



10 CFR 50.54(q)

LR-N22-0044

May 19, 2022

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

Salem Nuclear Generating Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-70 and DPR-75
NRC Docket Nos. 50-272 and 50-311

Hope Creek Generating Station
Renewed Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: Emergency Plan Document Revisions Implemented November, 2021.

Pursuant to 10 CFR 50.54(q) and 10 CFR 50.4(b)(5), PSEG Nuclear LLC (PSEG) is submitting 10 CFR 50.54(q) Summary Analysis Report 2021-32 for the revision to the Hope Creek Initial Contact Message Forms: EP-HC-325-F1, F2, F3, F24 Rev. 01, EP-HC-325-F4 Rev. 02 (Attachments 1, 2, 3, 4, 5 and 6) and Summary Analysis Report 2021-33 for the revision to the Salem Initial Contact Message Forms: EP-SA-325-F1, F2, F3, F24 Rev. 01 and EP-SA-325-F4 Rev.02 (Attachments 7, 8, 9, 10, 11 and 12).

There are no regulatory commitments contained in this letter.

Should you have any questions, or require further information regarding this submittal, please contact Ms. Megean M. Brown (856) 339-1773.

Respectfully,

A handwritten signature in black ink, appearing to read "S. Barr", written in a cursive style.

Stephen T. Barr
Manager, Emergency Preparedness

Attachment 1 - 10 CFR 50.54(q) Summary Analysis Report 2021-32
Attachment 2 - EP-HC-325-F1 Rev. 1 – Attachment 1 Unusual Event
Attachment 3 - EP-HC-325-F2 Rev. 1 – Attachment 2 Alert
Attachment 4 - EP-HC-325-F3 Rev. 1 – Attachment 3 Site Area Emergency
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(Common Site)
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Attachment 12 - EP-SA-325-F24 Rev. 1 – Attachment 24 Unusual Event
(Common Site)

cc: USNRC Administrator, Region I
USNRC Project Manager
USNRC Senior Resident Inspector, Salem
USNRC Senior Resident Inspector, Hope Creek
NJDEP Bureau of Nuclear Engineering
PSEG Corporate Commitment Tracking Coordinator

ATTACHMENT 1

10 CFR 50.54(q) Summary Analysis Report 2021-32

ATTACHMENT 3
10CFR50.54(q) SUMMARY ANALYSIS REPORT

Page 1 of 2

Revision 0

50.54Q I.D. Number: 2021-32

50.54Q Title: HC Initial Contact Message Forms: EP-HC-325-F1, F2, F3, F24 Rev. 01 and EP-HC-325-F4 Rev. 02

(Doc #, Rev. #, Name, If applicable)

Description of the change made to the Emergency Plan/Procedures:

- For EP-HC-325-F1, Moved bullet item "UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria" up to Section A Step 3. This step is being moved to ensure crew/facility is aware of Emergency Classification/Escalation criteria in a timely manner.
- For EP-HC-325-F2, F3, F4 & F24, Moved bullet item "UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria" up to Section A Step 4. This step is being moved to ensure crew/facility is aware of Emergency Classification/Escalation criteria in a timely manner.
- Revised ICMF approval from "EC Initials" to "EC Print/Sign". All required PSEG approvals for documentation require Print/Sign.
- Added Radioactive Release Determination Flow Chart. The chart is being added to provide clarification to the decision making process for radiation release determination.
- Added "*A sustained positive Secondary Containment D/P*" to the Rad Release Determination definition.

Description of why the change is editorial (if not editorial, N/A this block):

N/A

Description of the licensing basis affected by the change to the Emergency Plan/Procedure (if not affected, omit this element):

Emergency Plan Sections 5.0 - Emergency Classification System, Section 6.0 - Notification Methods, and Section 10.0 - Accident Assessment, describe methods and processes for accident assessment and notifications. Section 16.0 describes the Emergency Plan training program. The proposed revisions to EP-HC-325-F1, F2, F3, F4 and F24 provide classification process clarification and radiation release assessment clarification and do not impact the requirements of the above mentioned sections.

A description of how the change to the Emergency Plan/Procedures still complies with regulation:

Based on a review of regulations, the proposed changes comply with 10 CFR 50 Appendix E and with Regulatory Guide 1.219, Revision 1. The revisions were evaluated against the requirements of planning standards 10 CFR 50.47 (b)(5), (b)(9), and (b)(15), and were found to have no adverse impact.

ATTACHMENT 3
10CFR50.54(q) SUMMARY ANALYSIS REPORT

Page 2 of 2

Revision 0

50.54Q I.D. Number: 2021-32

50.54Q Title: HC Initial Contact Message Forms: EP-HC-325-F1, F2, F3, F24 Rev. 01 and EP-HC-325-F4 Rev. 02

(Doc #, Rev. #, Name, If applicable)

A description of why the proposed change was not a reduction in the effectiveness of the Emergency Plan/Procedure:

- The proposed changes will improve emergency classification timeliness and ensure crews and facilities are aware of accident conditions and escalation criteria.
- The proposed unmonitored radiation release definition and decision flow chart improves decision making for Emergency Coordinators and Direct Reports.
- The proposed changes to add approval Print/Sign instead of initials only aligns with station procedures when approving documents.
- The proposed changes have been validated through use in Licensed Operator Training.
- Training will be provide to Operations personnel through the Licensed Operator Training program. Training for the Emergency Coordinators in the TSC and EOF and their Direct Reports will be provided through Emergency Preparedness lead Focus Area Drills.

There is no reduction in effectiveness to the Emergency Plan resulting from these proposed revisions.

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ATTACHMENT 2

EP-HC-325-F1 Rev. 1 – Attachment 1 Unusual Event

**ATTACHMENT 1
UNUSUAL EVENT**

A. CLASSIFICATION

- | | |
|---|----------|
| 1. CALL communicators to the Control Room | <hr/> SM |
| 2. If time allows, DIRECT Classification Independent Verification to be performed | <hr/> SM |
| 3. After Classification Independent Verification is obtained: | |
| • DECLARE the UNUSUAL EVENT (enter time and date on ICMF) | <hr/> EC |
| • UPDATE Crew/Facility with Emergency Classification Level and potential escalation Criteria | <hr/> EC |
| • COMPLETE / APPROVE the ICMF | <hr/> EC |
| 4. If time allows OBTAIN accuracy peer check of the completed ICMF | <hr/> EC |
| 5. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: | |
| • If desired, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (Optional at UE) (EP 96-003) | <hr/> EC |
| • DIRECT the Primary Communicator to implement ECG Attachment 6 | <hr/> EC |
| • DIRECT the Secondary Communicator to implement ECG Attachment 8 for an UNUSUAL EVENT | <hr/> EC |
| • If ACTIVATION was performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation | <hr/> EC |
| • IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | <hr/> EC |

INITIAL CONTACT MESSAGE FORM

I. THIS IS _____, COMMUNICATOR IN THE CONTROL ROOM
(NAME)

AT THE **HOPE CREEK** NUCLEAR GENERATING STATION.

II. THIS IS NOTIFICATION OF AN **UNUSUAL EVENT** WHICH WAS
DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ DESCRIPTION OF EVENT _____

III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT } Any release above
normal, attributable
to the event. See
flow chart for
assessment.

IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

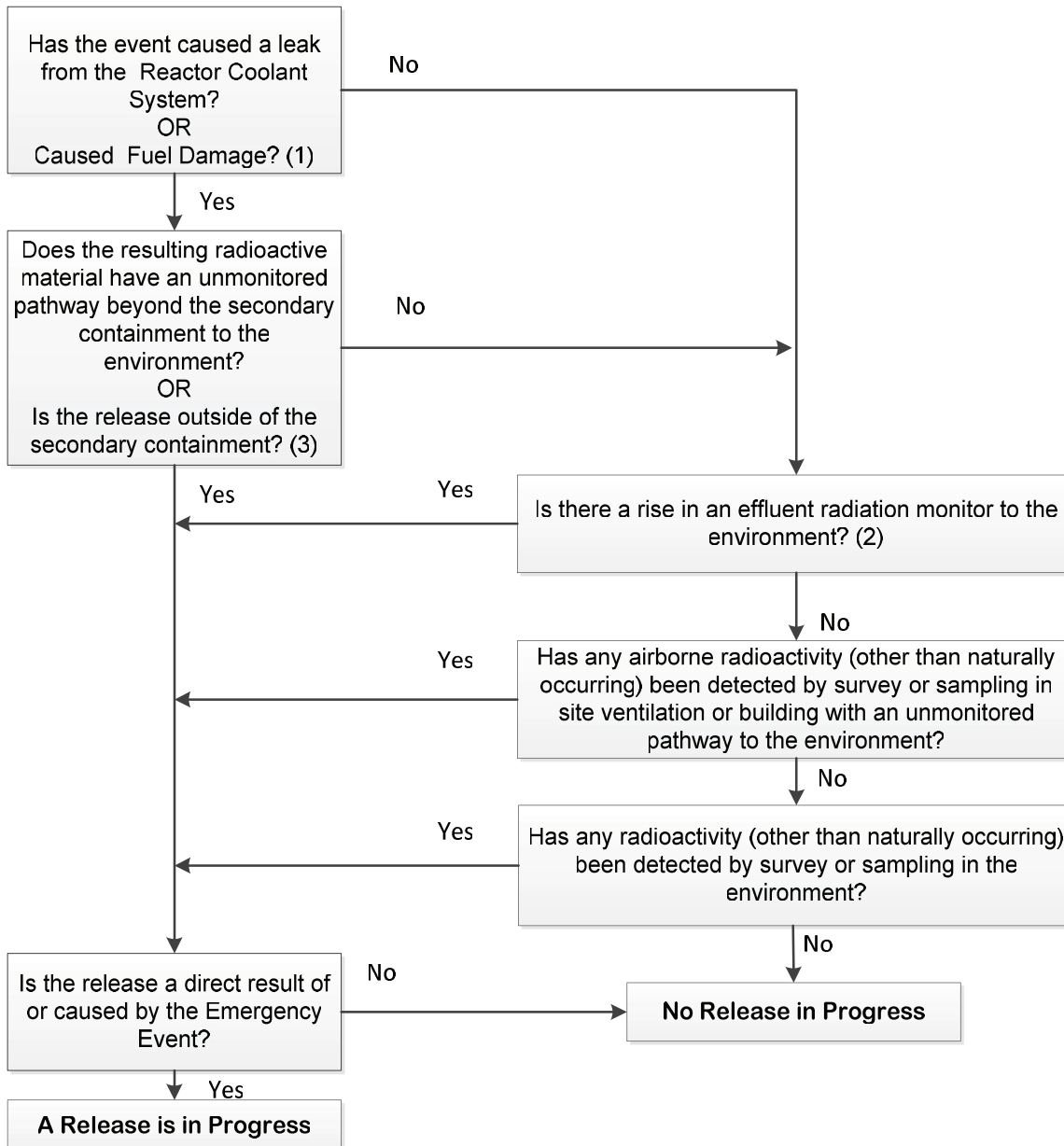
V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Hope Creek-Release In Progress Determination Guidance

An “Airborne” release due to the event is defined as:

**Any airborne radioactive release (Particulate, Iodine or Noble Gas)
that is a result of, or caused by, the emergency event.**



1. Fuel damage is considered to be ANY damage to IRRADIATED fuel in the reactor vessel, spent fuel pool or ISFSI (Independent Spent Fuel Storage Installation).

2. Any of the following conditions constitutes a release in progress due to the event:

- INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
- Opening the HTV to atmosphere post RCS leakage/LOCA.

3. Evidence of an UNMONITORED release to atmosphere. (examples include)

- Steam from blowout panels directly to atmosphere
- Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
- A sustained positive Secondary Containment D/P.

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification maybe delegated as needed with the exception of the 4 non-delegable actions listed below.
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) or Incident Assesor (IA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions.
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, Primary Communicator or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - SM approval initials have been completed
 - review/repeat back by the primary communicator would be considered a sufficient accuracy peer check

- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length.

- **Rad Release Determination (HC):** Any of the following conditions constitutes a release in progress due to the event:
 - INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
 - Opening the HTV to atmosphere post RCS leakage/LOCA.Evidence of an UNMONITORED release to atmosphere, examples include:
 - Steam from blowout panels directly to atmosphere
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
 - A sustained positive Secondary Containment D/P

Notification

- **Callout Activation: UE**

- Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **optional** for an Unusual Event and may be implemented at the discretion of the Emergency Coordinator (EC).
- Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available
- Activate the ERO Emergency Callout system using the posted instructions titled "Emergency Callout Activation".
- ERO callout system activation will be confirmed by verification on the Everbridge Website. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
EP-HC-325-102, ECG Use, Step 4.8
EP-HC-325-102, ECG Use, Step 1.1
EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

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ATTACHMENT 3

EP-HC-325-F2 Rev. 1 – Attachment 2 Alert

ATTACHMENT 2 ALERT

A. CLASSIFICATION

- | | |
|---|-------------|
| 1. CALL communicators to the Control Room. | _____
SM |
| 2. IF a Security Event is in progress, THEN IMPLEMENT the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. | _____
SM |
| 3. If time allows, DIRECT Classification Independent Verification to be performed | _____
SM |
| 4. After Classification Independent Verification is obtained: | _____
SM |
| <ul style="list-style-type: none"> • DECLARE the ALERT (Enter the time and date on ICMF) | _____
EC |
| <ul style="list-style-type: none"> • UPDATE Crew/Facility with the Emergency Classification level and potential escalation criteria | _____
EC |
| <ul style="list-style-type: none"> • COMPLETE / APPROVE the ICMF | _____
EC |
| 5. If time allows OBTAIN accuracy peer check of the completed ICMF | _____
EC |
| 6. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: | _____
EC |
| <ul style="list-style-type: none"> • If not previously performed, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (EP 96-003) | _____
EC |
| <ul style="list-style-type: none"> • DIRECT the Primary Communicator to implement ECG Attachment 6 | _____
EC |
| <ul style="list-style-type: none"> • DIRECT the Secondary Communicator to implement ECG Attachment 8 for an ALERT | _____
EC |
| <ul style="list-style-type: none"> • If not previously performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation | _____
EC |
| <ul style="list-style-type: none"> • IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | _____
EC |

INITIAL CONTACT MESSAGE FORM

- I. THIS IS _____, COMMUNICATOR IN THE ☐ CONTROL ROOM
(NAME) ☐ TSC
☐ EOF

AT THE **HOPE CREEK** NUCLEAR GENERATING STATION.

