Florida Power & Light, 9760 S.W. 344 ST. Florida City, FL 33034

MAY 11 2011
L-2010-185
10 CFR 50.90

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Supplemental Response for Alternative Source Term License Amendment Request No. 196 and Proposed Changes to Technical Specification 3.7.5 on Control Room Emergency Ventilation System

References:

(1) W. Jefferson (FPL) to U.S. Nuclear Regulatory Commission (L-2009-133), "License Amendment Request 196: Alternative Source Term and Conforming Amendment," Accession No. ML092050277, June 25, 2009.

(2) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-083), "Supplement to License Amendment Request (LAR) 196 and 3/24/2010 Request for Additional Information (RAI) Regarding Alternative Source Term (AST)," Accession No. ML101450028, May 21, 2010

(3) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-131), "Response to 5/28/2010 Request for Additional Information (RAI) Regarding "Alternative Source Term (AST) License Amendment Request (LAR) 196 (TAC Nos. ME1624 and ME1625), June 23, 2010.

(4) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-197), "Response to Request for Additional Information (RAI) Regarding Alternative Source Term (AST) License Amendment Request (LAR) 196 and Proposed Changes to Technical Specification (TS) 3/4.7.5 on Control Room Emergency Ventilation System (CREVS) (TAC Nos. ME1624 and ME1625), September 15, 2010.

By letter L-2009-133 dated June 25, 2009 [Reference 1], Florida Power and Light (FPL) requested to amend Facility Operating Licenses DPR-31 and DPR-41 and revise the Turkey Point Units 3 and 4 Technical Specifications (TS). The proposed amendments revise the TS to adopt the alternative source term (AST) as allowed in 10 CFR 50.67.

By letter L-2010-083 dated May 21, 2010 [Reference 2], FPL provided its response to NRC concerns over the current TS language in TS 3/4.7.5, Control Room Emergency Ventilation System (CREVS). In its response, FPL proposed TS changes consistent with the approach given in the Westinghouse Standard Technical Specifications (STS) as well as plant modifications intended to increase overall system reliability and availability.

By letter L-2010-131 dated June 23, 2010 [Reference 3], FPL provided its response to NRC concerns over an AST proposed change to TS 3/4.7.5 Surveillance Requirements (SR) 4.7.5.c.2a regarding the control room filter test acceptance criteria that appeared to conflict with Regulatory Guide (RG) 1.52 recommendations. In its response, FPL retracted the proposed SR change to the methyl iodide penetration criteria.

A102
A001
NRR

By letter L-2010-197 dated September 15, 2010 [Reference 4], FPL provided its response to NRC concerns over the current surveillance requirements for the existing filtration train and their applicability to the proposed compensatory filtration unit as well as to address NRC requests for additional language clarification in the proposed wording of specific action statements. In its response, FPL revised the proposed language in the indicated surveillance requirements and action statement.

Subsequent review of the proposed TS 3/4.7.5 changes resulted in additional concerns by the NRC staff that led to telephone conference calls on April 21, 2011 and May 3, 2011 between the NRC Project Manager, NRC staff from the Technical Specifications (ITSB) and Containment and Ventilation (SCVB) Branches, and FPL EPU project and corporate licensing staff. As a result of these calls, additional changes to the proposed TS 3/4.7.5 on Control Room Emergency Ventilation System (CREVS) were identified and hereby are provided in the Attachment to this letter.

In accordance with 10 CFR 50.91(b)(1), a copy of this letter is being forwarded to the State Designee of Florida.

This submittal does not alter the significant hazards consideration previously submitted by FPL letter L-2010-083 [Reference 2] nor does it alter the environmental assessment previously submitted by FPL letter L-2009-133 [Reference 1].

This submittal contains no new commitments and no revisions to existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Robert J. Tomonto, Licensing Manager, at (305) 246-7327.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 11, 2011.

