

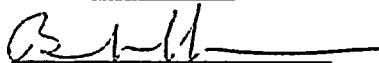
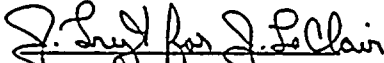


NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

UNIT II OPERATIONS

02-REQ-006-344-02-12 Revision 3

TITLE: EMERGENCY OPERATING PROCEDURES
RADIOACTIVITY RELEASE CONTROL (RR)

	<u>SIGNATURE</u>	<u>DATE</u>
PREPARER		<u>10/11/90</u>
TRAINING SUPPORT SUPERVISOR		<u>10/12/90</u>
TRAINING AREA SUPERVISOR		<u>10/12/90</u>
PLANT SUPERVISOR/ USER GROUP SUPERVISOR		<u>10/12/90</u>

CONTROLLED DOCUMENT

Summary of Pages
(Effective Date: 10/12/90)

Number of Pages: 8

Date: October 1990 Pages: 8

TRAINING DEPARTMENT RECORDS ADMINISTRATION ONLY:

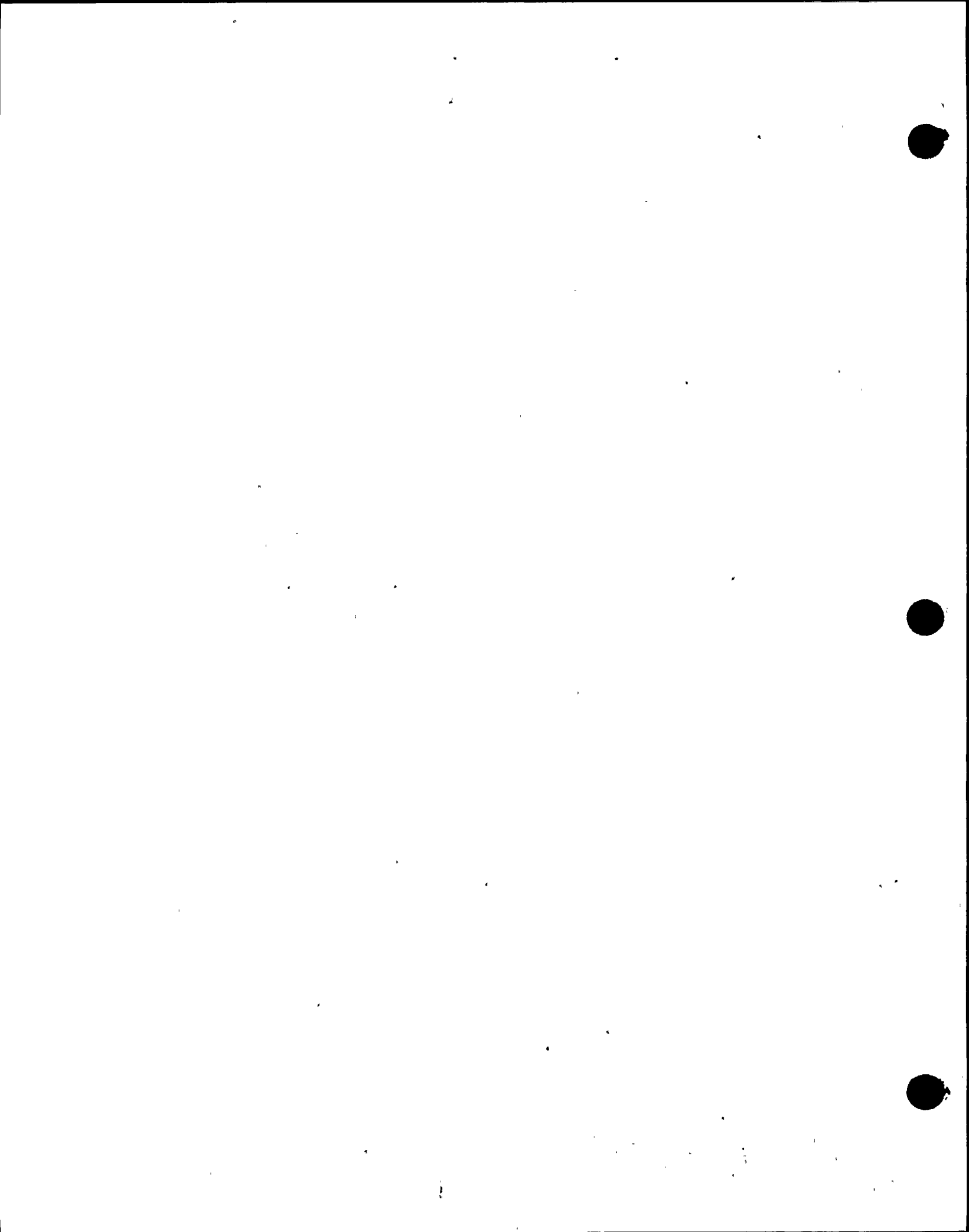
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RECORDS: _____