- II. THIS IS NOTIFICATION OF AN **ALERT** WHICH WAS
DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)
- EAL # _____ DESCRIPTION OF EVENT _____

- III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT
- } Any release above normal, attributable to the event See flow chart for assessment.

- IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

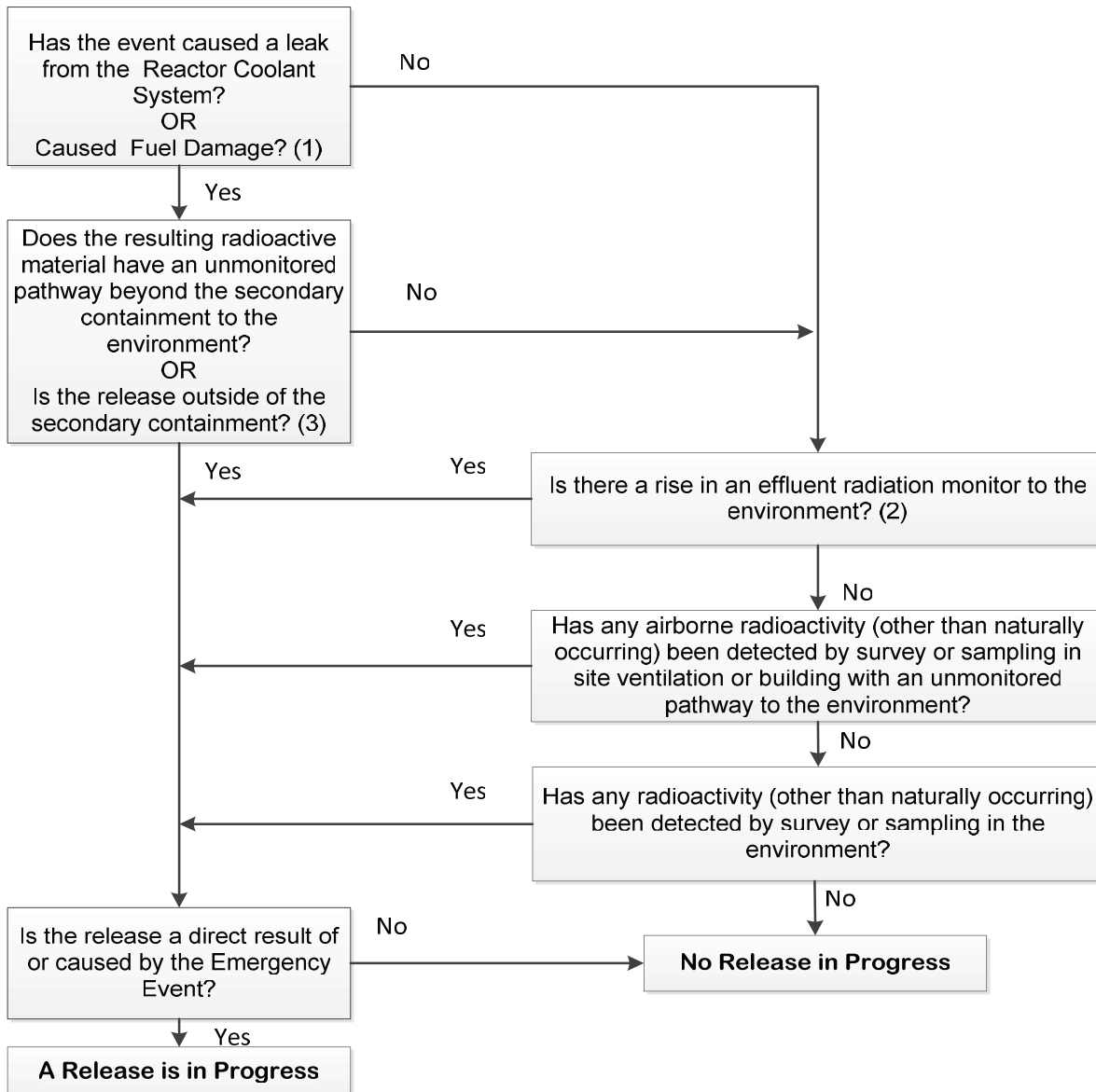
- V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Hope Creek-Release In Progress Determination Guidance

An “Airborne” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event.



1. Fuel damage is considered to be ANY damage to IRRADIATED fuel in the reactor vessel, spent fuel pool or ISFSI (Independent Spent Fuel Storage Installation).

2. Any of the following conditions constitutes a release in progress due to the event:

- INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
- Opening the HTV to atmosphere post RCS leakage/LOCA.

3. Evidence of an UNMONITORED release to atmosphere. (examples include)

- Steam from blowout panels directly to atmosphere
- Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
- A sustained positive Secondary Containment D/P.

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification maybe delegated as needed with the exception of the 4 non-delegable actions listed below
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) or Incident Assessor (IA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions.
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, Primary Communicator or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
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 - review/repeat back by the primary communicator would be considered a sufficient accuracy peer check

- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length.

- **Rad Release Determination (HC):** Determination of a release: any of the following conditions constitutes a release in progress due to the event:
 - INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
 - Opening the HTV to atmosphere post RCS leakage/LOCA.
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Steam from blowout panels directly to atmosphere
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
 - A sustained positive Secondary Containment D/P

Notification

- **Callout Activation (Alert, SAE, GE):**
 - Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Alert or higher classification.
 - Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
 - Activate the ERO Emergency Callout system using the posted instructions titled “Emergency Callout Activation”.
 - ERO callout system activation will be confirmed by verification on the Everbridge Website. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
EP-HC-325-102, ECG Use, Step 4.8
EP-HC-325-102, ECG Use, Step 1.1
EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

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ATTACHMENT 4

EP-HC-325-F3 Rev. 1 – Attachment 3 Site Area Emergency

**ATTACHMENT 3
SITE AREA EMERGENCY**

A. CLASSIFICATION

- | | |
|--|---|
| 1. CALL communicators to the Control Room. | <hr/> SM |
| 2. IF a Security Event is in progress, THEN IMPLEMENT the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. | <hr/> SM |
| 3. If time allows, DIRECT Classification Independent Verification to be performed | <hr/> SM |
| 4. After Classification Independent Verification is obtained: <ul style="list-style-type: none">• DECLARE the SITE AREA EMERGENCY (enter time and date on ICMF).• UPDATE Crew/Facility with the Emergency Classification level and potential escalation criteria.• COMPLETE / APPROVE the ICMF. | <div style="margin-bottom: 10px;"><hr/>EC</div> <div style="margin-bottom: 10px;"><hr/>EC</div> <div style="margin-bottom: 10px;"><hr/>EC</div> |
| 5. If time allows OBTAIN accuracy peer check of the completed ICMF | <hr/> EC |
| 6. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: <ul style="list-style-type: none">• If not previously performed, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (EP 96-003)• DIRECT the Primary Communicator to implement ECG Attachment 6• DIRECT the Secondary Communicator to implement ECG Attachment 8 for a SITE AREA EMERGENCY• If not previously performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation• IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | <div style="margin-bottom: 10px;"><hr/>EC</div> <div style="margin-bottom: 10px;"><hr/>EC</div> <div style="margin-bottom: 10px;"><hr/>EC</div> <div style="margin-bottom: 10px;"><hr/>EC</div> <div style="margin-bottom: 10px;"><hr/>EC</div> |

INITIAL CONTACT MESSAGE FORM

- I. THIS IS _____, COMMUNICATOR IN THE ☐ CONTROL ROOM
(NAME) ☐ TSC
☐ EOF

AT THE **HOPE CREEK** NUCLEAR GENERATING STATION.

- II. THIS IS NOTIFICATION OF AN **SITE AREA EMERGENCY** WHICH WAS
DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ , _____ , _____

DESCRIPTION OF EVENT: _____

- III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release above
normal, attributable
to the event. See
flow chart for
assessment

- IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

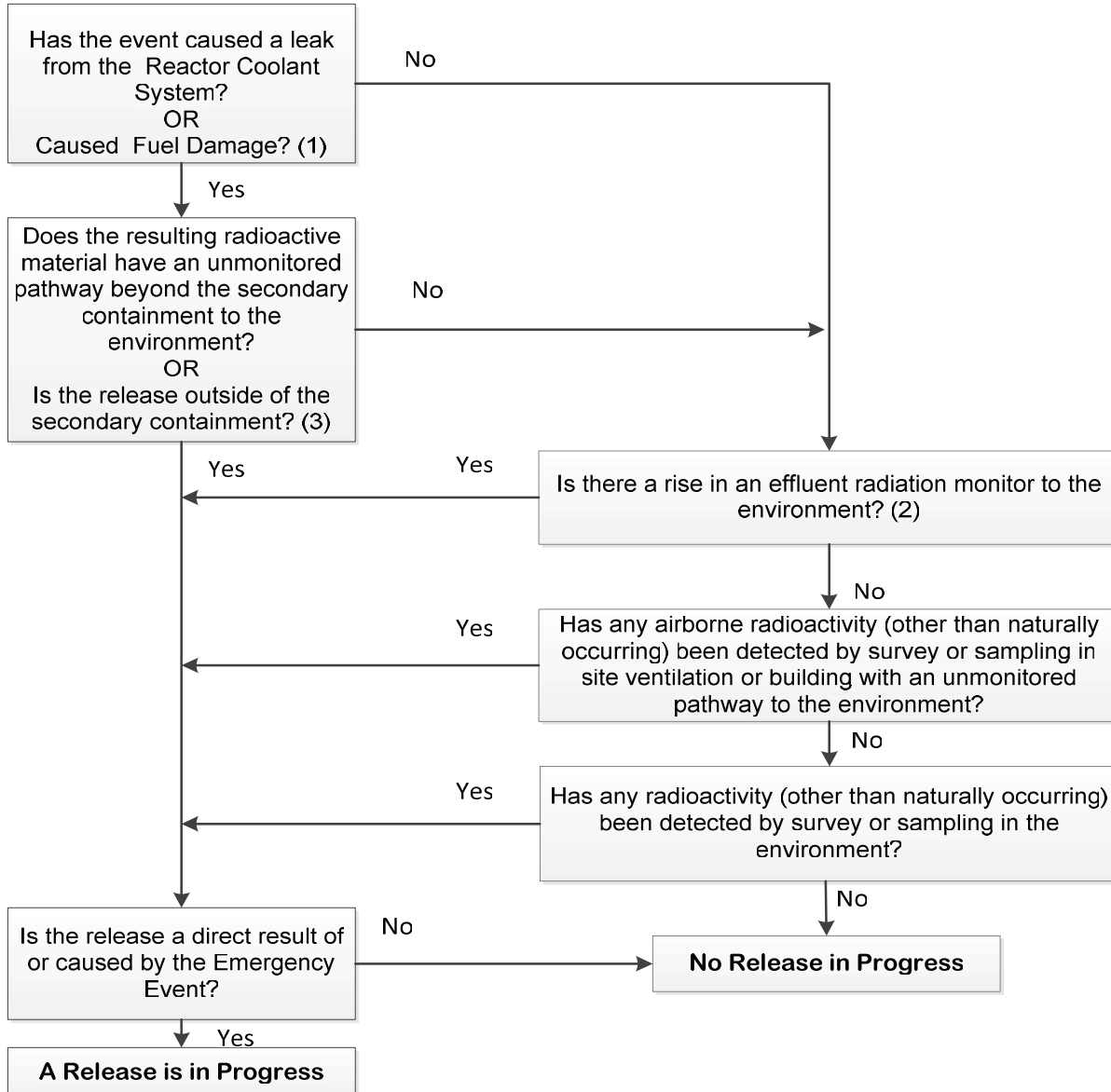
- V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Hope Creek-Release In Progress Determination Guidance

An “Airborne” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event.



1. Fuel damage is considered to be ANY damage to IRRADIATED fuel in the reactor vessel, spent fuel pool or ISFSI (Independent Spent Fuel Storage Installation).

2. Any of the following conditions constitutes a release in progress due to the event:

- INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
- Opening the HTV to atmosphere post RCS leakage/LOCA.

3. Evidence of an UNMONITORED release to atmosphere. (examples include)

- Steam from blowout panels directly to atmosphere
- Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
- A sustained positive Secondary Containment D/P.

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification maybe delegated as needed with the exception of the 4 non-delegable actions listed below.
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
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- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
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 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, Primary Communicator or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - SM approval initials have been completed.
 - review/repeat back by the primary communicator would be considered a sufficient accuracy peer check

- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length.

- **Rad Release Determination (HC):** Determination of a release: any of the following conditions constitutes a release in progress due to the event:
 - INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
 - Opening the HTV to atmosphere post RCS leakage/LOCA.
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 - A sustained positive Secondary Containment D/P

Notification

- **Callout Activation (Alert, SAE, GE):**

- Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Alert or higher classification.
- Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
- Activate the ERO Emergency Callout system using the posted instructions titled "Emergency Callout Activation".
- ERO callout system activation will be confirmed by verification of the Everbridge Website. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control

EP-HC-325-102, ECG Use, Step 4.8

EP-HC-325-102, ECG Use, Step 1.1

EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

LR-N22-0044

ATTACHMENT 5

EP-HC-325-F4 Rev. 2 – Attachment 4 General Emergency

ATTACHMENT 4 GENERAL EMERGENCY

A. CLASSIFICATION

- | | |
|---|--|
| 1. CALL communicators to the Control Room. | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> SM |
| 2. IF a Security Event is in progress, THEN IMPLEMENT the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> SM |
| 3. If time allows, DIRECT Classification Independent Verification to be performed | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> SM |
| 4. After Classification Independent Verification is obtained: | |
| • DECLARE the GENERAL EMERGENCY (enter time and date on ICMF) | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • UPDATE Crew/Facility with Emergency Classification level and potential escalation criteria | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • COMPLETE / APPROVE the ICMF | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| 5. If time allows OBTAIN accuracy peer check of the completed ICMF | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| 6. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: | |
| • If not previously performed, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (EP 96-003) | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • DIRECT the Primary Communicator to implement ECG Attachment 6 | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • DIRECT the Secondary Communicator to implement ECG Attachment 8 for a GENERAL EMERGENCY | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • If not previously performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |

INITIAL CONTACT MESSAGE FORM

I. THIS IS _____, COMMUNICATOR IN THE ☐ CONTROL ROOM
(NAME) ☐ TSC

☐ EOF

AT THE **HOPE CREEK** NUCLEAR GENERATING STATION.

IIa. ☐ THIS IS NOTIFICATION OF AN **GENERAL EMERGENCY** WHICH WAS

DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ , _____ , _____

DESCRIPTION OF EVENT: _____

OR

IIb. ☐ THIS IS NOTIFICATION OF A PROTECTIVE ACTION RECOMMENDATION
UPGRADE MADE AT _____ HRS ON _____

(Time - 24 HR CLOCK)

(DATE)

Reason for PAR Upgrade: _____

III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT

☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release
above normal,
attributable to the
event. See Basis
for examples.

IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

V.

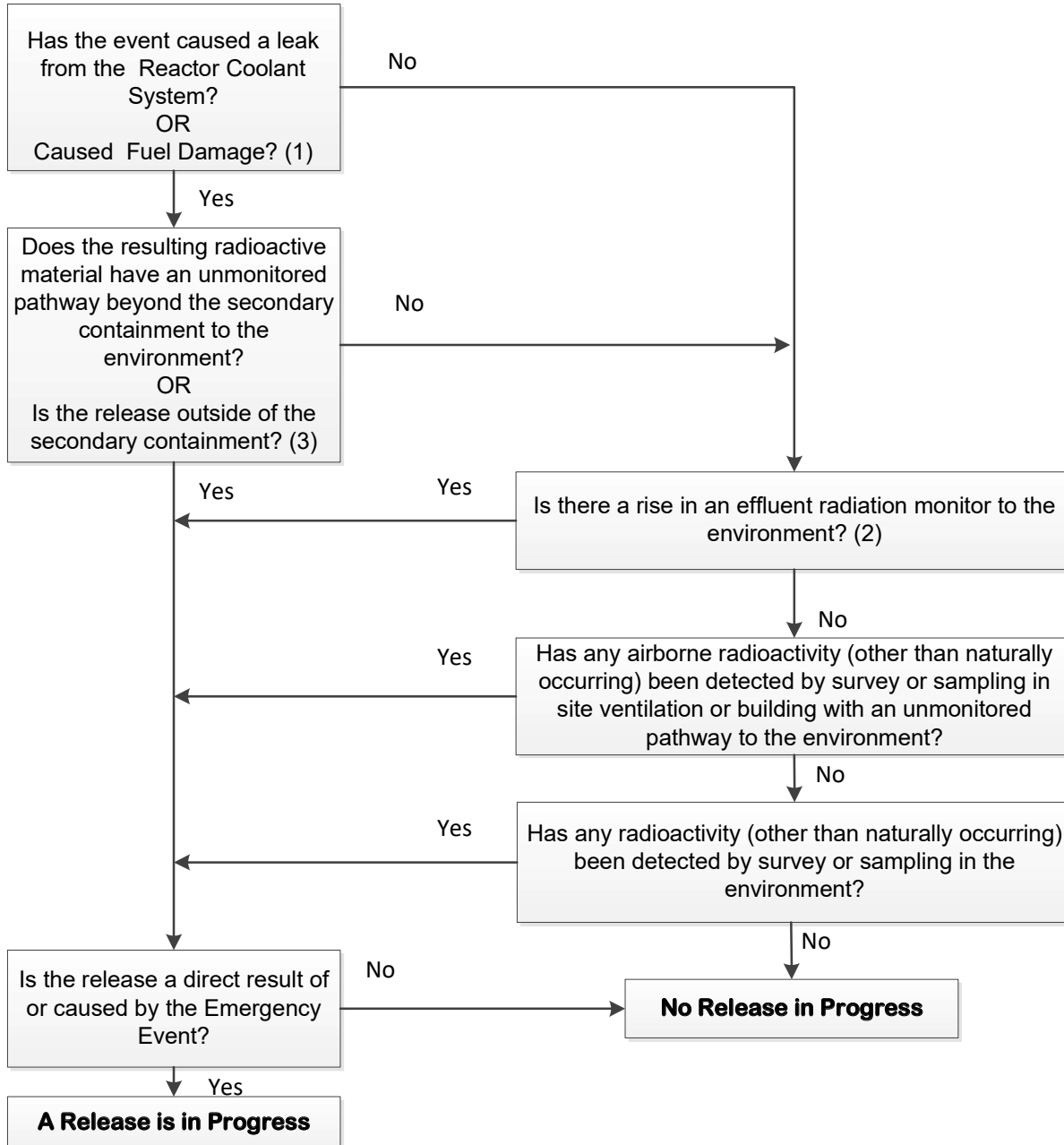
	Sectors	Dist. - Mile
<input type="checkbox"/> WE RECOMMEND EVACUATION AS FOLLOWS		
<input type="checkbox"/> WE RECOMMEND SHELTERING AS FOLLOWS		
<input type="checkbox"/> WE RECOMMEND MONITOR AND PREPARE AS FOLLOWS		
<input checked="" type="checkbox"/> WE RECOMMEND THE USE OF KI IN ACCORDANCE WITH STATE PROCEDURES		

EC Print/Sign
(Approval to Transmit ICMF)

Hope Creek-Release In Progress Determination Guidance

An “**Airborne**” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event.



1. Fuel damage is considered to be ANY damage to IRRADIATED fuel in the reactor vessel, spent fuel pool or ISFSI (Independent Spent Fuel Storage Installation).

2. Any of the following conditions constitutes a release in progress due to the event:

- INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
- Opening the HTV to atmosphere post RCS leakage/LOCA.

3. Evidence of an UNMONITORED release to atmosphere. (examples include)

- Steam from blowout panels directly to atmosphere
- Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
- A sustained positive Secondary Containment D/P.

BASIS - GE ICMF

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification maybe delegated as needed with the exception of the 4 non-delegable actions listed below ⁽¹⁾
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions. ⁽²⁾
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

Accuracy Peer Check: Have the STA, Primary Communicator or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:

- verification that the correct form has been used for the classification
- review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
- SM approval initials have been completed
- review/repeat back by the primary communicator would be considered a sufficient accuracy peer check

- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length. ⁽³⁾
- **PAR Upgrades:** ECG Attachment 4 is used for declaration of a General Emergency and also for PAR upgrades IAW NC.EP-EP.ZZ-0102 and NC.EP-EP.ZZ-0404. When completing the form for a PAR upgrade, steps not applicable to the PAR upgrade process should be N/A'd as appropriate.
- **Rad Release Determination (HC):** Determination of a release: any of the following conditions constitutes a release in progress due to the event Creek
 - INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
 - Opening the HTV to atmosphere post RCS leakage/LOCA.
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Steam from blowout panels directly to atmosphere
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
 - A sustained positive Secondary Containment D/P

Notification

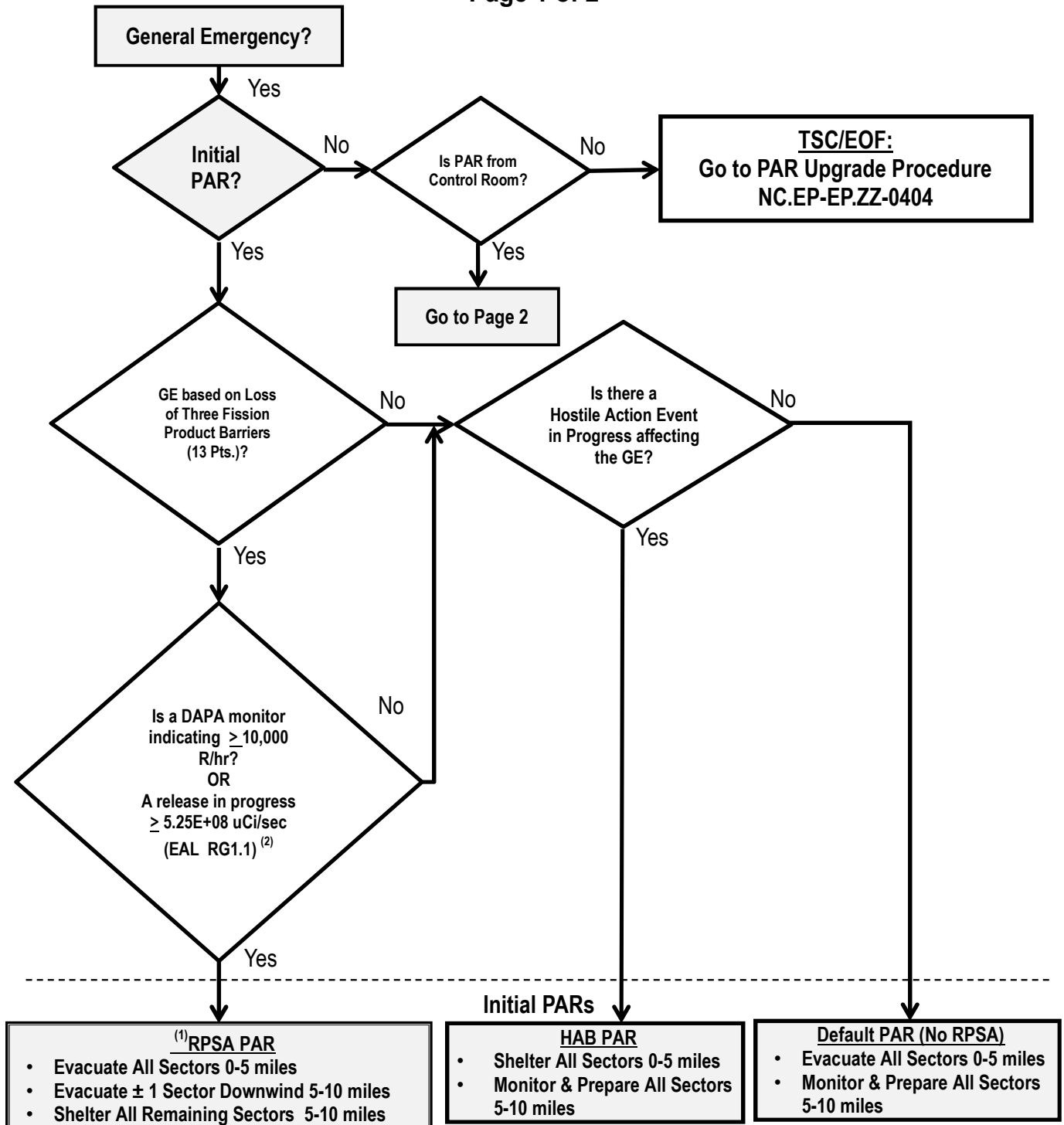
- **Callout Activation (Alert, SAE, GE):**
 - Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Alert or higher classification.
 - Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
 - Activate the ERO Emergency Callout system using the posted instructions titled "Emergency Callout Activation".
 - ERO callout system activation will be confirmed by a return call from the Everbridge system to the Communicators phone. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

- (1) Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-HC-325-102, ECG Use, Step 4.8
- (3) EP-HC-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

APPENDIX 1 PREDETERMINED PROTECTIVE ACTION RECOMMENDATIONS

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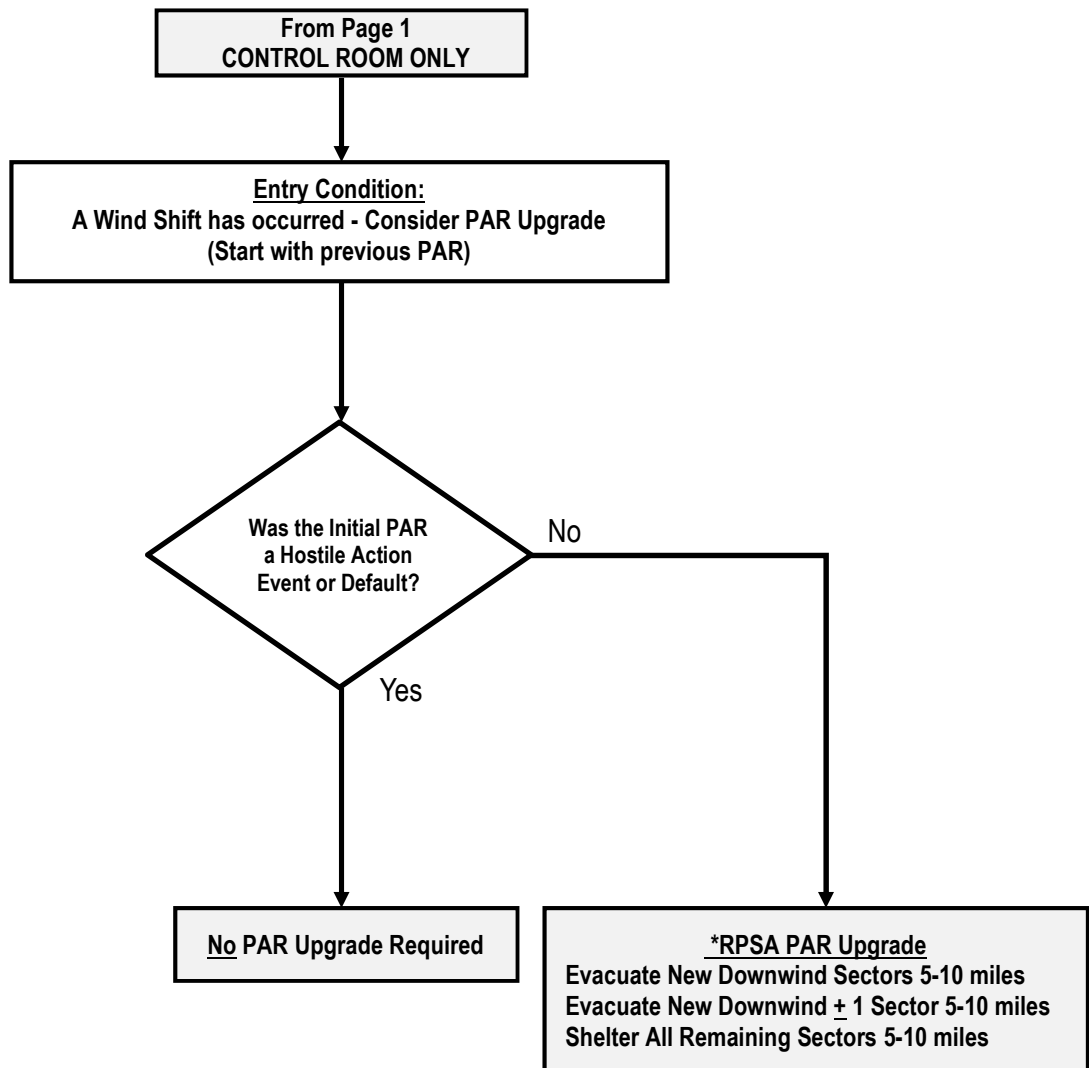


