST.
☐	☐	3.	Ensure all doors except main door are locked and remain locked.
☐	☐	4.	Ensure Security personnel are assigned to Pre-Briefing areas.
☐	☐	5.	Acquire cordless telephone (x3715) kept in NMP/JAFNPP room.
☐	☐	6.	Ensure clocks synchronized with network computer or EPIC time.
☐	☐	7.	Ensure completion of ATTACHMENT 8 - AUDIO-VISUAL CONTROL BOOTH & MEDIA BRIEFING ROOM CHECKLIST.
☐	☐	8.	Verify the following staff are signed into JIC Staffing sign-in sheet:

REQUIRED (JIC Mgr/Spokesperson or ED may alter requirements)

- ☐ Company Spokesperson (may also act as JIC Manager)
- ☐ JIC Manager
- ☐ Technical Advisor
- ☐ JIC Logistics Coordinator
- ☐ Information Coordinator
- ☐ JIC Media Liaison
- ☐ JIC Log Keeper
- ☐ JIC Technical Assistant
- ☐ Press Release Writer
- ☐ Media Monitoring
- ☐ Public Inquiry
- ☐ Inquiry Response Coordinator

DESIGNATED

- ☐ Assistant JIC Manager
- ☐ Additional Media Monitoring Staff
- ☐ Additional Media Inquiry Staff
- ☐ Additional Public Inquiry Staff

ADDITIONAL STAFF

- ☐ Clerical staff
- ☐ Security

☐	☐	9.	Ensure Public Inquiry initiated ATTACHEMENT 9 - PUBLIC INQUIRY-MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM
☐	☐	10.	Ensure all equipment, computers and printers are on.
☐	☐	11.	Ensure Staffing Chart updated as staff members fill JIC positions.
☐	☐	12.	Ensure appropriate Emergency Level Classification signs posted in JIC.
☐	☐	13.	Coordinate required services with the EOF Admin/Logistics Coordinator, including:

- Backup electrical generator
- Messenger services
- Additional clerical staff
- Transportation
- Lodging
- Laundry services
- Catering
- Additional equipment

☐	☐	14.	If required, coordinate with JIC Manager and EOF Administrative and Logistics Coordinator (593-5884) to develop 1st and 2nd shift staff schedules.
☐	☐	15.	Ensure water supplies in electrical/mechanical rooms are available and full. If not, call for service per instructions on tanks.
☐	☐	16.	Ensure all Briefing Room reference materials (i.e. posters, displays, etc.) refer to Entergy's FitzPatrick only.

ENTERGY NUCLEAR NORTHEAST JAMES A. FITZPATRICK NPP		JOINT INFORMATION CENTER STAFF SIGN IN	
POSITION		1ST SHIFT	2ND SHIFT
Spokespersons	JIC (Entergy)*		
	Nine Mile		
	Oswego County		
	New York State		
	FEMA		
	NRC		
	Others		
JIC Manager*			
Assistant JIC Manager (designate)			
JIC Technical Advisor*			
JIC Logistics Coordinator*			
Information Coordinator*			
JIC Media Liaison*			
JIC Log Keeper*			
JIC Technical Assistant*			
Press Release Writer*			
Inquiry Response Coordinator*			
Public/Media Inquiry Staff*			
Security (As assigned)			
Clerical (as assigned)	Registration		
	Copy Room		
	Fax Machines		
	Other		
Oswego County Staff			
New York State Staff			
Additional Staff			

*Required Positions (Reference Section 5.2.5)

REGISTRATION CHECKLIST Page 1 of 1

Complete N/A

Registration (Activation)

☐ ☐ 1. Set out individual registration sheets and badges with holders for:
- ☐ observers and visitors (blue)
- ☐ media representatives (pink)
- ☐ JIC staff, including state/county/federal officials (yellow)

☐ ☐ 2. Ensure JAF media kit and JIC information sheet are available for use by media.

☐ ☐ 3. Ensure all personnel already inside the JIC have been properly badged.