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S PDR

4/29/61



I. TRAINING DESCRIPTION

- A. Title of Lesson: Emergency Operating Procedures, Radioactivity Release Control (RR)
- B. Lesson Description: This lesson plan discusses the actions taken to control offsite radioactive releases.
- C. Estimate of the Duration of the Lesson: 1 Hour
- D. Method of Evaluation, Grade Format, and Standard of Evaluation:
 - 1. Written Examination with 80% minimum passing grade.
- E. Method and Setting of Instruction:
 - 1. Classroom Lecture
 - 2. Assign the Student Learning Objectives as review problems with the students obtaining answers from the text, writing them down and handing them in for grading.
- F. Prerequisites:
 - 1. Instructor:
 - a. Certified in accordance with NTP-16 or NTP-16.1.
 - 2. Trainee:
 - a. In accordance with NTP-10 or NTP-11 or
 - b. Be recommended for this training by the Operations Superintendent or his designee or the Training Superintendent.
- G. References:
 - 1. BWROG Emergency Procedure Guidelines, Rev. 4
 - 2. Plant Procedure N2-EOP-RR

II. REQUIREMENTS

- A. AP-9, Administration of Training
- B. NTP-10, Training of Licensed Operator Candidates
- C. NTP-11, Licensed Operator Requalification Training



III. TRAINING MATERIALS

A. Instructor Materials:

1. Transparency Package
2. Overhead Projector
3. Whiteboard and Felt Tip Markers
4. EOP Flowchart for RR

B. Trainee Materials:

1. EOP Flowchart for RR
2. OLP-RR

IV. EXAM AND MASTER ANSWER KEYS

Will be generated and administered as necessary. They will be on permanent file in the Records Room.



V. LEARNING OBJECTIVES

A. Terminal Objectives:

TO-1.0 Given conditions requiring the use of the Emergency Operating Procedure, use the procedure to place the plant in a stable condition as prescribed in the procedure.

B. Enabling Objectives:

EO-1.0 State the purpose of the Radioactivity Release Control Procedure.

EO-2.0 State the entry conditions for the Radioactivity Release Control Procedure.

EO-3.0 Given the procedural step, discuss the technical basis for that step.



I. INTRODUCTION

A. Student Learning Objectives

B. Purpose

Provides necessary actions to limit radioactivity release into areas outside the Primary and Secondary Containments.

EO-1.0

II. DETAILED DESCRIPTION

A. Entry Conditions

1. Setpoints

a. The entry condition for this procedure is:

EO-2.0

1) Stack GEMS - exceeds the alarm setpoint. (P882)

2) Vent GEMS - exceeds the alarm setpoint. (P882)

3) DRMS Liquid Effluent Monitor - exceeds the alert setpoint: SWP * RE 146A/B, CWS-RE 157, or LWS-RE206.

Note: The alert setpoint is yellow.

2. Setpoint Bases

Note: This is an Unusual Event action level.

a. This value selected corresponds directly to an action level in the emergency plan and thus provides the vehicle for coordinating the execution of the EOP's and the emergency plan.



b. It is sufficiently high that it is not expected to occur during normal operation but sufficiently low that it does not by itself threaten the health and safety of the public.

B. Procedural Steps

1. Activate the emergency plan, if required, IAW EAP-1.

- It is appropriate to activate the E-Plan, if plant conditions are at the action levels.