SEE LAST PAGE OF ATTACHMENT TO DETERMINE DOWNWIND SECTORS

(1) RPSA is a Rapidly Progressing Severe Accident

(2) RG1.1 defines a significant release in progress

APPENDIX 1
PREDETERMINED PROTECTIVE ACTION RECOMMENDATIONS
Page 2 of 2



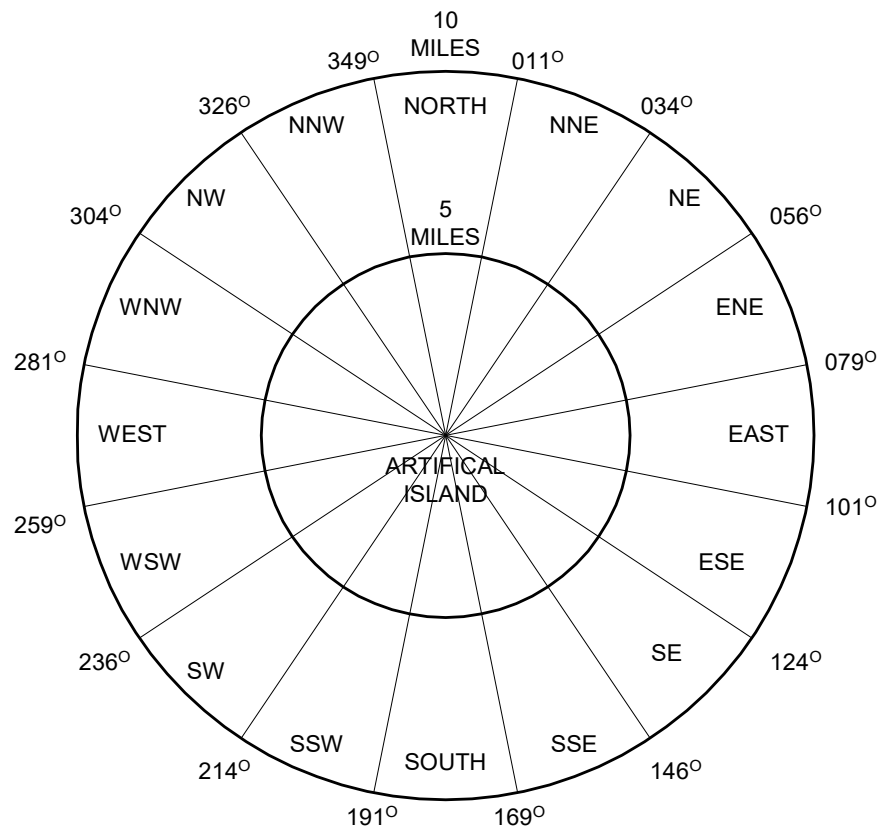
SEE LAST PAGE OF ATTACHMENT TO DETERMINE DOWNWIND SECTORS

*RPSA is a Rapidly Progressing Severe Accident

APPENDIX 1 (continued)
RECOMMENDED PROTECTIVE ACTION WORKSHEET

WIND DIRECTION FROM		PAR AFFECTED SECTORS	
DEGREES	COMPASS		DOWNWIND ± 1 SECTORS
349 - 011	N	\Rightarrow	SSE - S - SSW
011 - 034	NNE	\Rightarrow	S - SSW - SW
034 - 056	NE	\Rightarrow	SSW - SW - WSW
056 - 079	ENE	\Rightarrow	SW - WSW - W
079 - 101	E	\Rightarrow	WSW - W - WNW
101 - 124	ESE	\Rightarrow	W - WNW - NW
124 - 146	SE	\Rightarrow	WNW - NW - NNW
146 - 169	SSE	\Rightarrow	NW - NNW - N
169 - 191	S	\Rightarrow	NNW - N - NNE
191 - 214	SSW	\Rightarrow	N - NNE - NE
214 - 236	SW	\Rightarrow	NNE - NE - ENE
236 - 259	WSW	\Rightarrow	NE - ENE - E
259 - 281	W	\Rightarrow	ENE - E - ESE
281 - 304	WNW	\Rightarrow	E - ESE - SE
304 - 326	NW	\Rightarrow	ESE - SE - SSE
326 - 349	NNW	\Rightarrow	SE - SSE - S

NOTE: CONSIDER ADDING A SECTOR TO THE PAR IF THE WIND DIRECTION (FROM) IS WITHIN $\pm 3^\circ$ OF A SECTOR DIVIDING LINE.



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ATTACHMENT 6

EP-HC-325-F24 Rev. 1 – Attachment 24 Unusual Event (Common Site)

**ATTACHMENT 24
UNUSUAL EVENT (COMMON SITE)**

NOTE

ONLY one Shift Manager (SM) is required to declare this event and assume the responsibilities of **Emergency Coordinator (EC)**. The other SM should perform support duties in accordance with NC.EP-EP.ZZ-0101, Actions Required at Unaffected Station.

CAUTION

In the event of offsite toxic gas release affecting the site, evacuation of non-essential personnel takes precedence over notifications.

I. COMMON SITE EVENT ASSESSMENT/ EC DETERMINATION

A. NOTIFICATION OF SALEM SHIFT MANAGER

1. **CONTACT** the SALEM SM (NETS 5124, DID 5200) and **BRIEF** on the specific circumstances as follows:
 - a. **SHARE** information about the event in progress.
 - b. **OBTAIN** agreement on the **UNUSUAL EVENT** classification.
 - c. **DETERMINE** which SM will assume EC responsibilities.

Emergency Coordinator _____

2. IF the SALEM SM is the EC, THEN,
 - a. **IMPLEMENT** NC.EP-EP.ZZ-0101, Actions Required at the Unaffected Station.
 - b. **CONTACT** the Hope Creek Operations Manager, Emergency Duty Officer and Hope Creek NRC resident and **PROVIDE** them with a briefing on the UE.
 - c. **ASSIST** the Salem SM as needed.
 - d. **EXIT** this attachment

II. CLASSIFICATION and NOTIFICATION

A. CLASSIFICATION

1. **CALL** communicators to the Control Room. _____
SM
2. **IF** a **Security Event** is in progress, **THEN IMPLEMENT** the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. _____
SM
3. If time allows, **DIRECT** Classification **Independent Verification** to be performed _____
EC
4. After Classification **Independent Verification** is obtained:
 - **DECLARE** the **UNUSUAL EVENT** (enter time and date on ICMF) _____
EC
 - **UPDATE** Crew/Facility with the Emergency Classification and potential escalation criteria _____
EC
 - **COMPLETE / APPROVE** the ICMF _____
EC
5. If time allows, **OBTAIN** accuracy peer check of the completed ICMF _____
EC
6. Continue with **NOTIFICATION AND ACTIVATION** as follows:

NOTE

- Emergency Response Organization (ERO) Emergency Callout Activation **is required** for an Unusual Event based on a Security Event.
- Emergency Response Organization (ERO) Emergency Callout Activation **is optional** and may be implemented at the discretion of the Emergency Coordinator (EC) for all other Unusual Events.

- If desired, **ACTIVATE / DIRECT ACTIVATION** of ERO Emergency Callout (EP 96-003) _____
EC
- **DIRECT** the Primary Communicator to implement ECG Attachment 6 _____
EC
- **DIRECT** the Secondary Communicator to implement ECG Attachment 8 for an **UNUSUAL EVENT** _____
EC
- If **ACTIVATION** was performed, **VERIFY / DIRECT VERIFICATION** of ERO Emergency Callout activation _____
EC
- **IMPLEMENT** NC.EP-EP.ZZ-0102, EC Response _____
EC

INITIAL CONTACT MESSAGE FORM

I. THIS IS _____, COMMUNICATOR IN THE CONTROL ROOM
(NAME)

AT THE **HOPE CREEK** NUCLEAR GENERATING STATION.

II. THIS IS NOTIFICATION OF A **COMMON SITE UNUSUAL EVENT** AFFECTING
BOTH SALEM AND HOPE CREEK WHICH WAS

DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ DESCRIPTION OF EVENT _____

III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release above
normal, attributable
to the event. See
flow chart for
assessment

IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

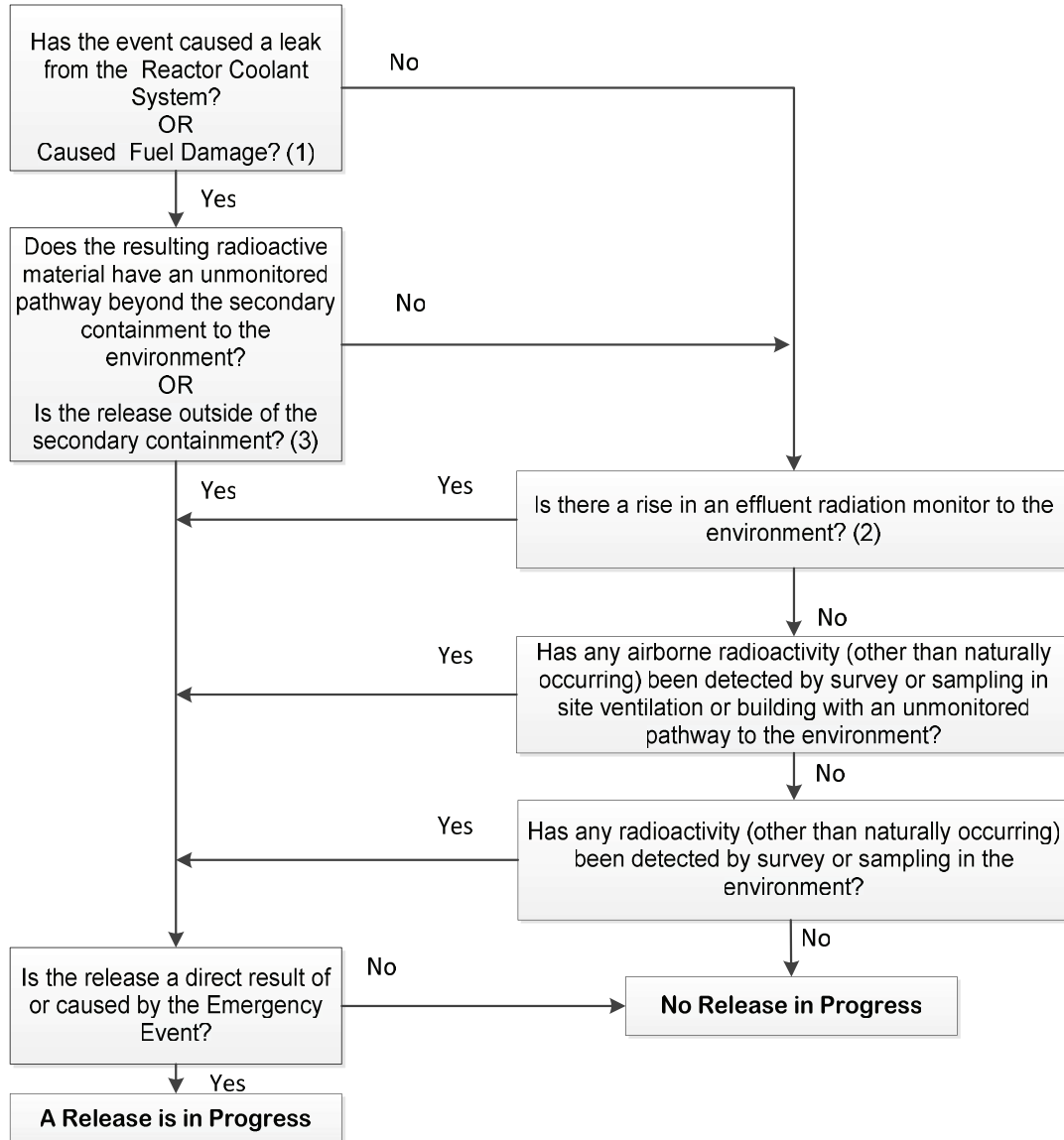
V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to transmit ICMF)

Hope Creek-Release In Progress Determination Guidance

An “Airborne” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event.



1. Fuel damage is considered to be ANY damage to IRRADIATED fuel in the reactor vessel, spent fuel pool or ISFSI (Independent Spent Fuel Storage Installation).

2. Any of the following conditions constitutes a release in progress due to the event:

- INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
- Opening the HTV to atmosphere post RCS leakage/LOCA.

3. Evidence of an UNMONITORED release to atmosphere. (examples include)

- Steam from blowout panels directly to atmosphere
- Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
- A sustained positive Secondary Containment D/P.

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification may be delegated as needed with the exception of the 4 non-delegable actions listed below
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) or Incident Assessor (IA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions.
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, Primary Communicator or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - SM approval initials have been completed
- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length.
- **Rad Release Determination (Hope Creek):** Any of the following conditions constitutes a release in progress due to the event:
 - INCREASE in the total SPV, NPV or FRVS release rates resulting from the EVENT. (NOT caused by normal or shutdown plant operations or ventilation lineup changes.)
 - Opening the HTV to atmosphere post RCS leakage/LOCA.
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Steam from blowout panels directly to atmosphere
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line
 - A sustained positive Secondary Containment D/P

Notification

- **Callout Activation: UE**
 - Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Unusual Event based on a Security Event. Activation is **optional** for all other Unusual Events and may be implemented at the discretion of the Emergency Coordinator (EC).
 - Activation may be delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
 - Activate the ERO Emergency Callout system using the posted instructions titled "Emergency Callout Activation".
 - ERO callout system activation will be confirmed by verification on the ERO web page. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

- (1) Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-HC-325-102, ECG Use, Step 4.8
- (3) EP-HC-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

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ATTACHMENT 7

10 CFR 50.54(q) Summary Analysis Report 2021-33

ATTACHMENT 3
10CFR50.54(q) SUMMARY ANALYSIS REPORT

Page 1 of 2

Revision 0

50.54Q I.D. Number: 2021-33

50.54Q Title: SA Initial Contact Message Forms: EP-SA-325-F1, F2, F3, F24 Rev. 01 and EP-SA-325-F4 Rev. 02

(Doc #, Rev. #, Name, If applicable)

Description of the change made to the Emergency Plan/Procedures:

- For EP-SA-325-F1, Moved bullet item "UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria" up to Section A Step 3. This step is being moved to ensure crew/facility is aware of Emergency Classification/Escalation criteria in a timely manner.
- For EP-SA-325-F2, F3, F4 & F24, Moved bullet item "UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria" up to Section A Step 4. This step is being moved to ensure crew/facility is aware of Emergency Classification/Escalation criteria in a timely manner.
- Revised ICMF approval from "EC Initials" to "EC Print/Sign". All required PSEG approvals for documentation require Print/Sign.
- Added Rad Release Determination Flow Chart. The chart is being added to provide clarification to the decision making process for radiation release determination.