Registration (De-activation)

☐ ☐ 1. Return unused registration materials to proper place on shelves or file cabinets behind registration desk.

☐ ☐ 2. Separate returned badges from holders and return holders to inventory.

☐ ☐ 3. File pre-made JIC staff yellow badges.

☐ ☐ 4. Destroy and dispose of used blue and pink badges.

☐ ☐ 5. Perform an inventory of registration supplies and report needs to the JIC Logistics Coordinator.

☐ ☐ 6. Turn over registration logs to JIC Logistics Coordinator and report registration closure complete.

INQUIRY RESPONSE COORDINATOR CHECKLIST

Complete	N/A	
☐	☐	1. Verify monitors (video and audio) are set to the appropriate electronic media outlet as below: TV Stations Monitor 3 local and 1 national station. Radio Stations Monitor 5 local stations.
☐	☐	2. Ensure audio/video recording media is inserted as necessary.
☐	☐	3. Ensure Public Inquiry is staffed.
☐	☐	4. Ensure the "Public Inquiry" phone number (315-592-3720) is distributed to state, county, and licensee telephone operators and posted in the Media Briefing Room.

AUDIO-VISUAL CONTROL BOOTH & MEDIA BRIEFING ROOM CHECKLIST Page 1 of 1

NOTE 1: AV equipment assistance can be obtained from NMP Emergency Planning, or if immediate response is needed, from York Telecom (437-0301).

NOTE 2: An equipment setup manual for all AV equipment is kept in the Equipment Manuals file cabinet drawer in the NMP/JAF room.

Complete	N/A	Start-up
☐	☐	1. Obtain control booth key (labeled JIC Master) from key cabinet located in the NMP/JAFNPP room and unlock booth.
☐	☐	2. Turn on audio system (black 'main power' button, top of audio rack).
☐	☐	3. Verify that the video audio distribution amp is turned on.
☐	☐	4. Turn on video recording and Internal Cable TV (ICTV) by placing power switches labeled power 2 and power 3 on video rack bottom to ON.
☐	☐	5. Verify video camera is on. If not, turn the DC power switch to RCU (located at top rear panel of camera).
☐	☐	6. Remove video camera lens cap.
☐	☐	7. Verify VCRs (3) are on (used to record press briefings).
☐	☐	8. If wireless microphones are to be used: ☐ Turn on wireless microphone (black button on power supply just below top section of audio rack). ☐ Obtain wireless microphones from bottom drawer of audio rack. ☐ Replace batteries (new batteries located on back shelf) in wireless microphone units. ☐ Deliver wireless microphone to spokesperson prior to media briefing.
☐	☐	9. Ensure overhead lighting is on as needed during briefings using the three switches located on the wall opposite the camera.
☐	☐	10. Record all press briefings including all question and answer sessions.
☐	☐	11. Ensure media cabling is routed through cable tray located on back stage and not run through doors.
☐	☐	12. Ensure that media is provided with access to both video and audio outputs. Refer to document aide located in the JIC audio visual control booth room for set-up assistance.
☐	☐	13. Refer to document aide located at podium for rear projection screen video projector and computer display set-up assistance.
		Shutdown
☐	☐	1. Turn off power supplies. ☐ Turn off black switch labeled main power switch. ☐ Turn off red switches labeled power 2 and power 3. ☐ Verify camera, VCRs and sound equipment, power down. ☐ Turn off wireless microphone power switch. ☐ Replace video camera lens cap
☐	☐	2. Turn off lights, lock door and return key to key cabinet.
☐	☐	3. Provide recording of briefings to JIC Manager.
☐	☐	4. Report any equipment problems, issues or needs to JIC Manager.

