

3.3 INSTRUMENTATION

3.3.12 Boron Dilution Alarm System (BDAS)

LC0 3.3.12 Two channels of BDAS shall be OPERABLE.

APPLICABILITY: MODES 3, 4, 5 and 6.

-----NOTE-----
Required in MODE 3 within 1 hour after the neutron flux is
within the startup range following a reactor shutdown.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required channel inoperable.	A.1 Determine the RCS boron concentration.	Immediately <u>AND</u> At the monitoring Frequency specified in the CORE OPERATING LIMITS REPORT
B. Two required channels inoperable.	B.1 Determine the RCS boron concentration by redundant methods.	Immediately <u>AND</u> At the monitoring frequency specified in the CORE OPERATING LIMITS REPORT

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time not met.	C.1 Suspend all operations involving positive reactivity additions.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.12.1	<p>-----NOTE----- Not required to be performed until 1 hour after neutron flux is within the startup range. -----</p> <p>Perform CHANNEL CHECK.</p>	12 hours
SR 3.3.12.2	<p>-----NOTE----- Not required to be performed until 72 hours after neutron flux is within the startup range. -----</p> <p>Perform CHANNEL FUNCTIONAL TEST.</p>	92 days
SR 3.3.12.3	<p>-----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. -----</p> <p>Perform CHANNEL CALIBRATION.</p>	18 months

3.9 REFUELING OPERATIONS

3.9.2 Nuclear Instrumentation

LCO 3.9.2 Two startup range monitors (SRMs) shall be OPERABLE.

APPLICABILITY: MODE 6.

ACTIONS

-----NOTE-----
Enter applicable Conditions and Required Actions of
LCO 3.3.12, "Boron Dilution Alarm System (BDAS)" for
BDAS made inoperable by SRMs.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required SRM inoperable.	A.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> A.2 Suspend positive reactivity additions.	Immediately
B. Two required SRMs inoperable.	B.1 Initiate action to restore one SRM to OPERABLE status.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.9.2.1	Perform CHANNEL CHECK.	12 hours
SR 3.9.2.2	<p>-----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. -----</p> <p>Perform CHANNEL CALIBRATION.</p>	18 months