Description of why the change is editorial (if not editorial, N/A this block):

N/A

Description of the licensing basis affected by the change to the Emergency Plan/Procedure (if not affected, omit this element):

Emergency Plan Sections 5.0 - Emergency Classification System, Section 6.0 - Notification Methods, and Section 10.0 - Accident Assessment, describe methods and processes for accident assessment and notifications. Section 16.0 describes the Emergency Plan training program. The proposed revisions to EP-SA-325-F1, F2, F3, F4 and F24 provide classification process clarification and radiation release assessment clarification and do not impact the requirements of the above mentioned sections.

A description of how the change to the Emergency Plan/Procedures still complies with regulation:

Based on a review of regulations, the proposed changes comply with 10 CFR 50 Appendix E and with Regulatory Guide 1.219, Revision 1. The revisions were evaluated against the requirements of planning standards 10 CFR 50.47 (b)(5), (b)(9), and (b)(15), and were found to have no adverse impact.

ATTACHMENT 3
10CFR50.54(q) SUMMARY ANALYSIS REPORT

Page 2 of 2

Revision 0

50.54Q I.D. Number: 2021-33

50.54Q Title: SA Initial Contact Message Forms: EP-SA-325-F1, F2, F3, F24 Rev. 01 and EP-SA-325-F4 Rev. 02

(Doc #, Rev. #, Name, If applicable)

A description of why the proposed change was not a reduction in the effectiveness of the Emergency Plan/Procedure:

- The proposed changes will improve emergency classification timeliness and ensure crews and facilities are aware of accident conditions and escalation criteria.
- The proposed decision flow chart improves decision making for Emergency Coordinators and Direct Reports.
- The proposed changes to add approval Print/Sign instead of initials only aligns with station procedures when approving documents.
- The proposed changes have been validated through use in Licensed Operator Training.
- Training will be provide to Operations personnel through the Licensed Operator Training program. Training for the Emergency Coordinators in the TSC and EOF and their Direct Reports will be provided through Emergency Preparedness lead Focus Area Drills.

There is no reduction in effectiveness to the Emergency Plan resulting from these proposed revisions.

LR-N22-0044

ATTACHMENT 8

EP-SA-325-F1 Rev. 1 – Attachment 1 Unusual Event

ATTACHMENT 1 UNUSUAL EVENT

A. CLASSIFICATION

1. **CALL** communicators to the Control Room _____
SM
2. If time allows, **DIRECT** Classification **Independent Verification** to be performed _____
SM
3. After Classification **Independent Verification** is obtained:
 - **DECLARE** the **UNUSUAL EVENT** (enter the time and date on the ICMF). _____
EC
 - **UPDATE** the Crew/Facility with the Emergency classification level and potential escalation criteria. _____
EC
 - **COMPLETE / APPROVE** the ICMF. _____
EC
4. If time allows **OBTAIN** accuracy peer check of the completed ICMF _____
EC
5. Continue with **NOTIFICATION AND ACTIVATION** as follows:
 - If desired, **ACTIVATE / DIRECT ACTIVATION** of ERO Emergency Callout (Optional at UE) (EP 96-003) _____
EC
 - **DIRECT** the Primary Communicator to implement ECG Attachment 6 _____
EC
 - **DIRECT** the Secondary Communicator to implement ECG Attachment 8 for an UNUSUAL EVENT _____
EC
 - If **ACTIVATION** was performed, **VERIFY / DIRECT VERIFICATION** of ERO Emergency Callout activation _____
EC
 - **IMPLEMENT** NC.EP-EP.ZZ-0102, EC Response _____
EC

INITIAL CONTACT MESSAGE FORM

I. THIS IS _____, COMMUNICATOR IN THE CONTROL ROOM
(NAME)

AT THE **SALEM** NUCLEAR GENERATING STATION, **UNIT**(s) No. _____

II. THIS IS NOTIFICATION OF AN **UNUSUAL EVENT** WHICH WAS

DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ DESCRIPTION OF EVENT _____

III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release
above normal,
attributable to the
event. See Basis
for examples.

IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

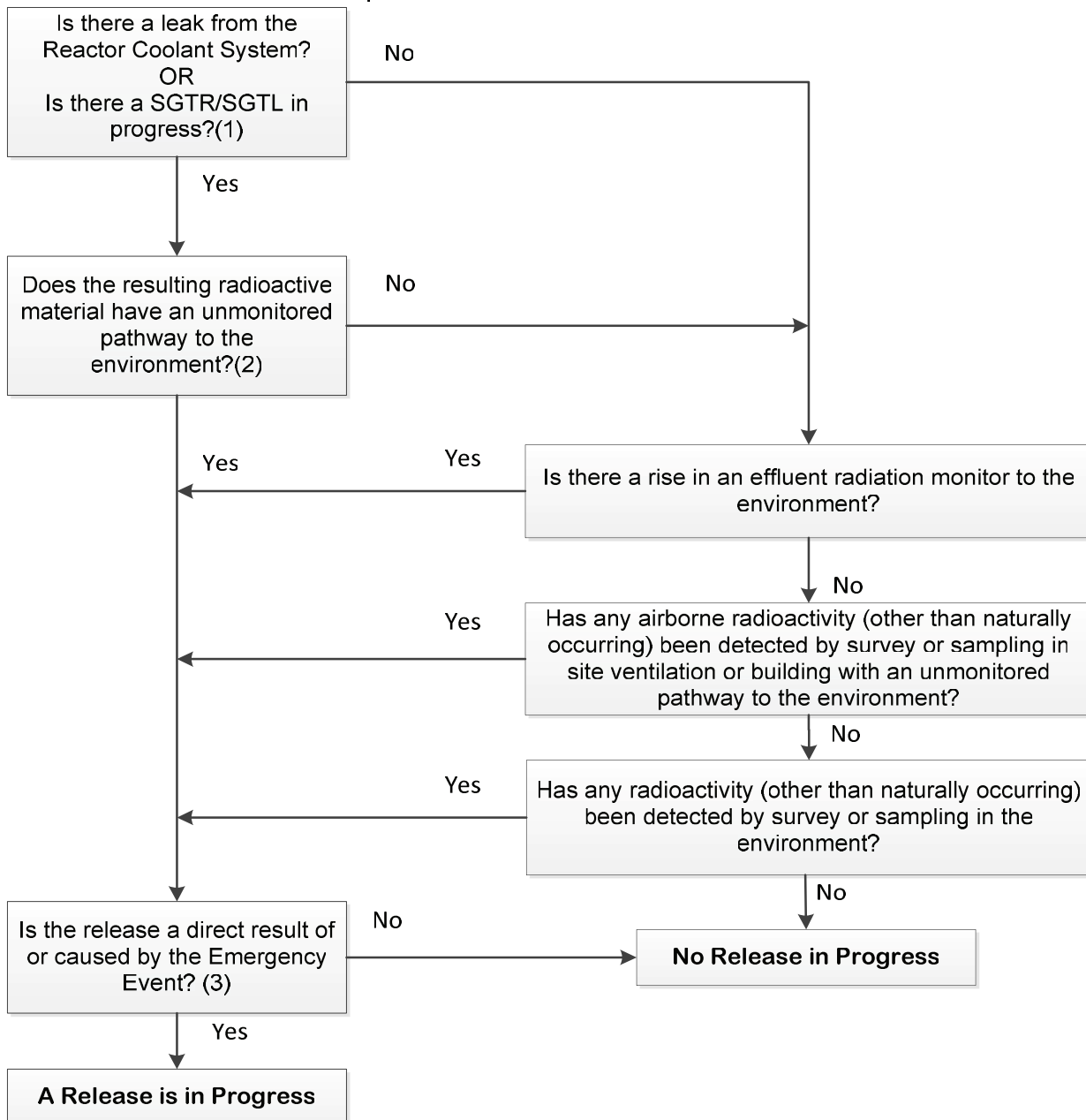
V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Salem-Release In Progress Determination Guidance

An “**Airborne**” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event. A steam release from a PWR secondary system is not considered a release in progress unless a pathway for reactor coolant to the secondary side to the offsite environment is present.



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

2. Some examples include: FAULTED/RUPTURED S/G, 13 or 23 AFW Pp in service with a SGTR in progress, Leak from Containment directly to the atmosphere and Bypass Release via the Aux Building to the Electrical Penetration.

3. 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 attributed to the normal operation or shutdown of plant systems to be considered a “Release in Progress.”

BASIS – UE ICMF

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification maybe delegated as needed with the exception of the 4 non-delegable actions listed below ⁽¹⁾
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions. ⁽²⁾
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, TSS, SSM or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the EC during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - EC approval initials have been completed.
- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length. ⁽³⁾
- **Rad Release Determination (Salem):** Any of the following conditions constitutes a release in progress due to the event:
 - Increase in Plant Vent Release Rate (NOT caused by operational transients or ventilation changes) which is caused by the EVENT.
 - A Steam Generator rupture which is faulted to the atmosphere (SRV, Atmospheric Vent or Line Break)
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Primary to Secondary leak and the steam driven feed pump is in service
 - Bypass release from the Aux Building through the Electrical Pen
 - Leakage from the Containment directly to atmosphere after a LOCA
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line

Notification

- **Callout Activation: UE**

- Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **optional** for an Unusual Event and may be implemented at the discretion of the Emergency Coordinator (EC).
- Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
- Activate the ERO Emergency Callout system using the posted instructions titled "Emergency Callout Activation".
- ERO callout system activation will be confirmed by a return call from the Everbridge system to the Communicators phone. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

- (1) Emergency Plan, Section 3.0 – Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-SA-325-102, ECG Use, Step 4.8
- (3) EP-SA-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

LR-N22-0044

ATTACHMENT 9

EP-SA-325-F2 Rev. 1 – Attachment 2 Alert

**ATTACHMENT 2
ALERT**

A. CLASSIFICATION

- | | |
|---|----------|
| 1. CALL communicators to the Control Room. | <hr/> SM |
| 2. IF a Security Event is in progress, THEN IMPLEMENT the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. | <hr/> SM |
| 3. If time allows, DIRECT Classification Independent Verification to be performed | <hr/> SM |
| 4. After Classification Independent Verification is obtained: | |
| • DECLARE the ALERT (enter the time and date on the ICMF). | <hr/> EC |
| • UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria. | <hr/> EC |
| • COMPLETE / APPROVE the ICMF. | <hr/> EC |
| 5. If time allows OBTAIN accuracy peer check of the completed ICMF | <hr/> EC |
| 6. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: | <hr/> EC |
| • If not previously performed, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (EP 96-003) | <hr/> EC |
| • DIRECT the Primary Communicator to implement ECG Attachment 6 | <hr/> EC |
| • DIRECT the Secondary Communicator to implement ECG Attachment 8 for an ALERT | <hr/> EC |
| • If not previously performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation | <hr/> EC |
| • IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | <hr/> EC |

INITIAL CONTACT MESSAGE FORM

- I. THIS IS _____, COMMUNICATOR IN THE ☐ CONTROL ROOM
 (NAME) ☐ TSC
☐ EOF

AT THE **SALEM** NUCLEAR GENERATING STATION, **UNIT(s)** No. _____

- II. THIS IS NOTIFICATION OF AN **ALERT** WHICH WAS
 DECLARED AT _____ ON _____
 (Time - 24 HR CLOCK) (DATE)

EAL # _____ DESCRIPTION OF EVENT _____

- III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release
 above normal,
 attributable to the
 event. See Basis
 for examples.

- IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
 (From MET Computer /SPDS) (DEGREES) (MPH)

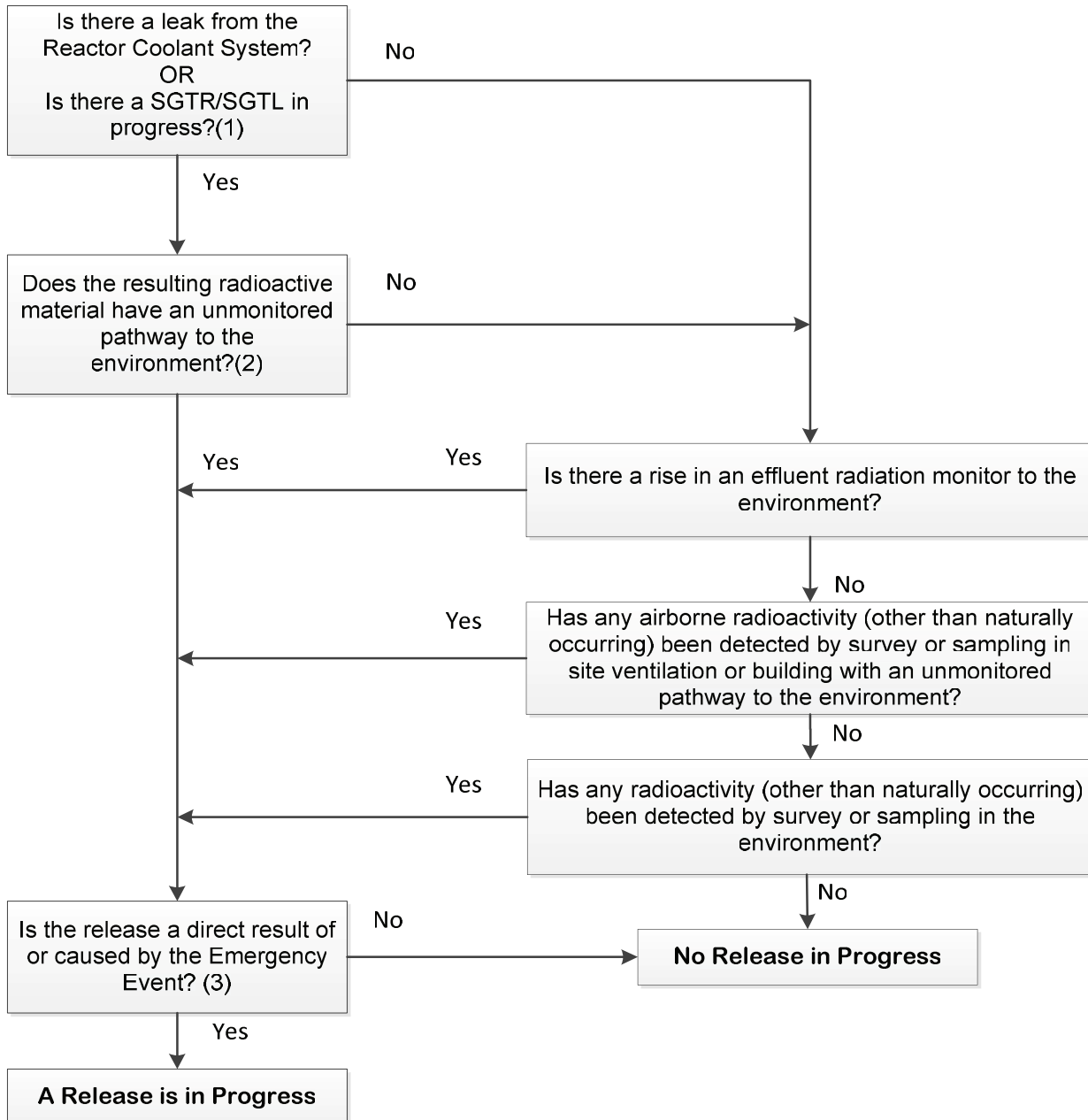
- V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Salem-Release In Progress Determination Guidance

An “**Airborne**” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event. A steam release from a PWR secondary system is not considered a release in progress unless a pathway for reactor coolant to the secondary side to the offsite environment is present.



