

COMANCHE PEAK STEAM ELECTRIC STATION

EMERGENCY RESPONSE GUIDELINES

FOR INFORMATION ONLY

ANTICIPATED TRANSIENT WITHOUT TRIP

SAFETY-RELATED

PROCEDURE NO. ECA - 1.0
REVISION NO. 0

SUBMITTED BY

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OPERATIONS SUPERINTENDENT

DATE

12/6/82

APPROVED BY

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MANAGER, PLANT OPERATIONS

DATE

12/30/82

CPSES
EMERGENCY RESPONSE GUIDELINE

ISSUE DATE
JAN 05 1983

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

A. PURPOSE

The purpose of this guideline is to add 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.

B. SYMPTOMS

Following are symptoms of an anticipated transient without scram condition:

1. Reactor trip breakers fail to open
2. Rod position indicators show failure of CRDMs to insert
3. Rod bottom lights not lit
4. Neutron level not decreasing rapidly corresponding to large negative reactivity insertion

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE: If at any time a reactor trip occurs, immediately go to EOP-0.0, REACTOR TRIP OR SAFETY INJECTION, STEP 2.

1 Perform Following Actions From Control Room:

- a. Try to trip reactor manually
- b. Try to trip turbine manually

- a. Try to manually insert control rods.
- b. Try to runback turbine.

2 Check AFW Pumps Running:

- a. Motor-driven pump breaker indicator lights - LIT
- b. Turbine-driven pump steam supply valves - OPEN

- a. Manually start pumps.
- b. Manually open valves.

3 Check AFW Valve Alignment:

- a. AFW valves - PROPER EMERGENCY ALIGNMENT:
 - MOT DRV AUX FW PMP-1 TO SG-1 FLOW CNTR, 1-FK-2453A
 - MOT DRV AUX FW PMP-1 TO SG-2 FLOW CNTR, 1-FK-2453B
 - MOT DRV AUX FW PMP-2 TO SG-3 FLOW CNTR, 1-FK-2454A
 - MOT DRV AUX FW PMP-2 TO SG-4 FLOW CNTR, 1-FK-2454B
 - TURB DRV AUX FW PMP TO SG-1 FLOW CNTR, 1-FK-2459A
 - TURB DRV AUX FW PMP TO SG-2 FLOW CNTR, 1-FK-2460A
 - TURB DRV AUX FW PMP TO SG-3 FLOW CNTR, 1-FK-2461A
 - TURB DRV AUX FW PMP TO SG-4 FLOW CNTR, 1-FK-2462A

- a. Manually open or close valves as appropriate.

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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4 Check If The Following Trips Have Occurred:

a. Reactor trip

a. If not, try to trip reactor locally:

- REACTOR TRIP BREAKER A
- REACTOR TRIP BREAKER B
- BYPASS BREAKER A
- BYPASS BREAKER B
- MOTOR BREAKER MG SET 1
- MOTOR BREAKER MG SET 2
- GEN BREAKER MG SET 1
- GEN BREAKER MG SET 2

b. Turbine trip

b. If not, try to trip turbine locally:

- CNTR FLUID PMP "A",
(1-HS-6550)
- CNTR FLUID PMP "B",
(1-HS-6551)
- CNTR FLUID PMP "C",
(1-HS-6552)
- LOCAL TRIP VALVE

5 Verify AFW Flow:

a. AFW flow indicators - CHECK
FOR FLOW

a. Perform actions of steps 2
and 3 locally.

*
* CAUTION: Charging pump miniflow valves must remain open when *
* RCS pressure is greater than (LATER) *
*

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

6 Initiate Rapid Boration of RCS To
Obtain Adequate Shutdown
Margin:

a. Initiate emergency boration:

- 1) Open the Emergency Boration
Valve:
 - EMER BORATE VLV (1/1-8104)

- 2) Start both Boric Acid Transfer
Pumps:

- BA TRANS PMP 1, (1/1-APBA 1)
- BA TRANS PMP 2, (1/1-APBA 2)

- 3) Verify PD charging pump running

- 4) Adjust letdown flow to 120 GPM

NOTE: This will require
additional charging pumps
to be run in order to
maintain PZR level.

- 5) Determine boron addition by
observing emergency borate flow:

- EMERG BORAT FLOW, (1-FI-183)

AND

the time duration of the
emergency boration

- 6) Monitor the following parameters
to determine adequate boration:

- Control rod bank position
- Tave
- Neutron flux level
- Emergency boration flow rate

- 1) IF valve 1-8104 does not
open, THEN open the boric
acid to blender valve
1-FCV-110A and manual
emergency boration valve
1-8439.

- 3) Start PD charging pump.

7 Verify Containment Ventilation
Isolation

IF isolation has NOT occurred,
THEN manually isolate
containment ventilation.

8 Maintain Adequate Shutdown
Margin per OPT-301, CALCULATING
SHUTDOWN MARGIN.

Borate as necessary.

9 Go to EOP-0.0, REACTOR TRIP OR
SAFETY INJECTION, STEP 2.

-END-