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SUBJECT: Forwards marked-up 821015 Tech Specs identifying changes needed in listed areas including containment purge monitors, post-accident sampling, iodine removal sys, fire rated assemblies, spray &/or sprinkler sys & fire hose stations.

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November 9, 1982

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Director, Office of Nuclear Reactor Regulation  
Attention: Mr. George W. Knighton, Branch Chief  
Licensing Branch No. 3  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-362  
San Onofre Nuclear Generating Station  
Unit 3

Final Draft San Onofre Nuclear Generating Station (SONGS) Unit 3 Technical Specifications were issued by the NRC on October 15, 1982. Southern California Edison Company (SCE) has reviewed Unit 3 Technical Specifications and has identified several areas where changes are needed. All of these areas have already been discussed with the NRC staff. The purpose of this letter is to document areas where changes are requested prior to issuance of Unit 3 Technical Specifications. The requested changes are shown in the attachments and are discussed below.

1. Containment Purge Monitors (Attachment 1)

Notes have been added to Technical Specifications 3.3.2, 3.3.3.1 and 3.3.3.9 which allow use of an alternate purge monitoring scheme prior to installation of the new purge vent stack monitor at first refueling. This alternate scheme was previously approved for Unit 2. The requirement for use of this alternate scheme for Unit 3 was identified and discussed with the NRC at the April 20, 1982 meeting and in NRC/SCE and SCE/NRC letters of April 22, 1982 and May 22, 1982 respectively. The addition of this note will make Unit 3 Technical Specifications consistent with License Condition (14) of the draft SONGS Unit 3 Operating License.

2. Post-Accident Sampling (PASS) (Attachment 2)

SCE's letter of September 27, 1982 requested that the PASS implementation date for Unit 3 be revised to "prior to first exceeding five (5) percent power." A note has been added to Technical Specification 6.8.4d making it consistent with this request and License Condition (16)F of the draft Operating License.

Boo!

3. Iodine Removal System (Attachment 3)

The upper temperature limit for the chemical spray addition tank is increased from 88°F to 104°F. This temperature limit maintains solution viscosity within the range required for accurate flow metering and precludes corrosion of the tank and piping. This wider temperature range allows greater operational flexibility.

4. Table 4.3-2 (Attachment 4)

The MODE 4 surveillance requirement for Item 5, Recirculation Actuation Signal (RAS) is added to make Table 4.3-2 consistent with Table 3.3-3 Item 5.

5. Fire Rated Assemblies (Attachment 5)

Surveillance requirements 4.7.9.1 and 4.7.9.2 have been reorganized in order of increasing surveillance intervals to be consistent with the format of other specifications. The addition of the words "mechanical and electrical" to 4.7.9.2.c clarify administrative aspects of compliance with these surveillance requirements.

6. 3.7.8.2 Spray and/or Sprinkler Systems (Attachment 6)

Action "a" is modified to differentiate between spray/sprinkler systems inside containment and those outside containment. In its current form Action "a" would require a shutdown so that a fire watch could be established in the event that one of the reactor coolant pump deluge systems is declared inoperable while the unit is at power. This is unacceptable from an operations standpoint. Proposed Action "b" provides sufficient operational flexibility to avoid a shutdown while requiring NRC notification to ensure that proper attention is given to the problem.

7. Tables 3.8-1 and 3.8-2 (Attachment 7)

The changes shown on Tables 3.8-1 and 3.8-2 are purely editorial in nature.

8. Table 3.3-5 (Attachment 8)

Unit 2 Technical Specification Proposed Change NPF-10-17, submitted to the NRC on October 21, 1982 as part of Amendment Application 13, identifies and justifies the requirement to increase the ECCS Miniflow Valves response time in Table 3.3-5 to 50.7 seconds. Unit 3 miniflow valves do not meet the current response time requirement of 40.7 seconds. As stated in proposed change NPF-10-17, this change has no adverse safety or environmental impact. It is requested that this change be included in Unit 3 Technical Specifications to avoid the need for an Amendment prior to initial entry into MODE 4.