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

2. Some examples include: FAULTED/RUPTURED S/G, 13 or 23 AFW Pp in service with a SGTR in progress, Leak from Containment directly to the atmosphere and Bypass Release via the Aux Building to the Electrical Penetration.

3. 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 attributed to the normal operation or shutdown of plant systems to be considered a “Release in Progress.”

BASIS – ALERT ICMF**Classification**

- **Non-Delegable Actions:** Actions taken in the process of emergency classification may be delegated as needed with the exception of the 4 non-delegable actions listed below ⁽¹⁾
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions. ⁽²⁾
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, TSS, SSM or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - EC approval initials have been completed.
- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length. ⁽³⁾
- **Rad Release Determination (Salem):** Any of the following conditions constitutes a release in progress due to the event:
 - Increase in Plant Vent Release Rate (NOT caused by operational transients or ventilation changes) which is caused by the EVENT.
 - A Steam Generator rupture which is faulted to the atmosphere (SRV, Atmospheric Vent or Line Break)
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Primary to Secondary leak and the steam driven feed pump is in service
 - Bypass release from the Aux Building through the Electrical Pen
 - Leakage from the Containment directly to atmosphere after a LOCA
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line

Notification

- **Callout Activation (Alert, SAE, GE):**
 - Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) **is required** for an Alert or higher classification.
 - Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
 - Activate the ERO Emergency Callout system using the posted instructions titled “Emergency Callout Activation”.
 - ERO callout system activation will be confirmed by a return call from the Everbridge system to the Communicators phone. If callout fails, then utilize backup procedures to alert the ERO (EP Aid-032)

References:

- (1) Emergency Plan, Section 3.0 – Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-SA-325-102, ECG Use, Step 4.8
- (3) EP-SA-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

LR-N22-0044

ATTACHMENT 10

EP-SA-325-F3 Rev. 1 – Attachment 3 Site Area Emergency

ATTACHMENT 3 SITE AREA EMERGENCY

A. CLASSIFICATION

- | | |
|---|--|
| 1. CALL communicators to the Control Room. | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> SM |
| 2. IF a Security Event is in progress, THEN IMPLEMENT the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> SM |
| 3. If time allows, DIRECT Classification Independent Verification to be performed | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> SM |
| 4. After Classification Independent Verification is obtained: | |
| • DECLARE the SITE AREA EMERGENCY (enter the time and date on the ICMF). | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria. | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • COMPLETE / APPROVE the ICMF. | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| 5. If time allows OBTAIN accuracy peer check of the completed ICMF | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| 6. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: | |
| • If not previously performed, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (EP 96-003) | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • DIRECT the Primary Communicator to implement ECG Attachment 6 | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • DIRECT the Secondary Communicator to implement ECG Attachment 8 for a SITE AREA EMERGENCY | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • If not previously performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |
| • IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | <hr style="border: none; border-top: 1px solid black; width: 50px; margin: 0 auto;"/> EC |

INITIAL CONTACT MESSAGE FORM

- I. THIS IS _____, COMMUNICATOR IN THE ☐ CONTROL ROOM
(NAME) ☐ TSC
☐ EOF

AT THE **SALEM** NUCLEAR GENERATING STATION, **UNIT**(s) No. _____

- II. THIS IS NOTIFICATION OF AN **SITE AREA EMERGENCY** WHICH WAS
DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ , _____ , _____

DESCRIPTION OF EVENT: _____

- III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release
above normal,
attributable to the
event. See Basis
for examples.

- IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

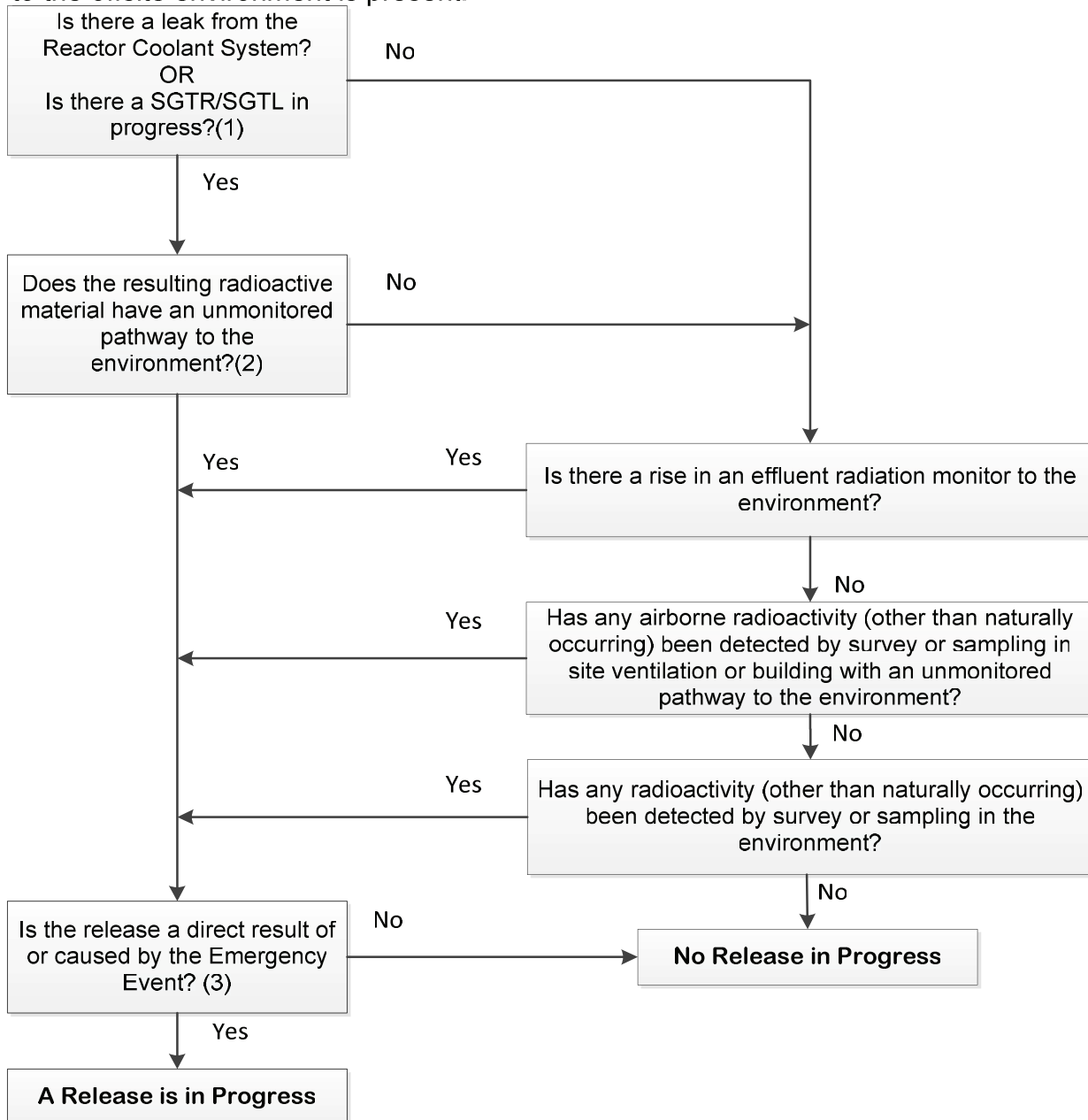
- V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Salem-Release In Progress Determination Guidance

An “Airborne” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event. A steam release from a PWR secondary system is not considered a release in progress unless a pathway for reactor coolant to the secondary side to the offsite environment is present.



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

2. Some examples include: FAULTED/RUPTURED S/G, 13 or 23 AFW Pp in service with a SGTR in progress, Leak from Containment directly to the atmosphere and Bypass Release via the Aux Building to the Electrical Penetration.

3. 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 attributed to the normal operation or shutdown of plant systems to be considered a “Release in Progress.”

BASIS – SAE ICMF

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification may be delegated as needed with the exception of the 4 non-delegable actions listed below ⁽¹⁾
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions. ⁽²⁾
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, TSS, SSM or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - EC approval initials have been completed.
- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length. ⁽³⁾
- **Rad Release Determination (Salem):** Any of the following conditions constitutes a release in progress due to the event:
 - Increase in Plant Vent Release Rate (NOT caused by operational transients or ventilation changes) which is caused by the EVENT.
 - A Steam Generator rupture which is faulted to the atmosphere (SRV, Atmospheric Vent or Line Break)
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Primary to Secondary leak and the steam driven feed pump is in service
 - Bypass release from the Aux Building through the Electrical Pen
 - Leakage from the Containment directly to atmosphere after a LOCA
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line

Notification

- **Callout Activation (Alert, SAE, GE):**
 - Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Alert or higher classification.
 - Activation maybe delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
 - Activate the ERO Emergency Callout system using the posted instructions titled “Emergency Callout Activation”.
 - ERO callout system activation will be confirmed by a return call from the Everbridge system to the Communicator’s phone. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

- (1) Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-SA-325-102, ECG Use, Step 4.8
- (3) EP-SA-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

LR-N22-0044

ATTACHMENT 11

EP-SA-325-F4 Rev. 2 – Attachment 4 General Emergency

ATTACHMENT 4 GENERAL EMERGENCY

A. CLASSIFICATION

- | | |
|---|---|
| 1. CALL communicators to the Control Room. | <hr style="width: 100px; margin: 0;"/> SM |
| 2. IF a Security Event is in progress, THEN IMPLEMENT the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. | <hr style="width: 100px; margin: 0;"/> SM |
| 3. If time allows, DIRECT Classification Independent Verification to be performed | <hr style="width: 100px; margin: 0;"/> SM |
| 4. After Classification Independent Verification is obtained: | |
| • DECLARE the GENERAL EMERGENCY (enter the time and date on the ICMF). | <hr style="width: 100px; margin: 0;"/> EC |
| • UPDATE the Crew/Facility with the Emergency classification level and potential escalation criteria. | <hr style="width: 100px; margin: 0;"/> EC |
| • COMPLETE / APPROVE the ICMF. | <hr style="width: 100px; margin: 0;"/> EC |
| 5. If time allows OBTAIN accuracy peer check of the completed ICMF | <hr style="width: 100px; margin: 0;"/> EC |
| 6. Continue with <u>NOTIFICATION AND ACTIVATION</u> as follows: | |
| • If not previously performed, ACTIVATE / DIRECT ACTIVATION of ERO Emergency Callout (EP 96-003) | <hr style="width: 100px; margin: 0;"/> EC |
| • DIRECT the Primary Communicator to implement ECG Attachment 6 | <hr style="width: 100px; margin: 0;"/> EC |
| • DIRECT the Secondary Communicator to implement ECG Attachment 8 for a GENERAL EMERGENCY | <hr style="width: 100px; margin: 0;"/> EC |
| • If not previously performed, VERIFY / DIRECT VERIFICATION of ERO Emergency Callout activation | <hr style="width: 100px; margin: 0;"/> EC |
| • IMPLEMENT NC.EP-EP.ZZ-0102, EC Response | <hr style="width: 100px; margin: 0;"/> EC |

INITIAL CONTACT MESSAGE FORM

I. THIS IS _____, COMMUNICATOR IN THE ☐ CONTROL ROOM (NAME)

☐ TSC
☐ EOF

AT THE SALEM NUCLEAR GENERATING STATION, UNIT(s) No. _____

IIa. ☐ THIS IS NOTIFICATION OF AN **GENERAL EMERGENCY** WHICH WAS

DECLARED AT

ON

(Time - 24 HR CLOCK)

(DATE)

EAL # _____

DESCRIPTION OF EVENT: _____

OR

IIb. ☐ THIS IS NOTIFICATION OF A PROTECTIVE ACTION RECOMMENDATION
UPGRADE MADE AT _____ HRS ON _____

Reason for PAR Upgrade: _____

III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE **IS NO** RELEASE IN PROGRESS DUE TO THE EVENT
Any release above normal, attributable to the event. See Basis for examples.