EO-3.0

2. While executing the following step:

IF

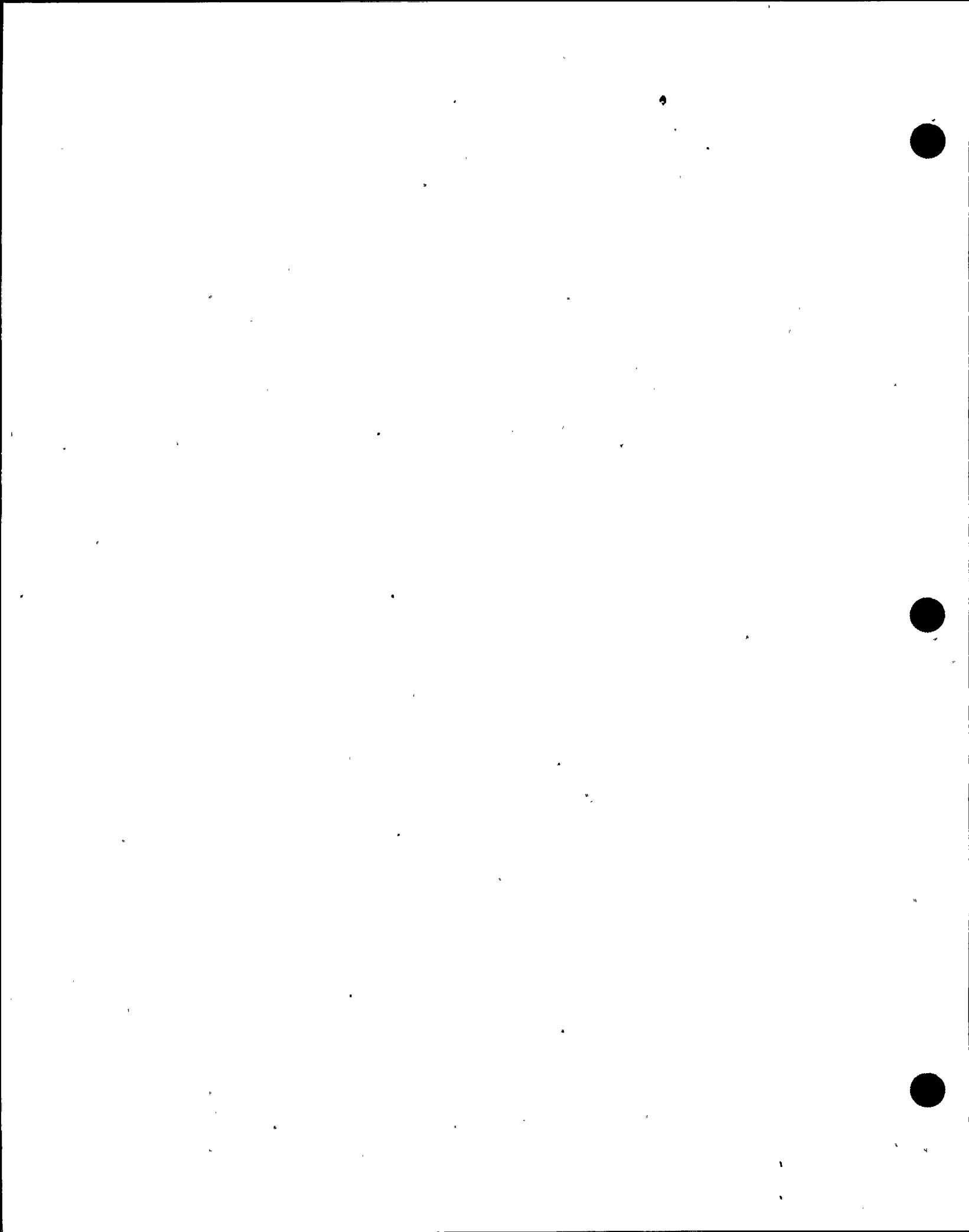
Turbine Building HVAC is shut down

THEN

Restart Turbine Building HVAC (OP-55 Section E.1)

- Restarting T.B. HVAC is appropriate for the following reasons:
 - The T.B. is not an airtight structure, which may permit an unmonitored, ground level release.
 - Radioactive Release inside the T.B. may limit personnel access.

EO-3.0



3. Isolate all Primary Systems that are discharging into areas outside the Primary and Secondary Containments except systems required to:
- a. assure adequate core cooling
OR
 - b. shutdown the reactor
 - Isolating Primary Systems discharging outside containment is the most direct action to terminate the release.
 - Since the inability to assure adequate core cooling or shutdown the reactor may ultimately result in large radioactivity releases, these systems are not isolated.

Note: Review the definition of "Primary System".

EO-3.0

EO-3.0



4. IF

The off-site radioactivity release rate approaches or exceeds the Emergency Plant "General Emergency" Level (as determined by chemistry)

AND

A Primary System is discharging into an area outside the Primary and Secondary Containments

THEN

Emergency RPV Depressurization is required; enter RPV Control and execute it concurrently with this procedure.

- Depressurizing the RPV reduces the driving head and therefore the flow from the Primary Systems that are discharging outside the Primary and Secondary Containments.
- Flags are provided referencing RP, C3, or C5 since they, as appropriate, contain the guidance to enter EOP-C2 to execute the emergency depressurization.

EO-3.0

EO-3.0



III. WRAP-UP

A. Summary

The Radioactivity Release Control procedure establishes the basis for isolating systems and controlling RPV pressure to minimize the off-site release of radioactivity in an emergency.

Discharge from Primary Systems to areas outside of the Primary and Secondary Containment are isolated (if possible) to terminate or minimize any release.

Depressurization of the RPV is required if the radioactivity release rate cannot be controlled below the release rate which requires a General Emergency.