Mr. George W. Knighton

-3-

November 9, 1982

9. Fire Hose Stations (Attachment 9)

Action "a" of Technical Specification 3.7.8.3 is overly prescriptive in its method for providing fire water coverage to areas with inoperable hose stations. The Action statement should allow flexibility in the choice of alternate sources of fire water such as fire hydrants and the SONGS fire truck and fire trailers. The proposed wording for Action "a" provides flexibility while not diminishing the ability of an alternate source to protect its designated area.

Should you have any questions regarding the above information, please call me.

Very truly yours,

*M. O. Medford* for KPB

ATTACHMENT 1

DRAFT

## INSTRUMENTATION

### 3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.2 The Engineered Safety Feature Actuation System (ESFAS) instrumentation channels and bypasses shown in Table 3.3-3 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3-4 and with RESPONSE TIMES as shown in Table 3.3-5.\*

APPLICABILITY: As shown in Table 3.3-3.

#### ACTION:

- a. With an ESFAS instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3-4, declare the channel inoperable and apply the applicable ACTION requirement of Table 3.3-3 until the channel is restored to OPERABLE status with the trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With an ESFAS instrumentation channel inoperable, take the ACTION shown in Table 3.3-3.

#### SURVEILLANCE REQUIREMENTS

4.3.2.1 Each ESFAS instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations for the MODES and at the frequencies shown in Table 4.3-2.

4.3.2.2 The logic for the bypasses shall be demonstrated OPERABLE during the at power CHANNEL FUNCTIONAL TEST of channels affected by bypass operation. The total bypass function shall be demonstrated OPERABLE at least once per 18 months during CHANNEL CALIBRATION testing of each channel affected by bypass operation.

4.3.2.3 The ENGINEERED SAFETY FEATURES RESPONSE TIME of each ESFAS function shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per function such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ESFAS function as shown in the "Total No. of Channels" Column of Table 3.3-3.

- \* Continuous monitoring and sampling of the containment purge exhaust directly from the purge stack shall be provided for the low and high volume (8-inch and 42-inch) containment purge prior to startup following the first refueling outage. Containment airborne monitor 32RT-7804-1 or 32RT-7807-2 and associated sampling media shall perform these functions prior to initial criticality. From initial criticality to the startup following the first refueling outage containment airborne monitor 32RT-7804-1 and associated sampling media shall perform the above required functions. 1982

## INSTRUMENTATION

**DRAFT**

### 3/4.3.3 MONITORING INSTRUMENTATION

#### RADIATION MONITORING ALARM INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION.

3.3.3.1 The radiation monitoring alarm instrumentation channels shown in Table 3.3-6 shall be OPERABLE with their alarm/trip setpoints within the specified limits. \*

APPLICABILITY: As shown in Table 3.3-6.

ACTION:

- a. With a radiation monitoring channel alarm setpoint exceeding the value shown in Table 3.3-6, adjust the setpoint to within the limit within 4 hours or declare the channel inoperable.
- b. With one or more radiation monitoring alarm channels inoperable, take the ACTION shown in Table 3.3-6.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.3.1 Each radiation monitoring alarm instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations for the MODES and at the frequencies shown in Table 4.3-3.

- \* Continuous monitoring and sampling of the containment purge exhaust directly from the purge stack shall be provided for the low and high volume (8-inch and 42-inch) containment purge prior to startup following the first refueling outage. Containment airborne monitors RT-7804-1 or RT-7807-2 and associated sampling media shall perform these functions prior to initial criticality. From initial criticality to the startup following the first refueling outage containment airborne monitor RT-7804-1 and associated sampling media shall perform the above required functions.

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## INSTRUMENTATION

### RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.3.9 The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.3-13 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded. The alarm/trip setpoints of these channels shall be determined in accordance with the ODCM.

APPLICABILITY: As shown in Table 3.3-13

#### ACTION:

- a. With a radioactive gaseous effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above Specification, immediately suspend the release of radioactive gaseous effluents monitored by the affected channel or declare the channel inoperable.
- b. With less than the minimum number of radioactive gaseous effluent monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-13. Additionally, if the inoperable instruments are not returned to OPERABLE status within 30 days, explain the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3, 3.0.4, and 6.9.1.13b are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.3.9 Each radioactive gaseous effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-9.