IV. 33 FT. LEVEL WIND DIRECTION (From): _____ (From MET Computer /SPDS)
WIND SPEED: _____ (DEGREES) _____ (MPH)

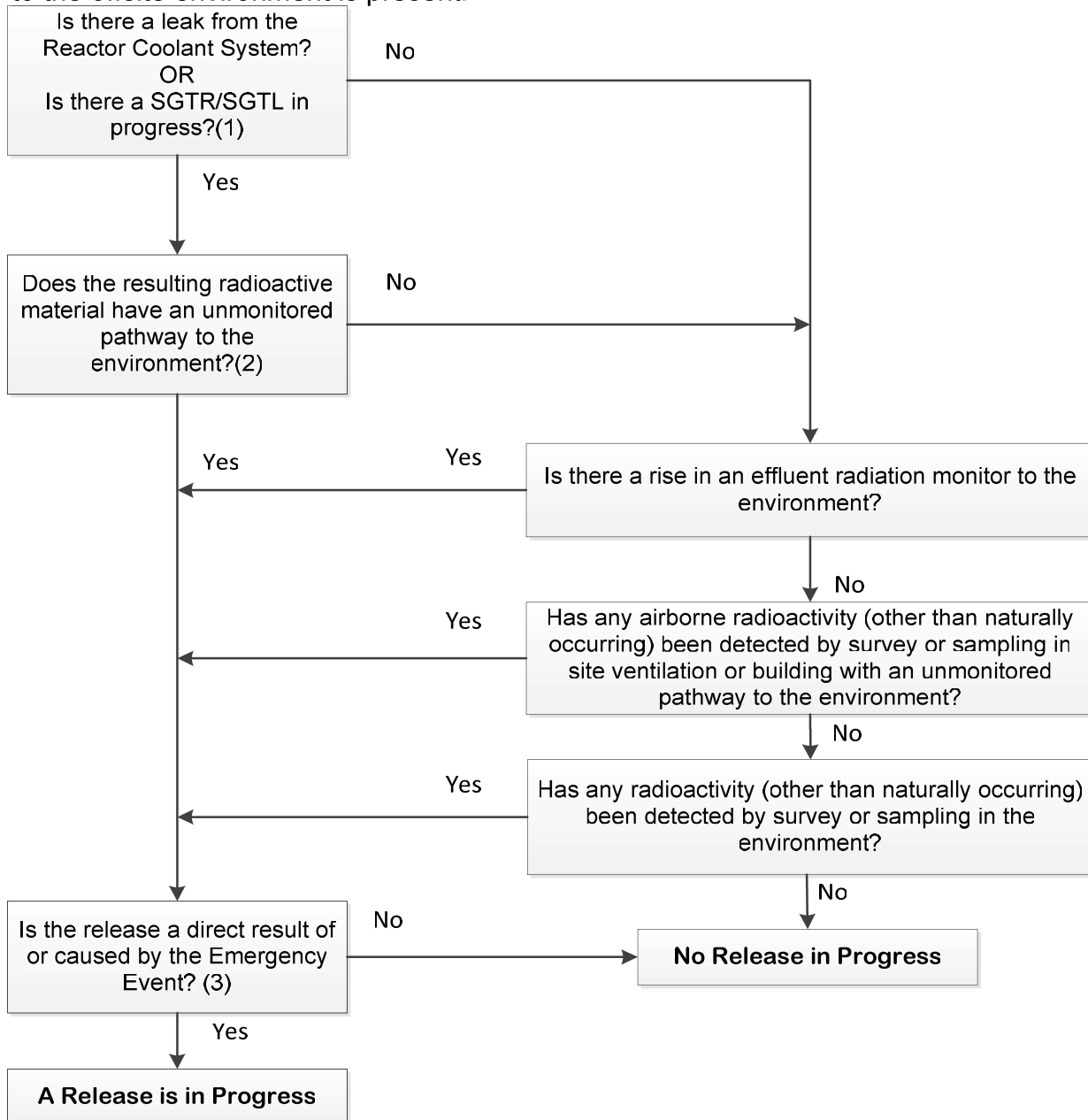
V.		<input type="checkbox"/> WE RECOMMEND EVACUATION AS FOLLOWS	Sectors	Dist. - Mile
		<input type="checkbox"/> WE RECOMMEND SHELTERING AS FOLLOWS		
		<input type="checkbox"/> WE RECOMMEND MONITOR AND PREPARE AS FOLLOWS		
<input checked="" type="checkbox"/> WE RECOMMEND THE USE OF KI IN ACCORDANCE WITH STATE PROCEDURES				

EC Print/Sign
(Approval to Transmit ICMF)

Salem-Release In Progress Determination Guidance

An “Airborne” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event. A steam release from a PWR secondary system is not considered a release in progress unless a pathway for reactor coolant to the secondary side to the offsite environment is present.



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

2. Some examples include: FAULTED/RUPTURED S/G, 13 or 23 AFW Pp in service with a SGTR in progress, Leak from Containment directly to the atmosphere and Bypass Release via the Aux Building to the Electrical Penetration.

3. 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 attributed to the normal operation or shutdown of plant systems to be considered a “Release in Progress.”

BASIS – GE ICMF

Classification

- **Non-Delegable Actions:** Actions taken in the process of emergency classification maybe delegated as needed with the exception of the 4 non-delegable actions listed below ⁽¹⁾
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions. ⁽²⁾
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, TSS, SSM or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - EC approval initials have been completed
- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length. ⁽³⁾
- **PAR Upgrades:** ECG Attachment 4 is used for declaration of a General Emergency and also for PAR upgrades IAW NC.EP-EP.ZZ-0102 and NC.EP-EP.ZZ-0404. When completing the form for a PAR upgrade, steps not applicable to the PAR upgrade process should be N/A'd as appropriate.
- **Rad Release Determination (Salem):** Any of the following conditions constitutes a release in progress due to the event:
 - Increase in Plant Vent Release Rate (NOT caused by operational transients or ventilation changes) which is caused by the EVENT.
 - A Steam Generator rupture which is faulted to the atmosphere (SRV, Atmospheric Vent or Line Break)
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Primary to Secondary leak and the steam driven feed pump is in service
 - Bypass release from the Aux Building through the Electrical Pen
 - Leakage from the Containment directly to atmosphere after a LOCA
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line

Notification

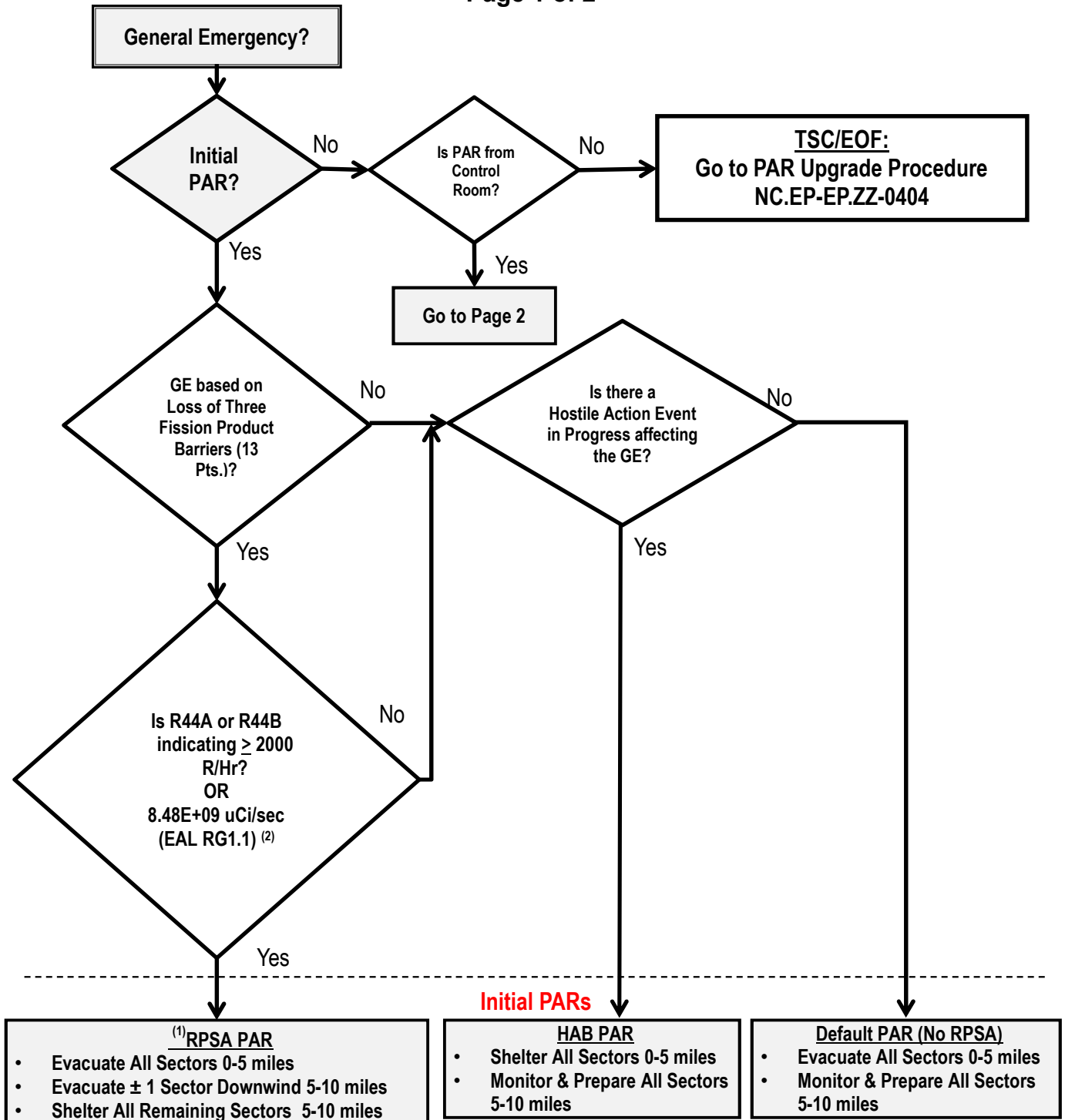
- **Callout Activation (Alert, SAE, GE):**
 - Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Alert or higher classification.
 - Activation may be delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
 - Activate the ERO Emergency Callout system using the posted instructions titled “Emergency Callout Activation”.
 - ERO callout system activation will be confirmed by a return call from the Everbridge system to the Communicator’s phone. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

- (1) Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-SA-325-102, ECG Use, Step 4.8
- (3) EP-SA-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies

APPENDIX 1 PREDETERMINED PROTECTIVE ACTION RECOMMENDATIONS

Page 1 of 2

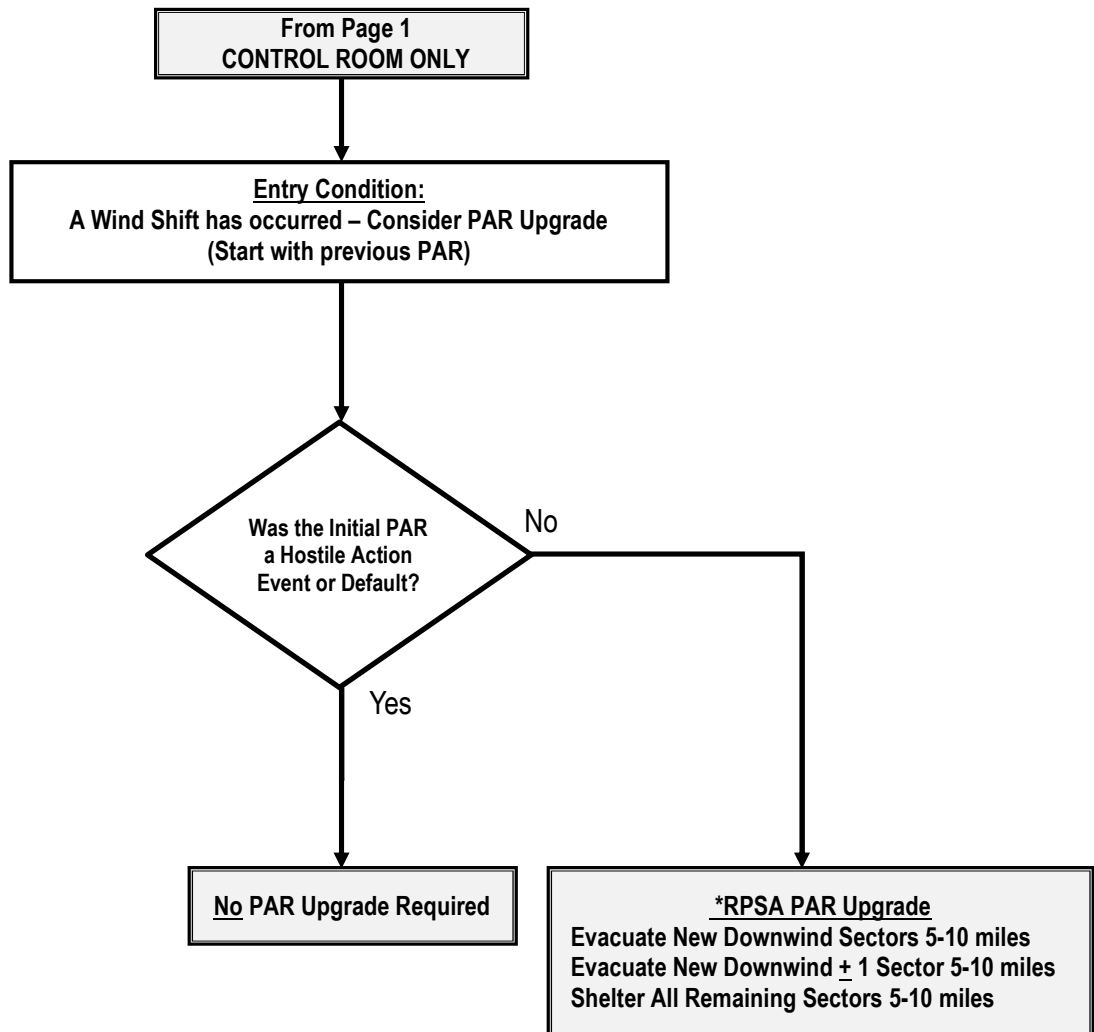


SEE LAST PAGE OF ATTACHMENT TO DETERMINE DOWNWIND SECTORS

(1) RPSA is a Rapidly Progressing Severe Accident

(2) RG1.1 defines a significant release in progress

APPENDIX 1
PREDETERMINED PROTECTIVE ACTION RECOMMENDATIONS
Page 2 of 2



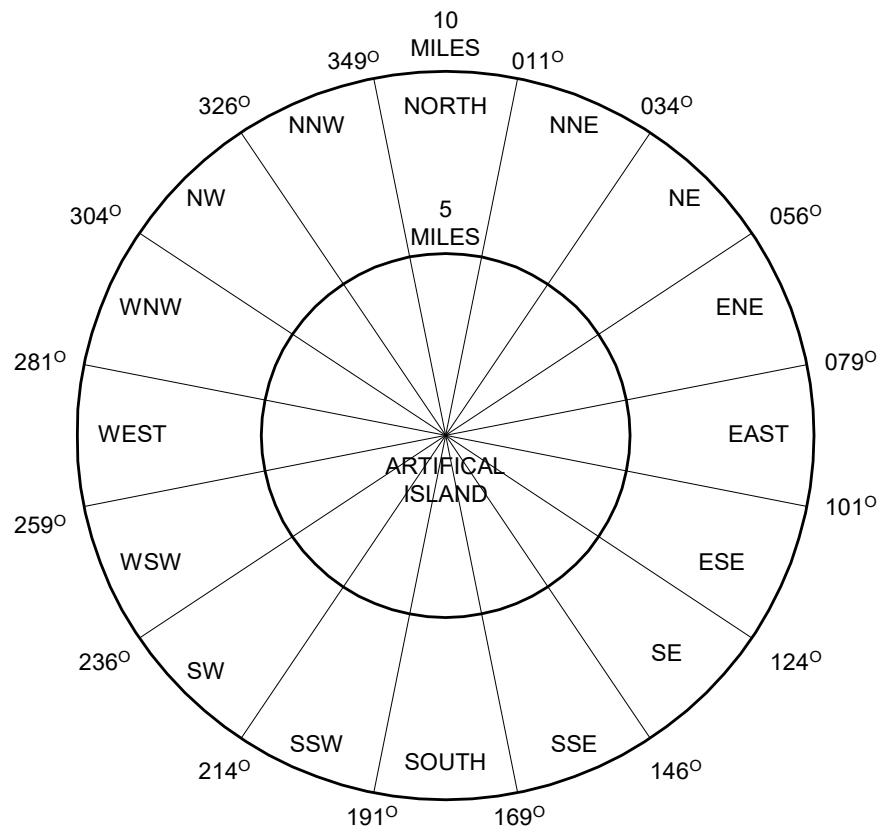
SEE LAST PAGE OF ATTACHMENT TO DETERMINE DOWNWIND SECTORS

*RPSA is a Rapidly Progressing Severe Accident

APPENDIX 1 (continued)
PROTECTIVE ACTION RECOMMENDATION WORKSHEET

WIND DIRECTION FROM		PAR AFFECTED SECTORS	
DEGREES	COMPASS		DOWNWIND ± 1 SECTORS
349 - 011	N	\Rightarrow	SSE - S - SSW
011 - 034	NNE	\Rightarrow	S - SSW - SW
034 - 056	NE	\Rightarrow	SSW - SW - WSW
056 - 079	ENE	\Rightarrow	SW - WSW - W
079 - 101	E	\Rightarrow	WSW - W - WNW
101 - 124	ESE	\Rightarrow	W - WNW - NW
124 - 146	SE	\Rightarrow	WNW - NW - NNW
146 - 169	SSE	\Rightarrow	NW - NNW - N
169 - 191	S	\Rightarrow	NNW - N - NNE
191 - 214	SSW	\Rightarrow	N - NNE - NE
214 - 236	SW	\Rightarrow	NNE - NE - ENE
236 - 259	WSW	\Rightarrow	NE - ENE - E
259 - 281	W	\Rightarrow	ENE - E - ESE
281 - 304	WNW	\Rightarrow	E - ESE - SE
304 - 326	NW	\Rightarrow	ESE - SE - SSE
326 - 349	NNW	\Rightarrow	SE - SSE - S

NOTE: CONSIDER ADDING A SECTOR TO THE PAR IF THE WIND DIRECTION (FROM) IS WITHIN $\pm 3^\circ$ OF A SECTOR DIVIDING LINE.