PUBLIC INQUIRY - MEDIA RESPONSE INQUIRY AND OFF AIR MONITOR FORM

Key Word: _____

Type of call: ☐(Public Inquiry) ☐(Professional Inquiry) ☐(Media Inquiry) ☐(Media Monitor Report)

Date of call/broadcast: _____ Time of call/broadcast: _____

Name of responder/monitor: _____

Media Name/Location: _____

Caller's/Reporter's name: _____ Phone: (____)____-_____

Question(s) asked/Inaccurate Information and Source: _____

_____

_____

_____

Response given/Correct Information and Source: _____

_____

_____

_____

Further action required: ☐ **YES** ☐ **NO**

Action needed: _____

_____

_____

Reported to Inquiry Response Coordinator at _____

Inquiry Response Coordinator Notes:

_____

Return completed form to Inquiry Response Coordinator

DEACTIVATION CHECKLIST

Complete	N/A		
☐	☐	1.	JIC Registration logs collected and all badges returned and accounted for.
☐	☐	2.	Turn over all logs and related materials to JIC Manager.
☐	☐	3.	Adjust heating/cooling system temperatures to 68° F.
☐	☐	4.	Ensure off video projector by pushing the PJ push-button (it should light) and then holding the power off push-button on the remote control for the video projector until a message appears on the screen stating, wait a few moments.
☐	☐	5.	Verify water supply is available and full. If not call for service per instructions on tanks.
☐	☐	6.	Ensure shutdown all printers and other equipment. Computers should be left on but with no user logged in.
☐	☐	7.	Call for septic tank to be pumped using number provided in utility room.
☐	☐	8.	Ensure all coffee pots are turned off, emptied and cleaned.
☐	☐	9.	Inventory JIC supplies, including: • Copier paper • Bottled water • Condiments • Office supplies
☐	☐	10.	Email JAF Emergency Preparedness Manager of needed supplies and to have NMPC empty the dumpster (if required).
☐	☐	11.	Ensure water in bathroom facilities is not running.
☐	☐	12.	Report completion of termination activities to JIC Manager.
☐	☐	13.	Turn off all lights.
☐	☐	14.	Verify all doors are locked.
☐	☐	15.	Forward this checklist and all generated paperwork to JAF Emergency Preparedness Manager.

SECURITY/LAW ENFORCEMENT PHRASES TO AVOID Page 1 of 1

WORDS TO AVOID	ALTERNATE WORDS TO USE
• Dead	• Neutralized
• Killed	• Neutralized
• Names of workers injured or killed.	• We do not provide the names of injured individuals at the stations. This is restricted for confidentiality concerns.
• Code Words (e.g. red, blue, security codes, etc)	• Do not comment on our response capabilities or actions. Generic statements such as "our security personnel are trained to respond to these types of events" is fine, but no specifics on the action and training they undertake.
PHRASES TO AVOID	**ALTERNATE PHRASES TO USE**
• Specifics on how many hostiles have been neutralized, killed, wounded or taken into custody.	• Refer to law enforcement agency spokesperson.
• Details of the attack or assault - methods, multiple aspects, repelled or successful, etc.	• Refer to law enforcement agency spokesperson.
• Specifics of how many workers have been killed or injured.	• General terms - we don't want to provide specifics - this could help the hostile group.
• Specifics of the components damaged, extent of damage, or areas of the plant effected.	• A statement to the effect of: "I can not provide that information as it could be useful to any supporters of the group that implemented the action on the plant." "What I can tell you is…."
• Numbers of security officers on shift.	• We do not discuss security staffing levels.

Entergy

James A. FitzPatrick
Nuclear Power Plant
Entergy Nuclear
PO Box 110
Lycoming, NY 13093
Tel 315 342 3840

This is a Drill **This is a Drill** **This is a Drill**

News Release

Date: [Click here and insert date as Month day, year]

Time: [Insert time after final approval]

For Release: Immediate –#[Click here and insert number]

Contact: Tammy Holden: 315-349-6681 or 315-297-6775
[Remove Tammy's contact info once activated]
OR
Joint Information Center: 315-592-3740 (Media Inquiry)

Unusual Event Declared at James A. FitzPatrick Nuclear Station

Lycoming, NY – Entergy officials declared an Unusual Event at the James A. FitzPatrick Nuclear Power Plant at approximately "[Time of Day]" today.