- \*Continuous monitoring and sampling of the containment purge exhaust directly from the purge stack shall be provided for the low and high volume (8-inch and 42-inch) containment purge prior to startup following the first refueling outage. Containment airborne monitor <sup>3</sup>ART-7804-1 or <sup>3</sup>ART-7807-2 and associated sampling media shall perform these functions prior to initial criticality. From initial criticality to the startup following the first refueling outage containment airborne monitor <sup>3</sup>ART-7804-1 and associated sampling media shall perform the above required functions.



ATTACHMENT 2

ADMINISTRATIVE CONTROLSb. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for monitoring, and
- (iii) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- (i) Identification of a sampling schedule for the critical variables and control points for these variables,
- (ii) Identification of the procedures used to measure the values of the critical variables,
- (iii) Identification of process sampling points, including monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- (iv) Procedures for the recording and management of data,
- (v) Procedures defining corrective actions for all off-control point chemistry conditions, and
- (vi) A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Post-Accident Sampling

A program\* which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the training of personnel, the procedures for sampling and analysis and the provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTSROUTINE REPORTS AND REPORTABLE OCCURRENCES

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the NRC Regional Administrator unless otherwise noted.

\* Not required to be implemented prior to first exceeding 5% power.

ATTACHMENT 3

**DRAFT**

CONTAINMENT SYSTEMS

IODINE REMOVAL SYSTEM

LIMITING CONDITION FOR OPERATION

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3.6.2.2 The iodine removal system shall be OPERABLE with:

- a. A spray additive tank containing a minimum solution volume of 1456 gallons of between 40 and 44% by weight NaOH solution with a solution temperature between 82°F and ~~88°F~~ <sup>104°F</sup> and
- b. Two spray chemical addition pumps each capable of adding NaOH solution from the chemical addition tank to a containment spray system pump flow.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

With the iodine removal system inoperable, restore the system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the iodine removal system to OPERABLE status within the next 48 hours or be in HOT SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS

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4.6.2.2 The iodine removal system shall be demonstrated OPERABLE:

- a. At least once per 24 hours by verifying the NaOH solution temperature.
- b. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. At least once per 6 months by:
  1. Verifying the contained solution volume in the tank, and
  2. Verifying the concentration of the NaOH solution by chemical analysis.
- d. At least once per 18 months, during shutdown, by verifying that (1) each automatic valve in the flow path actuates to its correct position and (2) that each spray chemical addition pump starts automatically on a Containment Spray Actuation test signal.
- e. At least once per 5 years by verifying a minimum solution flow rate of 20 gpm through all piping sections from the spray additive tank to the suction at the containment spray pumps.

ATTACHMENT 4

DRAFT

TABLE 4.3-2

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. SAFETY INJECTION (SIAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Containment Pressure - High	S	R	M	1, 2, 3
c. Pressurizer Pressure - Low	S	R	M	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(1)(3), SA(4)	1, 2, 3, 4
2. CONTAINMENT SPRAY (CSAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3
b. Containment Pressure -- High - High	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1)(3), SA(4)	1, 2, 3
3. CONTAINMENT ISOLATION (CIAS)				
a. Manual CIAS (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Manual SIAS (Trip Buttons)(5)	N.A.	N.A.	R	1, 2, 3, 4
c. Containment Pressure - High	S	R	M	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(1)(3), SA(4)	1, 2, 3, 4
4. MAIN STEAM ISOLATION (MSIS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3
b. Steam Generator Pressure - Low	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1)(3), SA(4)	1, 2, 3
5. RECIRCULATION (RAS)				
a. Refueling Water Storage Tank - Low	S	R	M	1, 2, 3, 4
b. Automatic Actuation Logic	N.A.	N.A.	M(1)(3), SA(4)	1, 2, 3, 4
6. CONTAINMENT COOLING (CCAS)				
a. Manual CCAS (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Manual SIAS (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
c. Automatic Actuation Logic	N.A.	N.A.	M(1)(3), SA(4)	1, 2, 3, 4