LR-N22-0044

ATTACHMENT 12

EP-SA-325-F24 Rev. 1 – Attachment 24 Unusual Event (Common Site)

**ATTACHMENT 24
UNUSUAL EVENT (COMMON SITE)**

NOTE

ONLY one Shift Manager (SM) is required to declare this event and assume the responsibilities of **Emergency Coordinator (EC)**. The other SM should perform support duties in accordance with NC.EP-EP.ZZ-0101, Actions Required at Unaffected Station.

CAUTION

In the event of offsite toxic gas release affecting the site, evacuation of non-essential personnel takes precedence over notifications.

I. COMMON SITE EVENT ASSESSMENT/ EC DETERMINATION

A. NOTIFICATION OF HOPE CREEK SHIFT MANAGER

1. **CONTACT** the Hope Creek SM (NETS 5234, DID 3027 or 3059) and **BRIEF** on the specific circumstances as follows:
 - a. **SHARE** information about the externally initiated event in progress.
 - b. **OBTAIN** agreement on the Unusual Event classification.
 - c. **DETERMINE** which SM will assume EC responsibilities.

Emergency Coordinator: _____

2. IF the Hope Creek SM is the EC, THEN:
 - a. **IMPLEMENT** NC.EP-EP.ZZ-0101, Actions Required at the Unaffected Station.
 - b. **CONTACT** the Salem Operations Manager, Emergency Duty Officer and Salem NRC resident and **PROVIDE** them with a briefing on the UE.
 - c. **ASSIST** the Hope Creek SM as needed.
 - d. **EXIT** this attachment.

II. CLASSIFICATION and NOTIFICATION

A. CLASSIFICATION

1. **CALL** communicators to the Control Room. SM
2. **IF** a **Security Event** is in progress, **THEN IMPLEMENT** the prompt actions of NC.EP-EP.ZZ-0102, EC Response, Attachment 10, prior to classification. SM
3. If time allows, **DIRECT** Classification **Independent Verification** to be performed EC
4. After Classification **Independent Verification** is obtained:
 - **DECLARE** the **UNUSUAL EVENT**
(enter time and date on ICMF) EC
 - **UPDATE** Crew/Facility with the Emergency Classification and potential escalation criteria EC
 - **COMPLETE / APPROVE** the ICMF EC
5. If time allows **OBTAIN** accuracy peer check of the completed ICMF EC
6. Continue with **NOTIFICATION AND ACTIVATION** as follows:

NOTE

- Emergency Response Organization (ERO) Emergency Callout Activation **is required** for an Unusual Event based on a Security Event.
- Emergency Response Organization (ERO) Emergency Callout Activation **is optional** and may be implemented at the discretion of the Emergency Coordinator (EC) for all other Unusual Events.

- If desired, **ACTIVATE / DIRECT ACTIVATION** of ERO Emergency Callout
(EP 96-003) EC
- **DIRECT** the Primary Communicator to implement ECG Attachment 6 EC
- **DIRECT** the Secondary Communicator to implement ECG Attachment 8 for an UNUSUAL EVENT EC
- If **ACTIVATION** was performed, **VERIFY / DIRECT VERIFICATION** of ERO Emergency Callout activation EC
- **IMPLEMENT** NC.EP-EP.ZZ-0102, EC Response EC

INITIAL CONTACT MESSAGE FORM

I. THIS IS _____, COMMUNICATOR IN THE CONTROL ROOM
(NAME)

AT THE **SALEM** NUCLEAR GENERATING STATION.

II. THIS IS NOTIFICATION OF A **COMMON SITE UNUSUAL EVENT** AFFECTING BOTH
SALEM AND HOPE CREEK WHICH WAS

DECLARED AT _____ ON _____
(Time - 24 HR CLOCK) (DATE)

EAL # _____ DESCRIPTION OF EVENT _____

III. ☐ THERE **IS** A RELEASE IN PROGRESS DUE TO THE EVENT
☐ THERE IS **NO** RELEASE IN PROGRESS DUE TO THE EVENT

} Any release
above normal,
attributable to the
event. See Basis
for examples.

IV. 33 FT. LEVEL WIND DIRECTION (**From**): _____ WIND SPEED: _____
(From MET Computer /SPDS) (DEGREES) (MPH)

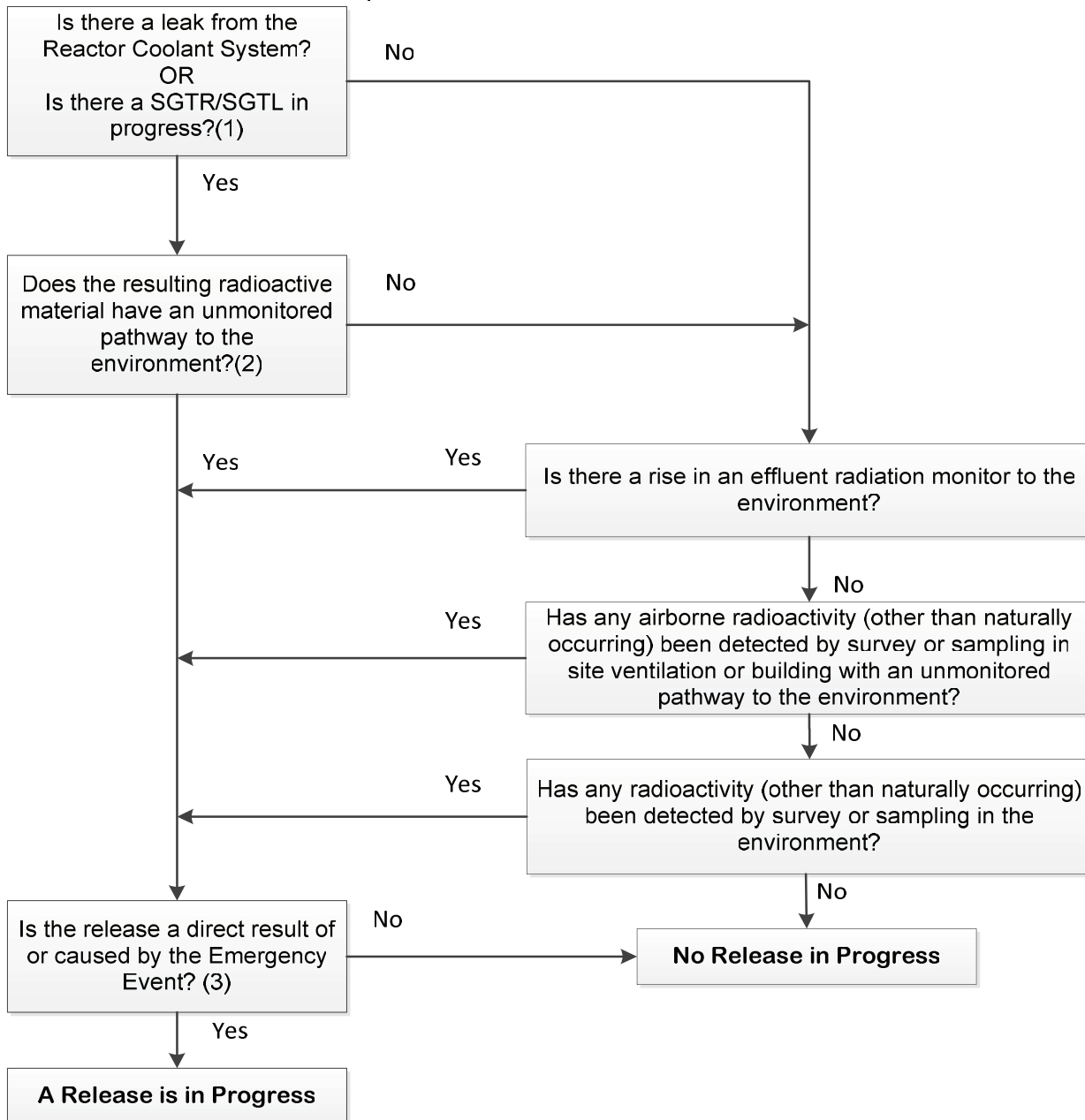
V. **NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME**

EC Print/Sign
(Approval to Transmit ICMF)

Salem-Release In Progress Determination Guidance

An “**Airborne**” release due to the event is defined as:

Any airborne radioactive release (Particulate, Iodine or Noble Gas) that is a result of, or caused by, the emergency event. A steam release from a PWR secondary system is not considered a release in progress unless a pathway for reactor coolant to the secondary side to the offsite environment is present.



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

2. Some examples include: FAULTED/RUPTURED S/G, 13 or 23 AFW Pp in service with a SGTR in progress, Leak from Containment directly to the atmosphere and Bypass Release via the Aux Building to the Electrical Penetration.

3. 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 attributed to the normal operation or shutdown of plant systems to be considered a “Release in Progress.”

BASIS – COMMON SITE UE ICMF**Classification**

- **Non-Delegable Actions:** Actions taken in the process of emergency classification may be delegated as needed with the exception of the 4 non-delegable actions listed below ⁽¹⁾
 - Classify emergencies in accordance with the Salem and Hope Creek Event Classification Guides - Includes final determination of the classification and approval of the ICMF
 - Make decisions to notify and recommend protective actions to offsite agencies
 - Provide overall direction, control and coordination of PSEG Nuclear's Emergency Response
 - Authorize the expenditure of company funds and commit corporate resources as necessary to implement emergency procedures and/or to mitigate the accident
- **Communicators:** Call communicators to the Control Room as soon as possible to provide time for them to respond from the field
- **Independent Verification:**
 - When the Shift Manager (SM) is the Emergency Coordinator, the Shift Technical Advisor (STA) is responsible to perform an independent verification of the EAL classification. The STA verification does not alleviate the requirement of the SM to make a timely classification. Should the SM fill the STA role, independent verification of the EAL classification will be delegated to another on-shift SRO, the Independent Assessor.
 - Independent verification, while recommended, is not required and should be performed at the SM/ECs discretion as time allows and based on plant conditions. ⁽²⁾
 - STA or designee performs Independent Verification for SM
 - SM or designee performs Independent Verification for EDO
 - EDO or designee performs Independent Verification for ERM
 - During the verification phase begin filling in the ICMF, completing the EAL declaration time once the EC and Independent Verifier have conferred and agree on a classification.

- **Accuracy Peer Check:** Have the STA, Primary Communicator or other knowledgeable individual perform an accuracy peer check of the ICMF. The peer check should include:
 - verification that the correct form has been used for the classification
 - review of all applicable fields that have been completed by the SM during completion of the ICMF (date, time, EAL, Description etc.) to ensure data is correct/accurate
 - SM approval initials have been completed
- **Classification Timeliness:** Classification must occur after verification and before the 15 minute EAL clock expires. Assessment of an Emergency Condition should be completed in a timely manner, which is considered to be within 15 minutes of when events are known or should have been known. If an EAL specifies a duration time (e.g., loss of annunciators for 15 minutes or longer), the assessment time runs concurrently with the EAL duration time and is the same length. ⁽³⁾
- **Rad Release Determination (Salem):** Any of the following conditions constitutes a release in progress due to the event:
 - Increase in Plant Vent Release Rate (NOT caused by operational transients or ventilation changes) which is caused by the EVENT.
 - A Steam Generator rupture which is faulted to the atmosphere (SRV, Atmospheric Vent or Line Break)
 - Evidence of an UNMONITORED release to atmosphere, examples include:
 - Primary to Secondary leak and the steam driven feed pump is in service
 - Bypass release from the Aux Building through the Electrical Pen
 - Leakage from the Containment directly to atmosphere after a LOCA
 - Elevated background radiation levels downwind from the station as monitored/reported by Radiation Protection Technician at fence line

Notification**• Callout Activation: UE**

- Emergency Response Organization (ERO) Emergency Callout Activation (EP Aid-031) is **required** for an Unusual Event based on a Security Event. Activation is **optional** for all other Unusual Events and may be implemented at the discretion of the Emergency Coordinator (EC).
- Activation may be delegated to the communicators if available, but must be performed as soon as possible after classification. The SM shall perform the callout if communicators are not available.
- Activate the ERO Emergency Callout system using the posted instructions titled "Emergency Callout Activation".
- ERO callout system activation will be confirmed by a return call from the Everbridge system to the Communicators phone. If callout fails, then utilize Backup Emergency Call-Out Activation (EP Aid-032).

References:

- (1) Emergency Plan, Section 3.0 - Organization, Paragraph 4.0 - Emergency Direction and Control
- (2) EP-SA-325-102, ECG Use, Step 4.8
- (3) EP-SA-325-102, ECG Use, Step 1.1
- (4) EP 96-003 - Enhance callout system by correcting deficiencies and capturing time inefficiencies