Licensed operators and trained plant personnel continue to monitor conditions at the plant.

Additional information regarding the emergency declared today at FitzPatrick will be provided as information becomes available or as conditions warrant.

In accordance with federal regulations and plant procedures, appropriate government agencies have been notified including the Nuclear Regulatory Commission, state, county and local officials. An Unusual Event is the lowest of four emergency classifications for U. S. nuclear power plants, as outlined by the Nuclear Regulatory Commission.

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

-30-

Entergy's online address is www.entergy.nuclear.com

Entergy

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Nuclear Power Plant
Entergy Nuclear PO Box 110
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News Release

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For Release: Immediate --#[Click here and insert number]

Contact: Tammy Holden: 315-349-6681 or 315-297-6775
[Remove Tammy's contact info once activated]
OR
Joint Information Center: 315-592-3740 (Media Inquiry)

Alert Declared at James A. FitzPatrick Nuclear Power Plant

Lycoming, NY – Entergy officials declared an Alert at the James A. FitzPatrick Nuclear Power Plant at approximately "[Time of Day]" today.

Licensed operators and trained plant personnel continue to monitor conditions at the plant.

Additional information regarding the emergency declared today at FitzPatrick will be provided as information becomes available or as conditions warrant.

In accordance with federal regulations and plant procedures, appropriate government agencies have been notified including the Nuclear Regulatory Commission, state, county and local officials. An Alert is the second of four emergency classifications for U. S. nuclear power plants, as outlined by the Nuclear Regulatory Commission.

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

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Time: [Insert time after final approval]

For Release: Immediate --#[Click here and insert number]

Contact: Tammy Holden: 315-349-6681 or 315-297-6775
[Remove Tammy's contact info once activated]
OR
Joint Information Center: 315-592-3740 (Media Inquiry)

Site Area Emergency Declared at James A. FitzPatrick Nuclear Power Plant

Lycoming, NY – Entergy officials declared a Site Area Emergency at the James A. FitzPatrick Nuclear Power Plant at approximately "[Time of Day]" today.

Licensed operators and trained plant personnel continue to monitor conditions at the plant.

Additional information regarding the emergency declared today at FitzPatrick will be provided as information becomes available.

In accordance with federal regulations and plant procedures, appropriate government agencies have been notified including the Nuclear Regulatory Commission, state, county and local officials. A Site Area Emergency is the third of four emergency classifications for U. S. nuclear power plants, as outlined by the Nuclear Regulatory Commission.

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

-30-

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This is a Drill **This is a Drill** **This is a Drill**

News Release

Date: [Click here and insert date as Month day, year]

Time: [Insert time after final approval]

For Release: Immediate –#[Click here and insert number]

Contact: Tammy Holden: 315-349-6681 or 315-297-6775
[Remove Tammy's contact info once activated]
OR
Joint Information Center: 315-592-3740 (Media Inquiry)

General Emergency Declared at James A. FitzPatrick Nuclear Power Plant

Lycoming, NY – Entergy officials declared a General Emergency at the James A. FitzPatrick Nuclear Power Plant at approximately "[Time of Day]" today.

Licensed operators and trained plant personnel continue to monitor conditions at the plant.

Additional information regarding the emergency declared today at FitzPatrick will be provided as information becomes available.

In accordance with federal regulations and plant procedures, appropriate government agencies have been notified including the Nuclear Regulatory Commission, state, county and local officials. A General Emergency is the highest emergency classifications for U. S. nuclear power plants, as outlined by the Nuclear Regulatory Commission.

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees.