Very truly yours,

R. J. Tomonto for M. Kiley

Michael Kiley
Site Vice President
Turkey Point Nuclear Plant

Attachment

cc: USNRC Regional Administrator, Region II
USNRC Project Manager, Turkey Point Nuclear Plant
USNRC Resident Inspector, Turkey Point Nuclear Plant
Mr. W. A. Passetti, Florida Department of Health

Attachment

Supplemental Response for AST LAR No. 196
and Proposed Changes to TS 3/4.7.5 CREVS

Response to Request for Additional Information

The following information is provided by Florida Power & Light (FPL) in response to the U. S. Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI). This information was requested to support License Amendment Request (LAR) 196, Alternative Source Term (AST) and Conforming Amendment, for Turkey Point Nuclear Plant (PTN) Units 3 and 4 that was submitted to the NRC by FPL via letter (L-2009-133) dated June 25, 2009 [Reference 1].

By letter L-2010-083 dated May 21, 2010 [Reference 2], FPL provided a response to NRC concerns over the current language in Technical Specification (TS) 3/4.7.5, Control Room Emergency Ventilation System (CREVS). In this response, FPL proposed TS changes consistent with the approach given in the Westinghouse Standard Technical Specifications (STS) as well as plant modifications intended to increase redundancy of key system components and functions, thereby increasing overall system reliability and availability. The response states that "The proposed plant modifications to the CREVS include installation of a compensatory filtration unit that may be manually placed into service in the event that the installed filter train becomes inoperable. The proposed location for the new filter unit is in the purge fan room adjacent to the southeast corner of the Control Room and will be designed as a safety-related, Seismic Class I backup to the installed system. This location is currently outside of the control room envelope and post maintenance testing will assure the leak tightness of the system. The new filtration unit design is currently planned to include a recirculation fan, charcoal and high efficiency particulate air filters and capable of being powered off of the swing bus from the EDGs."

By letter L-2010-131 dated June 23, 2010 [Reference 3], FPL retracted a proposed change to the methyl iodide penetration criteria in TS 4.7.5.c (2) that was included in the original AST LAR submittal [Reference 1] in response to a NRC comment made in the June 7, 2010 public meeting.

By letter L-2010-197 dated September 15, 2010 [Reference 4], FPL provided its response to NRC concerns over the current surveillance requirements for the existing filtration train and their applicability to the proposed compensatory filtration unit as well as to address NRC requests for additional clarification in the proposed wording of certain surveillance requirements and actions. In its response, FPL revised the proposed language in the surveillance requirements and actions.

Subsequent review of the proposed TS 3/4.7.5 changes resulted in additional concerns by the NRC staff that led to telephone conference calls on April 21, 2011 and May 3, 2011 between the NRC Project Manager, NRC staff from the Technical Specifications (ITSB) and Containment and Ventilation (SCVB) Branches, and FPL EPU project and corporate licensing staff. As a result of these calls, additional changes to the proposed TS 3/4.7.5 on Control Room Emergency Ventilation System (CREVS) were identified and are provided below.

TS Change

A revision to the proposed wording in LCO TS 3.7.5.b is provided to clarify that only two of the three condensing units are needed for operability. The last sentence in Actions a.3, a.4, and a.7 regarding their applicability when the mitigating actions of Action a.5 are implemented is deleted. The footnote at the end of the Actions is revised to require the system be placed in the recirculation mode for Actions a.7, a.8, and a.9 prior to movement of any irradiated fuel. This latter change is also now reflected in the TS Bases discussion. The changes to the TS LCO and Actions are shown below and in Figure 1 while the change in the TS Bases is shown in Figure 2.

TS 3.7.5 LCO & ACTIONS

Current

3.7.5 The Control Room Emergency Ventilation System shall be OPERABLE.

APPLICABILITY: All MODES.

ACTION:

MODES 1, 2, 3 and 4:

With the Control Room Emergency Ventilation System inoperable, suspend all movement of fuel in the spent fuel pool and restore the inoperable system to OPERABLE status within 84 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

Proposed

TS 3.7.5 (as previously submitted in L-2010-083 & revised in L-2010-131 & L-2010-197)

3.7.5 The Control Room Emergency Ventilation System shall be OPERABLE with

a. Three air handling units,
b. Two of three condensing units,
c. Two control room recirculation fans,
d. Two recirculation dampers,
e. One filter train,
f. Two isolation dampers in the normal outside air intake duct,
g. Two isolation dampers in the emergency outside air intake duct,
h. Two isolation dampers in the kitchen area exhaust duct, and
i. Two isolation dampers in the toilet area exhaust duct.