ATTACHMENT 5

**DRAFT**

PLANT SYSTEMS

3/4.7.9 FIRE RATED ASSEMBLIES

LIMITING CONDITION FOR OPERATION

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3.7.9 All fire rated assemblies (walls, floor/ceilings, cable tray enclosures and other fire barriers) separating safety related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable, ventilation duct, and piping penetration seals) shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more of the above required fire rated assemblies and/or sealing devices inoperable, within one hour either establish a continuous fire watch on at least one side of the affected assembly, or verify the OPERABILITY of the fire detectors on at least one side of the inoperable assembly and establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.7.9.1 Each of the above required fire doors shall be verified OPERABLE by:

- a. Verifying at least once per 24 hours the position of each closed fire door and that doors with automatic hold-open and release mechanisms are free of obstructions.
- b. Verifying at least once per 7 days the position of each locked closed fire door.
- c. Performing a CHANNEL FUNCTIONAL TEST at least once per 31 days of the fire door supervision system.
- d. Inspecting at least once per 6 months the automatic hold-open, release and closing mechanism and latches.
- e. Performing a functional test at least once per 18 months of the automatic hold-open, release, closing mechanisms and latches.



SURVEILLANCE REQUIREMENTS

4.7.9.42 At least once per 18 months the above required fire rated assemblies and penetration sealing devices other than fire doors shall be verified OPERABLE by:

- a. Performing a visual inspection of the exposed surfaces of each fire rated assembly.
- b. Performing a visual inspection of each fire window/fire damper/ and associated hardware.
- c. Performing a visual inspection of at least 10 percent of each type of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10 percent of each type of sealed penetration shall be made. This inspection process shall continue until a 10 percent sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each penetration seal will be inspected at least once per 15 years.

(mechanical and electrical)

ATTACHMENT 6

**DRAFT**

PLANT SYSTEMS

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.8.2 The spray and/or sprinkler systems listed in Table 3.7-5 shall be OPERABLE.

APPLICABILITY: Whenever equipment protected by the spray/sprinkler system is required to be OPERABLE.

ACTION:

- a. With one or more of the above required spray and/or sprinkler systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol.

INSERT →

- ~~b~~ c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.8.2 Each of the above required spray and/or sprinkler systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated or automatic) outside of containment in the flow path is in its correct position.
- b. At least once per 31 days during each COLD SHUTDOWN or REFUELING by verifying that each valve (manual, power-operated or automatic) inside containment in the flow path is in its correct position,
- c. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- d. At least once per 18 months:
1. By performing a system functional test which includes simulated automatic actuation of the system, and:
    - a) Verifying that the automatic valves in the flow path actuate to their correct positions on a test signal, and
    - b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
  2. By a visual inspection of the dry pipe spray and wet pipe spray sprinkler headers to verify their integrity, and

SURVEILLANCE REQUIREMENTS (Continued)

- 3. By a visual inspection of each spray/sprinkler head to verify the spray pattern is not obstructed.
- e. At least once per 3 years by performing an air flow test through each open head spray/sprinkler header and verifying each open head spray/sprinkler nozzle is unobstructed.

*Insert in Actions on page 3/4 7-30*

- b. With one or more of the above required spray and/or sprinkler systems inside containment inoperable, restore the system to OPERABLE status within 24 hours or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

