

SALEM OPERATIONS

1-EOP-TRIP-3, Rev. 10

SAFETY INJECTION TERMINATION

USE CATEGORY: I

REVISION SUMMARY:

This is a major revision to the EOP's.

Revision Bars are not utilized for this change.

The revision numbers for all EOPs will move to rev. 10. Presently, each EOP flowchart has its own respective revision number associated with it such that for a given procedure, EOP-SGTR-1 for example, the revision number on each flowchart is not the same. Future revisions to the EOPs will revise all documents associated with that specific procedure. i.e., when a change is made to EOP-TRIP-2, all EOP-TRIP-2 flowcharts and cover sheets will be updated to the same revision number.

The conditional action step before resetting Safety Injection (SI) has changed to address any single vital bus blackout. This change is a result of a revision request which addresses the required operator action should a single bus blackout loading occur. The intent of this step is that if a single bus blackout occurs after the SI is reset then the operator should reset the Safeguards Equipment Cabinet (SEC) and start Safeguards loads in accordance with the supplied table.

IMPLEMENTATION REQUIREMENTS:

APPROVED: 

OPERATIONS MANAGER SALEM

DATE: 7-11-94

9505020326 950421
PDR ADDCK 05000272
S PDR

SALEM OPERATIONS

1-EOP-TRIP-3, Rev. 10

SAFETY INJECTION TERMINATION

USE CATEGORY: 1

REVISION SUMMARY CONTINUATION:

Deleted section warning operators that Reactor Coolant System (RCS) temperature indications and interlocks may be inaccurate when on Natural Circulation. This caution, as referenced in the Emergency Response Guide (ERG) background document, applies to plants with Resistance Temperature Detector (RTD) bypass manifolds which require Reactor Coolant Pumps (RCP) in service to provide flow through the manifold. Salem uses imbedded RTD elements in the loops which indicate loop temperature independent of RCP operation.

As an enhancement RCP Seal Cooling now requires both Seal Injection and Thermal Barrier cooling be established to RCPs.

Various procedures have added the precaution to not start an RCP, if seal cooling had been previously lost, until an RCP evaluation has been completed. This precaution is now standard in all EOPs where applicable. The basis for this step is to evaluate for possible introduction of crud into the seal package from RCS back leakage.

Pressurizer (PZR) level adverse setpoints have changed as a result of ERG footnotes and new methods of calculating uncertainties and adverse allowances. PZR level setpoints have changed from 26% to 35% and from 11% to 21%. See SC-RC002-01 for detailed analysis.

Restoration of Service Water to the Turbine Building has been standardized.

Continuous Action Summary (CAS) for EOPs have been standardized in most cases. The verbiage and the content of the CAS action steps are more consistently worded. Additionally the size, shape and location of the CAS's are now standardized.

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USE CATEGORY: I

REVISION SUMMARY CONTINUATION:

Cartesian markers are no longer used on the flowcharts. Coordinate markers i.e., sh-2 H, 17 are no more.

Procedure references have been changed to incorporate the Procedure Maintenance Group (PMG) nomenclature and numbering system.

EMERGENCY OPERATING PROCEDURE
EOP-TRIP-3
SAFETY INJECTION TERMINATION

1.0 Entry Conditions

See Flowchart

2.0 Operator Actions

2.1 Immediate Actions

None

2.2 Subsequent Actions

See Flowchart

3.0 Attachments List

3.1 Tables

Table 1, Post Safety Injection Data

CAS TABLE 1-1

3.2 Figures

None

3.3 Graphs

None

3.4 Check Off Sheets

None

End of Procedure

Final Page

PAGE CHANGE CONTROL SHEET

List of pages

1-EOP-TRIP-3	SHEET 1	Rev. 10
1-EOP-TRIP-3	SHEET 2	Rev. 10
1-EOP-TRIP-3	SHEET 3	Rev. 10
1-EOP-TRIP-3	TAB 1-1	Rev. 10
1-EOP-TRIP-3	CAS TABLE 1-1	Rev. 10

TABLE 1

POST SAFETY INJECTION DATA

Initial Pressurizer Level _____ %

Final Pressurizer Level _____ %

Initial Pressurizer Pressure _____ PSIG

Final Pressurizer Pressure _____ PSIG

Initial Tavg _____ F

Final Tavg _____ F

RWST Temperature (T0650A) _____ F

Duration of Safety Injection _____ Min.