-30-

Entergy's online address is www.entergy.nuclear.com

Procedure/Document Number: EAP-16.2	Revision: 16
Equipment/Facility/Other: James A. Fitzpatrick (JAF)	
Title: Joint Information Center Operation	

Part I. Description of Activity Being Reviewed (event or action, or series of actions that may result in a change to the emergency plan or affect the implementation of the emergency plan):

Change 1: Deleting references to positions that no longer exist.
ITEM 1: Delete all references to the EOF Security Coordinator.
ITEM 2: Remove Section 5.3.4 - Security – "The JIC Logistics Coordinator should contact the EOF Security Coordinator (593-5880) to request JIC security support".
ITEM 3: Attachment 4 – JIC Activation Checklist – remove item number 1 - Contact the EOF Security Coordinator (593-5880) to request JIC security support.
ITEM 4: Attachment 4 – Item 13 – change title from EOF Purchasing Staff to EOF Admin/logistics Coordinator.

Change 2: Deleting references to the environmental lab that no longer exists.
ITEM 5: Developmental references - delete 2.2.4 - EAP-37 - Security of the Emergency Operations Facility (EOF) and Environmental Laboratory (EL) during drills, exercises and actual events.

Change 3: Changing operational instructions for Audio/Visual equipment.
ITEM 6: Attachment 8 – Startup, number 2 change green button to black.
ITEM 7: Attachment 8 – Shutdown, number 1 change green button to black.

Change 4: Enhancements
ITEM 8: Attachment 4 - JIC ACTIVATION CHECKLIST – add "inquiry response coordinator" to list of required individuals
ITEM 9: Section 2.2.4 – Change JIC Director to JIC Manager.

Procedure/Document Number: EAP-16.2	Revision: 16
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Part II. Activity Previously Reviewed?
Is this activity fully bounded by an NRC approved 10 CFR 50.90 submittal or Alert and Notification System Design Report?

If YES, identify bounding source document number/approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below:
Justification:

☐ Bounding document attached (optional)

☐ YES	☒ NO
50.54(q)(3) Evaluation is NOT required. Enter justification below and complete Part VI.	Continue to next part

Part III. Applicability of Other Regulatory Change Control Processes

Check if any other regulatory change processes control the proposed activity.(Refer to EN-LI-100)

NOTE: For example, when a design change is the proposed activity, consequential actions may include changes to other documents which have a different change control process and are **NOT** to be included in this 50.54(q)(3) Screening.

APPLICABILITY CONCLUSION

☒ If there are no controlling change processes, continue the 50.54(q)(3) Screening.
☐ One or more controlling change processes are selected, however, some portion of the activity involves the emergency plan or affects the implementation of the emergency plan; continue the 50.54(q)(3) Screening for that portion of the activity. Identify the applicable controlling change processes below.
☐ One or more controlling change processes are selected and fully bounds all aspects of the activity. 50.54(q)(3) Evaluation is NOT required. Identify controlling change processes below and complete Part VI.

CONTROLLING CHANGE PROCESSES 10CFR50.54(q)

Part IV. Editorial Change
Is this activity an editorial or typographical change such as formatting, paragraph numbering, spelling, or punctuation that does not change intent?
For the purpose of this assessment, editorial changes are considered those that involve only formatting, paragraph numbering, spelling, or punctuation that do not change intent.

☐ YES	☒ NO
50.54(q)(3) Evaluation is NOT required. Enter justification and complete Part VI.	Continue to next part

Part V. Emergency Planning Element/Function Screen (Associated 10 CFR 50.47(b) planning standard function identified in brackets) Does this activity affect any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II?