APPLICABILITY: All MODES.

ACTION:

a.1 With one air handling unit inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable air handling unit to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.2 With two condensing units inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore at least one of the inoperable condensing units to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.3 With one recirculation fan inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable fan to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. ~~If the mitigating actions of action a.5 are implemented, then this action does not apply.~~

a.4 With one recirculation damper inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or place and maintain at least one of the recirculation dampers in the open position and place the system in

recirculation mode** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. ~~If the mitigating actions of action a.5 are implemented, then this action does not apply.~~

a.5 With the filter train inoperable, e.g., an inoperable filter, and/or two inoperable recirculation fans, and/or two inoperable recirculation dampers, immediately suspend all movement of irradiated fuel and, immediately, initiate action to implement mitigating actions, and, within 24 hours, verify mitigating actions ensure control room occupant radiological exposures will not exceed limits and, within 7 days, restore the filter train to OPERABLE status.

With the above requirements not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.6 With an inoperable damper in the normal outside air intake, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or place and maintain at least one of the normal outside air intake isolation dampers in the closed position and place the system in recirculation mode** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.7 With an inoperable damper in the emergency outside air intake, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or place and maintain at least one of the emergency outside air intake isolation dampers in the open position** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. ~~If the mitigating actions of action a.5 are implemented, then this action does not apply.~~

a.8 With an isolation damper inoperable in the kitchen area exhaust duct, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or isolate the flow path** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.9 With an isolation damper inoperable in the toilet area exhaust duct, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or isolate the flow path** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

**If action is taken such that indefinite operation is permitted and the system is placed in recirculation mode, then movement of irradiated fuel may resume.

Justification

Clarification of the LCO and action statements made to address NRC concerns related to the applicability of selected action statements and to selected system operational alignments when moving irradiated fuel.

References

1. W. Jefferson (FPL) to U.S. Nuclear Regulatory Commission (L-2009-133), "License Amendment Request 196: Alternative Source Term and Conforming Amendment," Accession No. ML092050277, June 25, 2009.
2. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-083), "Supplement to License Amendment Request (LAR) 196 and 3/24/2010 Request for Additional Information (RAI) Regarding Alternative Source Term (AST)," Accession No. ML101450028, May 21, 2010
3. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-131), "Response to 5/28/2010 Request for Additional Information (RAI) Regarding "Alternative Source Term (AST) License Amendment Request (LAR) 196 (TAC Nos. ME1624 and ME1625), June 23, 2010.
4. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-197), "Response to Request for Additional Information (RAI) Regarding Alternative Source Term (AST) License Amendment Request (LAR) 196 and Proposed Changes to Technical Specification (TS) 3/4.7.5 on Control Room Emergency Ventilation System (CREVS) (TAC Nos. ME1624 and ME1625), September 15, 2010.

Figure 1 TS 3/4.7.5

PLANT SYSTEMS

3/4.7.5 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.5 The Control Room Emergency Ventilation System shall be OPERABLE. with Insert 1

APPLICABILITY: All MODES.

ACTION:

MODES 1, 2, 3 and 4:

~~With the Control Room Emergency Ventilation System inoperable, suspend all movement of fuel in the spent fuel pool and restore the inoperable system to OPERABLE status within 84 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.~~ Insert 2

MODES 5 and 6:

With the Control Room Emergency Ventilation System inoperable, suspend all operations involving CORE ALTERATIONS, movement of fuel in the spent fuel pool, or positive reactivity changes. This ACTION shall apply to both units simultaneously.