ATTACHMENT 7

TABLE 3.8-1  
CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

**DRAFT**

Primary Device Number	Backup Device Number	Service Description
3Q01724	3Q017 (Main Breaker)	Containment Sump Inlet Flow 3FT5799A/B, 3FT5802A/B
3Q02801	3Q028 (Main Breaker)	RCP P-001 (Motor Enclosure Heater)
3Q02802	3Q028 (Main Breaker)	RCP P-004 (Motor Enclosure Heater)
3Q02803	3Q028 (Main Breaker)	RCP P-002 (Motor Enclosure Heater)
3Q02804	3Q028 (Main Breaker)	Containment Reactor Cavity Cooling Fan A-320 (Motor Enclosure Heater)
3Q02805	3Q028 (Main Breaker)	RCP P-003 (Motor Enclosure Heater)
3Q02808	3Q028 (Main Breaker)	Containment Reactor Cavity Cooling Fan (Motor Enclosure Heater)
3Q03904	3Q039 (Main Breaker)	Dome Circulating Fan A-071 (Motor Enclosure Heater)
3Q03906	3Q039 (Main Breaker)	Dome Circulating Fan A-074 (Motor Enclosure Heater)
3Q04104	3Q041 (Main Breaker)	Standby Dome Circulating Fan A-072 (Motor Enclosure Heater)
3Q04106	3Q041 (Main Breaker)	Standby Dome Circulating Fan A-073
3D5P108	3D503	Panel 3LP4 Emergency Lighting
3D5P109	3D503	Panel 3LP11 Emergency Lighting
3D5P118	3D503	Panel 3LP16 Emergency Lighting
<del>3A0101</del> 3A0102	<del>3A0102</del> 3A0101 3A0104 3A0105	Reactor Coolant Pump P-001 Reactor Coolant Pump P-001 Reactor Coolant Pump P-001

TABLE 3.8-1

## CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

DRAFT

Primary Device Number	Backup Device Number	Service Description
<del>3A0103</del>	3A0102	Reactor Coolant Pump P-004
3A0104	<del>3A0104</del> 3A0103	Reactor Coolant Pump P-004
	3A0105	Reactor Coolant Pump P-004
<del>3A0201</del>	<del>3A0202</del> 3A0201	Reactor Coolant Pump P-002
3A0202	3A0204	Reactor Coolant Pump P-002
	3A0205	Reactor Coolant Pump P-002
<del>3A0203</del>	3A0202	Reactor Coolant Pump P-003
3A0204	<del>3A0204</del> 3A0203	Reactor Coolant Pump P-003
	3A0205	Reactor Coolant Pump P-003
CEA04	CB3001	CEA4
CEA05	CB3001	CEA5
CEA06	CB3001	CEA6
CEA07	CB3001	CEA7
CEA08	CB3002	CEA8
CEA09	CB3002	CEA9
CEA10	CB3002	CEA10
CEA11	CB3002	CEA11
CEA12	CB3003	CEA12
CEA14	CB3003	CEA14
CEA16	CB3003	CEA16
CEA18	CB3003	CEA16
CEA13	CB3004	CEA13
CEA15	CB3004	CEA15
CEA17	CB3004	CEA17
CEA19	CB3004	CEA19

TABLE 3.8-2 (Continued)

**DRAFT**

<u>VALVE NUMBER</u>	<u>FUNCTION</u>
HV-5686	Firewater to containment isolation
HV-0227B	Volume control tank (T077) drain return
HV-9240	Boric acid makeup tank (T071) to charging pump suction
HV-9235	Boric acid makeup tank (T072) to charging pump suction
HV-9336	Shutdown cooling flow to LPSI pump suction
HV-9359	Shutdown cooling warm up valve
HV-9301	Refueling water tank west (T006) outlet
HV-6495	Saltwater from CCW HX E002
TV-9267	Letdown Line Containment isolation valve
HV-9434	HPSI Header #2 to reactor coolant loop 1 hot leg
HV- <sup>8152</sup> <del>8151</del>	Shutdown cooling HX inlet isolation valve
HV-8153	Shutdown cooling HX inlet isolation valve
HV-4712	Aux F.W. pump P504 discharge to steam gen. control
HV-8160	Shutdown Cooling HX Bypass Control Valve
HV-8161	Shutdown Cooling HX Bypass Control Valve
HV-8162	LPSI Pump Miniflow Isolation
HV-8163	LPSI Pump Miniflow Isolation
HV-0396	Shutdown Cooling HX Bypass Control Valve



ATTACHMENT 8

DRAFT

Table 3.3-5 (Continued)

