

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

EMERGENCY INSTRUCTION S01-1.2-16

ANTICIPATED TRANSIENT WITHOUT SCRAM

I. PURPOSE:

The purpose of this instruction is to provide a procedure for adding negative reactivity to the core when the control/shutdown banks are not inserted upon demand, to establish and maintain a heat sink for conditions amenable to long term cooling, and to prevent or minimize damage to the fuel and release of excessive radioactivity.

II. SYMPTOMS:

1. Reactor trip breakers fail to open.
2. Rod position indicators show failure of two or more control rods to insert.
3. Two or more rod bottom light not on.
4. Neutron level not decreasing rapidly corresponding to an expected large negative reactivity insertion.

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1	<u>Perform Following Actions From Control Room:</u> a. Manually Trip Reactor. b. Manually Trip Turbine.	a. Manually insert control rods. b. Manually runback the turbine with the load limit.
2	<u>Check Auxiliary Feedwater Pumps Running:</u> a. Motor driven pump breaker indicator light-LIT. b. Steam driven pump steam supply valve - OPEN.	a. Manually start pump using AUTO circuit. b. Manually open valve using AUTO circuit.
3	<u>Check Auxiliary Feedwater Pump Valve Alignment:</u> a. Motor driven pump discharge valve open. b. Steam driven pump discharge CV open.	a. Manually open valve. b. Manually open valve.

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Check If The Following Trips
Have Occurred:

a. Reactor trip.

a. Trip the Reactor Trip
Breakers locally in
the 4 KV room OR open
the DC supply to the
control rods, Bkr.
72-114 in #1DC room.

b. Turbine trip.

b. Trip the turbine from
the turbine front
standard.

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Verify Auxiliary Feedwater
Flow:

a. Total AFW flow
- GREATER THAN
250 GPM.

a. Perform actions of
steps 2 and 3 locally.

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6	<u>Initiate Rapid Boration Of RCS To Obtain Adequate Shutdown Margin:</u> a. Verify that at least one charging pump is operating. b. Start the boric acid transfer pump that is valved to the boric acid tank AND pump until tank level has decreased 45%. c. Open the boric acid supply to charging pump suction CV 334. d. Close or verify closed boric acid tank recirculation valve CV 333. e. Increase letdown flow to 90 GPM.	a. Manually start charging pump. b. Use borated water from the refueling water storage tank. 1) Open MCV 1100 B AND D. 2) Close MCV 1100 C AND maintain this alignment until tank level has decreased 10%. Go to step 7.
7	<u>Establish 5% Shutdown Margin:</u> a. Continue RCS boration until 5% shutdown margin is achieved.	

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Subsequent Action:

- a. Go to S01-1.2-1.0, REACTOR TRIP
OR SAFETY INJECTION, step 3.

-END-

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