

NRC

REV. 0
DATE 4/18/79

EMERGENCY PROCEDURE EP-14

TITLE: Loss of RCS Flow Indication

APPROVALS: PORC (Vice-Chairman) J. K. ... DATE 4/19/79

UNIT SUPT.: M. ... DATE 4/21/79

B&W J. ... DATE 4/23/79 NRC M. ... DATE 4/23/79

ALARA C. ... DATE 4/23/79 J. ... DATE 4/25/79

EP-14 Loss of RCS
Flow Indication

Purpose - The purpose of this procedure is to provide a method of determining that a loss of indication has occurred (and not a loss of RC pumps), and to provide alternate means of verifying sufficient RCS flow.

1.0 Symptoms

- 1.1 Loss of RCS Total Flow indication
- 1.2 Loss of RCS "A" loop and/or "B" loop indication

2.0 Immediate Actions

2.1 Automatic Actions

none

2.2 Manual Actions

- 2.2.1 Verify loss of indication is due to an instrumentation failure:
 - a. Verify running RCP current has not changed from recent indications (~ 600 amps).
 - b. Verify that the following RCS temperatures continue to indicate sufficient RCS flow:
 1. RTD temperatures (T_h, T_c) remain stable (i.e., no increase in ΔT).
 2. Incore thermocouples remain stable and indicate sufficient cooling.
- 2.2.2 If indications are that the running RCP is not operating properly and is not providing adequate core flow, trip RCP and shift to EP-32, Loss of Operating RCP.

3.0 Long Term Actions

- 3.1 Adjust RCS operable RTD computer points to alarm at 5°F above their current readings.
- 3.2 Continue operating without RCS flow indication as long as the pump current and system temperature can be frequently monitored and their indication can be considered valid. If flow cannot be maintained, trip RCP and Shift to EP-32.

EP-14 Loss of RCS
Flow Indication

Sgt. J. Oklencki

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1.0 Symptoms

- 1.1 Loss of RCS Total Flow indication
- 1.2 Loss of RCS "A" loop and/or "B" loop indication

2.0 Immediate Actions

2.1 Automatic Actions

none

2.2 Manual Actions

- 2.2.1 Verify loss of indication is due to an instrumentation failure:
 - a. Verify running RCP current has not changed from recent indications (600 amps).
 - b. Verify that the following RCS temperatures continue to indicate sufficient RCS flow:
 1. RTD temperatures (T_h , T_c) remain stable (i.e., no increase in ΔT).
 2. Incore thermocouples remain stable and indicate sufficient cooling.
- 2.2.2 If indications are that the running RCP is not operating properly and is not providing adequate core flow, trip RCP and shift to EP-32, Loss of Operating RCP.

3.0 Long Term Actions

- 3.1 Adjust RCS operable RTD computer points to alarm at 75°F above their current readings.
- 3.2 Continue operating without RCS flow indication as long as the pump current and system temperature can be frequently monitored and their indication can be considered valid. If flow cannot be maintained or all indication is lost, trip RCP and shift to EP-32.