SURVEILLANCE REQUIREMENTS

4.7.5 The Control Room Emergency Ventilation System shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 120°F;

b. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes; ***

c. At least once per 18 months or (1) after 720 hours of system operation, or (2) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (3) following ~~operational~~ exposure of the filters to effluents from painting, fire, or chemical release in any ventilation zone communicating with the system, or (4) after complete or partial replacement of a filter bank by:

that may have an adverse effect on the functional capability of the system

Figure 1 TS 3/4.7.5 (continued)

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

1) Verifying that the air cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of greater than or equal to 99% DOP and halogenated hydrocarbon removal at a system flow rate of 1000 cfm ±10%.***

2) Verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, and analyzed per ASTM D3803 - 1989 AT 30°C and 95% relative humidity, meets the methyl iodide penetration criteria of less than 2.5% or the charcoal be replaced with charcoal that meets or exceeds the stated performance requirement; and ***

3) Verifying by a visual inspection the absence of foreign materials and gasket deterioration.***

d. At least once per 12 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of 1000 cfm ±10%.***

e. At least once per 18 months by verifying that on a Containment Phase "A" Isolation test signal the system automatically switches into the recirculation mode of operation.

f. At least once per 18 months by verifying operability of the kitchen and toilet area exhaust dampers.

***As the mitigating actions of TS 3.7.5 Action a.5 may include the use of the compensatory filtration unit, the unit shall meet the surveillance requirements of TS 4.7.5.b, by manual initiation from outside the control room and TS 4.7.5.c and d

Figure 1 TS 3/4.7.5 LCO

Insert 1

a. Three air handling units,

b. Two of three condensing units,

c. Two control room recirculation fans,

d. Two recirculation dampers,

e. One filter train,

f. Two isolation dampers in the normal outside air intake duct,

g. Two isolation dampers in the emergency outside air intake duct,

h. Two isolation dampers in the kitchen area exhaust duct, and

i. Two isolation dampers in the toilet area exhaust duct.

Insert 2

a.1 With one air handling unit inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable air handling unit to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.2 With two condensing units inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore at least one of the inoperable condensing units to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.3 With one recirculation fan inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable fan to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. ~~If the mitigating actions of action a.5 are implemented, then this action does not apply.~~

Figure 1 TS 3/4.7.5 LCO (continued)

a.4 With one recirculation damper inoperable, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or place and maintain at least one of the recirculation dampers in the open position and place the system in recirculation mode** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. ~~If the mitigating actions of action a.5 are implemented, then this action does not apply.~~

a.5 With the filter train inoperable, e.g., an inoperable filter, and/or two inoperable recirculation fans, and/or two inoperable recirculation dampers, immediately suspend all movement of irradiated fuel and, immediately, initiate action to implement mitigating actions, and, within 24 hours, verify mitigating actions ensure control room occupant radiological exposures will not exceed limits and, within 7 days, restore the filter train to OPERABLE status.

With the above requirements not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.6 With an inoperable damper in the normal outside air intake, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or place and maintain at least one of the normal outside air intake isolation dampers in the closed position and place the system in recirculation mode** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.7 With an inoperable damper in the emergency outside air intake, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or place and maintain at least one of the emergency outside air intake isolation dampers in the open position** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. ~~If the mitigating actions of action a.5 are implemented, then this action does not apply.~~

Figure 1 TS 3/4.7.5 LCO (continued)

a.8 With an isolation damper inoperable in the kitchen area exhaust duct, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or isolate the flow path** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

a.9 With an isolation damper inoperable in the toilet area exhaust duct, immediately suspend all movement of irradiated fuel and, within 7 days, restore the inoperable damper to OPERABLE status or isolate the flow path** or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. If this ACTION applies to both units simultaneously, be in HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours.

**If action is taken such that indefinite operation is permitted and the system is placed in recirculation mode, then movement of irradiated fuel may resume.