INITIATING SIGNAL AND FUNCTION	RESPONSE TIME (SEC)
5. <u>Steam Generator Pressure - Low</u>	
MSIS	
(1) Main Steam Isolation (MSIV)	20.9
(2) Main Feedwater Isolation	10.9
6. <u>Refueling Water Storage Tank - Low</u>	
RAS	
(1) Containment Sump Valves Open	50.7*
(2) ECCS Miniflow Valves Shut	<del>40.7</del> 50.7*
7. <u>4.16 kv Emergency Bus Undervoltage</u>	
LOV (loss of voltage and degraded voltage)	Figure 3.3-1
8. <u>Steam Generator Level - Low (and No Pressure-Low Trip)</u>	
EFAS	
(1) Auxiliary Feedwater (AC trains)	50.9*/40.9**
(2) Auxiliary Feedwater (steam/DC train)	30.9 (NOTE 6)
9. <u>Steam Generator Level - Low (and <math>\Delta P</math> - High)</u>	
EFAS	
(1) Auxiliary Feedwater (AC trains)	50.9*/40.9**
(2) Auxiliary Feedwater (Steam/DC train)	30.9 (NOTE 6)
10. <u>Control Room Ventilation Airborne Radiation</u>	
CRIS	
Control Room Ventilation - Emergency Mode	Not Applicable
11. <u>Control Room Toxic Gas (Chlorine)</u>	
TGIS	
Control Room Ventilation - Isolation Mode	16 (NOTE 5)
12. <u>Control Room Toxic Gas (Ammonia)</u>	
TCIS	
Control Room Ventilation - Isolation Mode	36 (NOTE 5)

ATTACHMENT 9

## PLANT SYSTEMS

**DRAFT**

### FIRE HOSE STATIONS

#### LIMITING CONDITION FOR OPERATION

3.7.8.3 The fire hose stations shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

ACTION:

*Replace with attached*

~~a. With one or more of the fire hose stations shown in Table 3.7-6 inoperable, provide gated wye(s) on the nearest OPERABLE hose station(s). One outlet of the wye shall be connected to the standard length of hose for the hose station. The second outlet of the wye shall be connected to a length of hose sufficient to provide coverage for the area left unprotected by the inoperable hose station. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to operating technicians, plant equipment, or the hose itself, the fire hose shall be stored in a roll at the outlet of the OPERABLE hose station. Signs shall be mounted above the gated wye(s) to identify the proper hose to use. The above action shall be accomplished within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise route the additional hose within 24 hours.~~

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.8.3 Each of the fire hose stations shown in Table 3.7-6 shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the stations accessible during plant operation to assure all required equipment is at the station.
- b. At least once per 18 months by:
  - >1. Visual inspection of the stations not accessible during plant operations to assure all required equipment is at the station.
  - 2. Removing the hose for inspection and re-racking, and
  - 3. Inspecting all gaskets and replacing any degraded gaskets in the couplings.
- c. At least once per 3 years by:
  - 1. Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
  - 2. Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above the maximum fire main operating pressure, whichever is greater.

Replace 3.7.8.3 ACTION "a" with:

- A. WITH ONE OR MORE OF THE FIRE HOSE STATIONS SHOWN IN TABLE 3.7-6 INOPERABLE, ROUTE AN EQUIVALENT CAPACITY HOSE FROM AN ALTERNATE SOURCE, OF SUFFICIENT LENGTH TO COVER THE AREA LEFT UNPROTECTED BY THE INOPERABLE HOSE STATION. USE OF THE ALTERNATE SOURCE SHALL NOT DIMINISH ITS ABILITY TO PROTECT ITS DESIGNATED AREA. WHERE IT CAN BE DEMONSTRATED THAT THE PHYSICAL ROUTING OF THE FIRE HOSE WOULD RESULT IN A RECOGNIZABLE HAZARD TO STATION PERSONNEL, PLANT EQUIPMENT OR THE HOSE ITSELF THE FIRE HOSE SHALL BE STORED AT OR NEAR THE ALTERNATE SOURCE. THE ABOVE ACTION SHALL BE ACCOMPLISHED WITHIN ONE HOUR IF THE INOPERABLE FIRE HOSE STATION IS THE PRIMARY MEANS OF FIRE SUPPRESSION; OTHERWISE THE ABOVE ACTION SHALL BE ACCOMPLISHED WITHIN 24 HOURS.