Initial RWST Level _____ feet

Final RWST Level _____ feet

Recorded by _____ Date _____

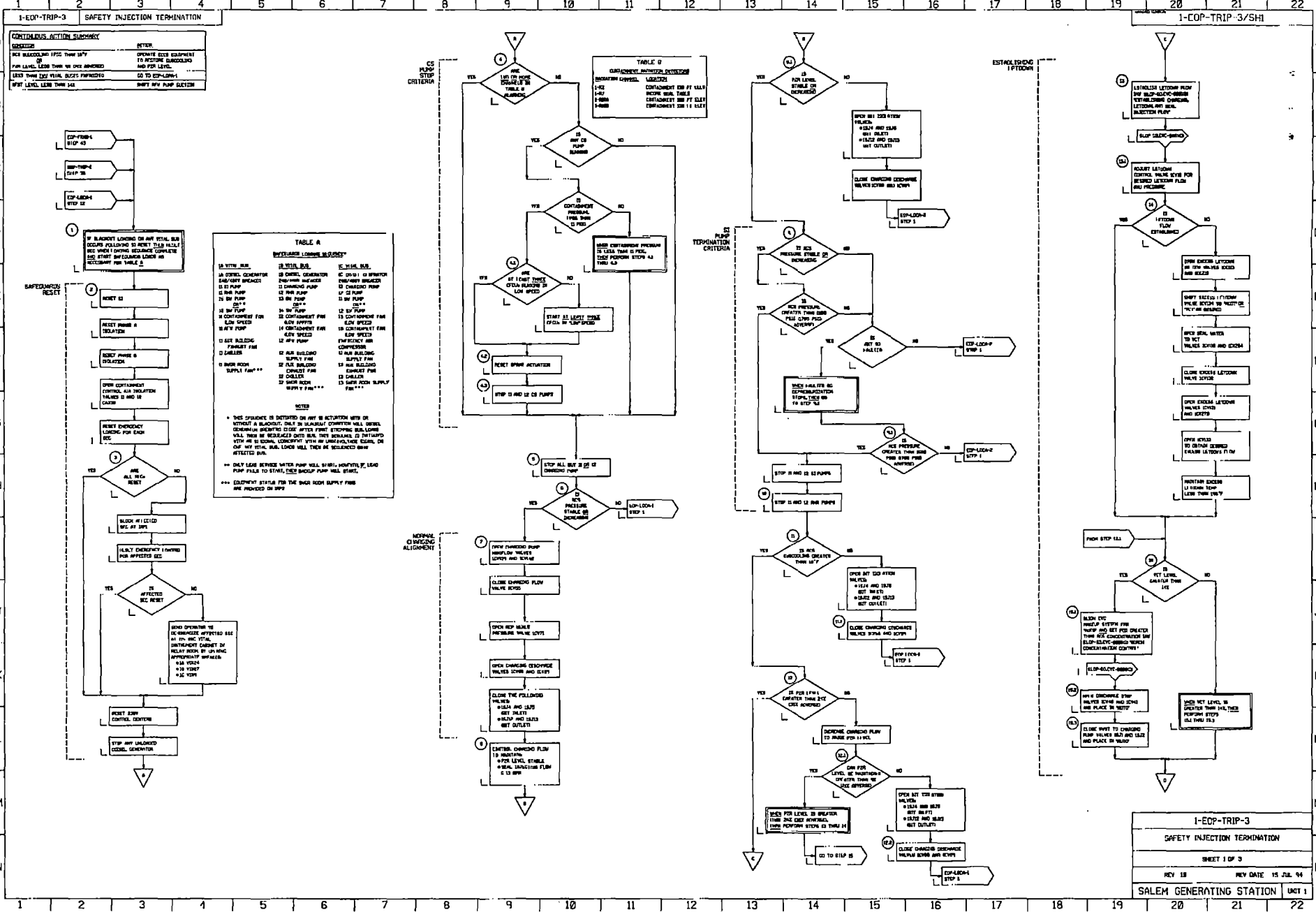
Reviewed by _____ Date _____
(Senior) Nuclear Shift Supervisor

TABLE 1

EOP-TRIP-3

CONTINUOUS ACTION SUMMARY

<u>CONDITION</u>	<u>ACTION</u>
RCS SUBCOOLING LESS THAN 10°F OR PZR LEVEL LESS THAN 9% (21% ADVERSE)	OPERATE ECCS EQUIPMENT TO RESTORE SUBCOOLING AND PZR LEVEL
LESS THAN <u>TWO</u> VITAL BUSES ENERGIZED	GO TO EOP-LOPA-1
AFST LEVEL LESS THEN 14%	SHIFT AFW PUMP SUCTION