Figure 2 – TS 3/4.7.5 Bases (Information Only)

Procedure No.:	Procedure Title:	Page:
		100
0-ADM-536	Technical Specification Bases Control Program	Approval Date: 1/19/10

ATTACHMENT 1
(Page 89 of 112)

TECHNICAL SPECIFICATION BASES

3/4.7.5 (Cont'd)

~~The Control Room Emergency Ventilation System is considered to be OPERABLE (Ref. JPN-PTN-SENP-92-017) when 1) Three air handling units (AHUs) (one of each of the three air conditioning units) are operable, 2) Two condensing units (two out of three available condensers) are operable, 3) One recirculation filter unit is operable, 4) Two recirculation fans operable, and 5) Associated dampers are operable. The reason three AHUs are required is that in the event of a single failure, only two AHUs would be available to supply air to the suction of the recirculation filter and fan. This is the configuration tested to support Technical Specification operability for flow through the emergency charcoal filter. Taking one AHU out of service renders the system incapable of operating in accordance with the tested configuration assuming an accident and a single failure (i.e., only one air handling unit available instead of the two assumed by the analysis). Any one of the three condensing (air conditioning) units is capable of maintaining the control room equipment within its environmental limits for temperature and humidity. Thus, one condensing unit can be taken out of service without impacting the ability of the Control Room Emergency Ventilation System to accomplish its intended function under single failure conditions.~~ Add Insert 1 next page

System components are not subject to rapid deterioration, having lifetimes of many years, even under continuous flow conditions. Visual inspection and operating tests provide assurance of system reliability and will ensure early detection of conditions which could cause the system to fail or operate improperly. The filters performance tests prove that filters have been properly installed, that no deterioration or damage has occurred, and that all components and subsystems operate properly. The in-situ tests are performed in accordance with the methodology and intent of ANSI N510 (1975) and provide assurance that filter performance has not deteriorated below returned specification values due to aging, contamination, or other effects. Charcoal samples are tested using ASTM D3803-1989 in accordance with Generic Letter 99-02. The test conditions (30°C and 95% relative humidity) are as specified in the Generic Letter. Table 1 of the ASTM standard provides the tolerances that must be met during the test for each test parameter. The specified methyl iodide penetration value is based on the assumptions used in the LOCA Analysis.

3/4.7.6 Snubbers

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to each safety-related system during an earthquake or severe transient. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

W2003:DPS/ln/cls/cls

Figure 2 TS 3/4.7.5 Bases (Information Only) (continued)

Insert 1

The Control Room Emergency Ventilation System (CREVS) is considered to be OPERABLE (Ref: JPN_PTN_SENP-92-017) when 1) Three air handling units (AHUs) (three out of three) are operable, 2) Two condensing (air conditioning (A/C)) units (two out of three) are operable, 3) Two recirculation fans are operable, 4) Two recirculation dampers are operable, 5) One recirculation filter unit is operable, 6) Two normal outside air intake dampers are operable, 7) Two emergency outside air intake dampers are operable, 8) Two isolation dampers (one motor-operated damper and one gravity backdraft damper) in the kitchen area exhaust duct are operable, and 9) Two isolation dampers (one motor-operated damper and one gravity backdraft damper) in the toilet area exhaust duct are operable. The reason three AHUs are required is that in the event of a single failure, only two AHUs would be available to supply air to the suction of the recirculation filter and fan. This is the configuration tested to support Technical Specification operability for flow through the emergency charcoal filter unit. Taking one AHU out of service renders the system incapable of operating in accordance with the tested configuration assuming an accident and a single failure, i.e., only one air handling unit available instead of the two assumed in the analysis. Any one of the three condensing (A/C) units is capable of maintaining control room equipment within environmental limits for temperature and humidity. Thus, one condensing unit can be taken out of service without impacting the ability of CREVS to accomplish its intended function under single failure conditions.

The LCO actions allow inoperability of the redundant active CREVS components (one AHU, two condensing units, one recirculation fan, one recirculation damper, one normal outside air intake damper, and/or one emergency outside air intake damper) for a period of up to 7 days consistent with the approach provided in the Westinghouse Standard Technical Specifications and based on the low probability of occurrence of a Design Basis Accident (DBA) challenging the Control Room Habitability during this time period and the continued capability of the remaining operable system components to perform the required CREVS safety function. When the motor-operated isolation damper in a kitchen or toilet area exhaust duct becomes inoperable, the damper is required to be restored to operability within 7 days or a damper in the flow path be closed (either the motor-operated damper or its associated manual isolation damper) until it can be restored to operability. This 7 day AOT is predicated on continued operability of its associated gravity backdraft damper.