1. Responsibility for emergency response is assigned. [1]	☐
2. The response organization has the staff to respond and to augment staff on a continuing basis (24/7 staffing) in accordance with the emergency plan. [1]	☐
3. The process ensures that on shift emergency response responsibilities are staffed and assigned. [2]	☐
4. The process for timely augmentation of onshift staff is established and maintained. [2]	☐
5. Arrangements for requesting and using off site assistance have been made. [3]	☐

Procedure/Document Number: EAP-16.2	Revision: 16
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6. State and local staff can be accommodated at the EOF in accordance with the emergency plan. [3]	☐
7. A standard scheme of emergency classification and action levels is in use. [4]	☐
8. Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes after declaration of an emergency and providing follow-up notifications. [5]	☐
9. Administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway. [5]	☐
10. The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter. [5]	☐
11. Systems are established for prompt communication among principal emergency response organizations. [6]	☐
12. Systems are established for prompt communication to emergency response personnel. [6]	☐
13. Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ). [7]	☐
14. Coordinated dissemination of public information during emergencies is established. [7]	☐
15. Adequate facilities are maintained to support emergency response. [8]	☐
16. Adequate equipment is maintained to support emergency response. [8]	☐
17. Methods, systems, and equipment for assessment of radioactive releases are in use. [9]	☐
18. A range of public PARs is available for implementation during emergencies. [10]	☐
19. Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities. [10]	☐
20. A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.[10]	☐
21. The resources for controlling radiological exposures for emergency workers are established. [11]	☐
22. Arrangements are made for medical services for contaminated, injured individuals. [12]	☐
23. Plans for recovery and reentry are developed. [13]	☐
24. A drill and exercise program (including radiological, medical, health physics and other program areas) is established. [14]	☐
25. Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses. [14]	☐
26. Identified weaknesses are corrected. [14]	☐
27. Training is provided to emergency responders. [15]	☐
28. Responsibility for emergency plan development and review is established. [16]	☐
29. Planners responsible for emergency plan development and maintenance are properly trained. [16]	☐

APPLICABILITY CONCLUSION

☒ If no Part V criteria are checked, a 50.54(q)(3) Evaluation is NOT required; document the basis for conclusion below and complete Part VI.

Procedure/Document Number: EAP-16.2	Revision: 16
Equipment/Facility/Other: James A. Fitzpatrick (JAF)	
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BASIS FOR CONCLUSION

Changes 1: The proposed change is deleting all references to positions that no longer exist. EOF Security Coordinator and EOF Purchasing Staff are no longer required positions at the EOF. The proposed does not affect the planning standards listed above because the change doesn't add or delete actions from the implementation of the EP function due to these positions having already previously been evaluated when JAF went to the Standard ERO. Evaluated under Plan Section 5, Revision 49 on 2-23-2015. No further evaluation will be performed for this change.

Change 2: The proposed change removed the reference to the Environmental Lab because it no longer exists at that facility. The proposed does not affect the planning standards listed above because the change doesn't add or delete actions from the implementation of the EP function due to the removal of the Environmental Lab having already previously been evaluated when JAF eliminated the Environmental Lab. Evaluated under Plan Section 7, Revision 33 on 12-19-2014. No further evaluation will be performed for this change.

Change 3: The proposed change updates operational instructions for Audio/Visual equipment at the JIC - the current information is outdated. This procedure revision will update the information allowing users to better understand the equipment being used. The proposed change does not affect the planning standards listed above because the proposed does not change the meaning or intent of the Emergency Plan. No further evaluation will be performed for this change.

Change 4: The proposed change adds inquiry response coordinator to the list of individuals required for the JIC activation Checklist. Previously this individual was not listed on the checklist and should have been. Also changed the title in Section 2.2.4 from JIC Director to JIC Manager as this was mislabeled. The proposed change does not affect the planning standards listed above because the proposed does not change the meaning or intent of the Emergency Plan. No further evaluation will be performed for this change.

For changes 1, 2, 3 and 4 no further evaluation is required.

Part VI. Signatures:

Preparer Name (Print) Mellonie Blauvelt	Preparer Signature MBlauvelt	Date: 12-10-2015
(Optional) Reviewer Name (Print) N/A	Reviewer Signature	Date:
Reviewer Name (Print) TIMOTHY F. GARVEY Nuclear EP Project Manager	Reviewer Signature Tim Garvey	Date: 12/15/15
Approver Name (Print) Pete Cullman (acting) EP manager or designee	Approver Signature	Date: 12/15/15