1-EOP-TRIP-3 SAFETY INJECTION TERMINATION

1-COP-TRIP-3/SHI

CONTINUOUS ACTION SUMMARY

DESCRIPTION	ACTION
WATER LEVEL ABOVE 175% TRIP SETPOINT	OPERATE EOP EQUIPMENT TO RESTORE GUARDED WTR LEVEL LESS THAN 10% ABOVE 175% TRIP SETPOINT
WTR LEVEL LESS THAN 10% ABOVE 175% TRIP SETPOINT	GO TO EOP-TRIP-1
WTR LEVEL LESS THAN 10% ABOVE 175% TRIP SETPOINT	SHIFT WTR PUMP SECTION

TABLE A
INJECTION LOGGING RECORDS*

INJECTION LOG	INJECTION LOG	INJECTION LOG
1A CONTROL OPERATOR	1B CONTROL OPERATOR	1C OPERATOR
2A CONTROL OPERATOR	2B CONTROL OPERATOR	2C CONTROL OPERATOR
3A CONTROL OPERATOR	3B CONTROL OPERATOR	3C CONTROL OPERATOR
4A CONTROL OPERATOR	4B CONTROL OPERATOR	4C CONTROL OPERATOR
5A CONTROL OPERATOR	5B CONTROL OPERATOR	5C CONTROL OPERATOR
6A CONTROL OPERATOR	6B CONTROL OPERATOR	6C CONTROL OPERATOR
7A CONTROL OPERATOR	7B CONTROL OPERATOR	7C CONTROL OPERATOR
8A CONTROL OPERATOR	8B CONTROL OPERATOR	8C CONTROL OPERATOR
9A CONTROL OPERATOR	9B CONTROL OPERATOR	9C CONTROL OPERATOR
10A CONTROL OPERATOR	10B CONTROL OPERATOR	10C CONTROL OPERATOR
11A CONTROL OPERATOR	11B CONTROL OPERATOR	11C CONTROL OPERATOR
12A CONTROL OPERATOR	12B CONTROL OPERATOR	12C CONTROL OPERATOR
13A CONTROL OPERATOR	13B CONTROL OPERATOR	13C CONTROL OPERATOR
14A CONTROL OPERATOR	14B CONTROL OPERATOR	14C CONTROL OPERATOR
15A CONTROL OPERATOR	15B CONTROL OPERATOR	15C CONTROL OPERATOR
16A CONTROL OPERATOR	16B CONTROL OPERATOR	16C CONTROL OPERATOR
17A CONTROL OPERATOR	17B CONTROL OPERATOR	17C CONTROL OPERATOR
18A CONTROL OPERATOR	18B CONTROL OPERATOR	18C CONTROL OPERATOR
19A CONTROL OPERATOR	19B CONTROL OPERATOR	19C CONTROL OPERATOR
20A CONTROL OPERATOR	20B CONTROL OPERATOR	20C CONTROL OPERATOR
21A CONTROL OPERATOR	21B CONTROL OPERATOR	21C CONTROL OPERATOR
22A CONTROL OPERATOR	22B CONTROL OPERATOR	22C CONTROL OPERATOR

* THIS CHANGE IS INITIATED ON ANY STOP INITIATION WITH OR WITHOUT A SHUTDOWN. ONLY IN NORMAL OPERATION WILL NORMAL OPERATIONS BE INITIATED. ONLY IN NORMAL OPERATION WILL NORMAL OPERATIONS BE INITIATED. ONLY IN NORMAL OPERATION WILL NORMAL OPERATIONS BE INITIATED.

TABLE B
CONTAINMENT BREACH/LEVEL DETECTION

CONTAINMENT BREACH/LEVEL DETECTION	CONTAINMENT BREACH/LEVEL DETECTION
1-4	CONTAINMENT BREACH/LEVEL DETECTION
5-8	CONTAINMENT BREACH/LEVEL DETECTION
9-11	CONTAINMENT BREACH/LEVEL DETECTION

1-EOP-TRIP-3 SAFETY INJECTION TERMINATION

1-EOP-TRIP-3/SH2

CONTINUOUS ACTION REMAINING	ACTION
PCS BACKGROUND EPSR TRIP 30% OR FOR SIGNAL LESS THAN 10% BE ADDRESS OR TO FOR-LAPS-1 OR TO FOR-LAPS-2 OR TO FOR-LAPS-3	OPERATE EPSR EQUIPMENT TO RESTORE BACKGROUND AND FOR LEVEL. OR TO FOR-LAPS-1 OR TO FOR-LAPS-2 OR TO FOR-LAPS-3
PCS BACKGROUND EPSR TRIP 30% OR FOR SIGNAL LESS THAN 10% BE ADDRESS OR TO FOR-LAPS-1 OR TO FOR-LAPS-2 OR TO FOR-LAPS-3	OPERATE EPSR EQUIPMENT TO RESTORE BACKGROUND AND FOR LEVEL. OR TO FOR-LAPS-1 OR TO FOR-LAPS-2 OR TO FOR-LAPS-3