When one damper in the normal outside air intake is inoperable, it can either be restored within 7 days or one of the two in-series dampers closed and CREVS run in recirculation mode. When one recirculation damper is inoperable, it can either be restored or one of the two paralleled dampers opened and the CREVS run in recirculation mode. With one or both emergency outside air intake dampers inoperable, they can either be restored or opened without adversely impacting the normal or emergency mode of operation. (See TSA 03-03-025-024 for evaluation). The placement of the dampers in their "fail-safe" position in lieu of restoration is allowed as the dampers fail "as-is" in the event of loss of offsite power (except for the emergency outside air intake dampers which go to their emergency "open" position) and are in their emergency mode position in the event of receipt of an emergency actuation signal.

Figure 2 TS 3/4.7.5 Bases (Information Only) (continued)

As indicated in LCO footnote, if an action is taken such that indefinite operation is permitted (a.4, a.6, a.7, a.8, a.9) and the system is placed in recirculation mode, then movement of irradiated fuel is allowed. Although still technically in the Action due to component inoperability, system configuration, as modified, satisfies the design requirement to support system emergency operation with ability to withstand a single active failure.

When the filter train is inoperable, e.g., the filter is inoperable, and/or two recirculation fans are inoperable, and/or two recirculation dampers are inoperable, all movement of fuel in the spent fuel pool is required to be immediately suspended and mitigating actions, e.g., use of compensatory filtration unit, are required to be immediately initiated, and, within 24 hours, the mitigating actions are required to be verified to be in place to ensure the control room occupant radiological exposures will not exceed limits, e.g., the compensatory filtration unit is placed into service, and, within 7 days, the inoperable filter train is required to be restored to OPERABLE status. The 24 hour allowance is reasonable based on the low probability of a DBA occurring during this time period, and the use of mitigating actions, i.e., compensatory filtration unit. The 7 day AOT is reasonable based on the determination that the mitigating actions will ensure protection of Control Room occupants within analyzed limits. In addition, the 7 day AOT is a reasonable time to diagnose, plan, repair, and test most problems with the inoperable filter train.

The compensatory filtration unit is designed as a manual, safety-related, Seismic Class I backup to the installed system with the same functional and operational capabilities as the installed filter train. In addition, the unit is surveillance tested in accordance with the same requirements as those imposed on the installed filter train per TS 4.7.5.b, c, and d except that the requirements of TS 4.0.1 – 4.0.4 do not apply to the compensatory unit as it is not included in CREVS LCO.

Regarding exposure of the filters to effluents that may have an adverse effect on the functional capability of the system, painting, fire, or chemical releases are considered "not communicating" with the HEPA filter or adsorber if the system is not in operation, the isolation dampers for the system are closed, and there is no pressure differential across the filter housing. This provides reasonable assurance that air is not passing through the filters and adsorbers.

In addition, the CREVS includes the emergency outside air intakes, located beyond the southeast and northeast corners of the Auxiliary Building. The CREVS emergency outside air intakes are considered OPERABLE when: 1) both flow paths are available, 2) have balanced intake flow rates and 3) a flow path capable of drawing outside makeup air from only the analyzed intake locations. The alternative source term radiological analyses assume both emergency outside air intake flow paths are available with parallel dampers ensuring outside makeup air can be drawn through both intake locations during a design basis accident and a single active failure. These analyses rely on a provision in Regulatory Guide 1.194 Section 3.3.2 that allows a reduction in the atmospheric dispersion factors (X/Qs) for dual intake arrangements with balanced flow rates to one half of the more limiting X/Q value provided the two intakes are not within the same wind direction window for each release / receptor location. Accordingly, any maintenance on the emergency outside intake dampers or associated duct work that would prevent the CREVS from accomplishing these functions would require entering action statement a.7. The provisions of LCO 3.0.6 apply to the surveillance testing required to demonstrate operability of the emergency intake flow paths.