Entergy

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Michael A. Balduzzi
Site Vice President

May 24, 2005

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

SUBJECT: Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
Docket No. 50-293
License No. DPR-35

Technical Specifications Amendment Request to Revise Primary Containment Oxygen Concentration and Drywell-to-Suppression Chamber Differential Pressure Applicability Requirements

LETTER NUMBER: 2.05.008

Dear Sir or Madam:

Pursuant to 10CFR50.90, Entergy Nuclear Operations Inc. (Entergy) hereby proposes to amend its Facility Operating License, DPR-35. The proposed changes would revise the Operating License Technical Specifications (TS) applicability requirements related to primary containment oxygen concentration and drywell-to-suppression chamber differential pressure limits. The associated required actions are also revised to be consistent with exiting the applicability for each specification.

These applicability changes result in consistency with Standard Technical Specifications (NUREG-1433, Revision 3) and changes previously approved by the NRC for other boiling water reactors. Entergy has reviewed the proposed amendment in accordance with 10CFR50.92 and concludes it does not involve a significant hazards consideration.

Entergy requests approval of the proposed amendment by June 1, 2006. Once approved, the amendment shall be implemented within 60 days.

There are no commitments contained in this letter.

If you have any questions or require additional information, please contact Bryan Ford at (508) 830-8403.

A001

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 24th day of May, 2005.

Sincerely,

FOR MAB

Michael A. Balduzzi

Enclosure: Evaluation of the proposed change – 8 pages

Attachment: 1. Proposed Technical Specification Changes (mark-up) – 7 pages

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ENCLOSURE

EVALUATION OF THE PROPOSED CHANGE

ENCLOSURE

Evaluation of the Proposed Change

Subject: Technical Specifications Amendment Request to Revise Primary Containment Oxygen Concentration and Drywell-to-Suppression Chamber Differential Pressure Applicability Requirements

1. Description

Entergy Nuclear Operations, Inc. (Entergy) is requesting to amend Operating License DPR-35 for Pilgrim Nuclear Power Station (PNPS). The proposed changes would revise the Operating License Technical Specifications (TS) applicability requirements related to primary containment oxygen concentration and drywell-to-suppression chamber differential pressure limits. The associated required actions are also revised to be consistent with exiting the applicability for each specification. Current requirements present inconsistent intent by stating differing conditions for the requirement and for conditions to be met if the limits are not restored.

These applicability changes result in consistency with Standard Technical Specifications (NUREG-1433, Revision 3) and changes previously approved by the NRC for other boiling water reactors.

2. Proposed Changes

2.1 The following administrative reorganization is made (detailed technical changes to these TS are described separately):

- TS 3.7.A.1.i, j, k, l, and 4.7.A.1.f are revised to show "Deleted" and new 3/4.7.A.8 on page 3/4.7-10 is created for drywell-to-suppression chamber differential pressure requirements.

- TS 3.7.A.6 is renumbered (and appropriately relocated) as 3.7.A.5, and its reference to 3.7.A.5 is revised to 3.7.A.4. TS 3/4.7.A.5, "Oxygen Concentration," is renumbered (and appropriately relocated) as 3/4.7.A.6.

2.2 Combine existing 3.7.A.1.i and j into proposed 3.7.A.8.a for the drywell-to-suppression chamber differential pressure limit and applicability. In editorially restating the applicability as part of the requirement, also revise the applicability to reference "15% rated thermal power" as follows:

a. The existing "24 hours of placing the reactor in the run mode following a shutdown" is revised to the 3.7.A.8.a "RUN MODE" applicability and subpart stating, "24 hours after thermal power is greater than 15% rated thermal power following a startup."

b. The existing "24 hours prior to a scheduled shutdown" is revised to the 3.7.A.8.a "RUN MODE" applicability and subpart stating, "24 hours prior to reducing thermal power to less than 15% rated thermal power prior to the next scheduled shutdown."

Additionally, the existing 3.7.A.1.l (proposed 3.7.A.8.c) action for not maintaining the required differential pressure is revised from a 6-hour restoration and 24-hour requirement to be in cold shutdown (i.e., total 30 hour period), to an 8-hour restoration and 12-hour requirement to exit the applicability by reducing power to less than 15% rated thermal power (i.e., total 20 hour period).

2.3 Combine existing 3.7.A.5.a and b into proposed 3.7.A.6.a for the primary containment oxygen limit and applicability. In editorially restating the applicability as part of the requirement, also revise the applicability to reference "RUN MODE" and "15% rated thermal power" as follows:

a. The existing 3.7.A.5.a "during reactor power operation with reactor coolant pressure above 100 psig" is deleted.

b. The existing 3.7.A.5.b allowed period without requiring the oxygen concentration to be met is revised from "24 hours period subsequent to placing the reactor in the Run mode following a shutdown" to the 3.7.A.6.a "RUN MODE" applicability and subpart stating, "24 hours after thermal power is greater than 15% rated thermal power following a startup."

c. The existing 3.7.A.5.b "deinerting may commence 24 hours prior to a shutdown" is revised to the 3.7.A.6.a "RUN MODE" applicability and subpart stating, "24 hours prior to reducing thermal power to less than 15% rated thermal power prior to the next scheduled shutdown."

Additionally, if the required oxygen concentration is not maintained the current "default action" is the existing 3.7.A.6 i.e., a 24-hour requirement to be in cold shutdown. A new separate default action, proposed 3.7.A.6.b revises the requirement to allowing a 24-hour restoration and 8-hour requirement to exit the applicability by reducing power to less than 15% rated thermal power.

3. Background

3.1 The PNPS primary containment consists of a drywell and connected pressure suppression chamber. Large vent pipes connect the drywell and the pressure suppression chamber. A total of eight circular vent pipes are provided, each having a diameter of 6.75 ft. The drywell vents are connected to a 4 ft 9 in diameter vent header in the form of a torus, which is contained within the airspace of the suppression chamber. Projecting downward from the header are 96 downcomer pipes, each 24 inches in diameter, terminating approximately 3 ft to 3 ft 5 in below the water surface of the pool.

Vent pipes and vent headers are braced to withstand expected loads from steam blowdown into the pool. Additionally, the Boiling Water Reactor (BWR) Mark I Containment Long Term Program testing showed that maintaining a drywell to suppression chamber pressure differential to keep the suppression chamber downcomer legs clear of water significantly reduced suppression chamber post design basis loss of coolant accident (LOCA) hydrodynamic loads. The effect of this pressure differential and reduced downcomer water leg permits the downcomers to clear earlier in the LOCA with resultant drywell pressure consequently lower. It also reduces both the downward and upward pressure loads on the containment.

3.2 The relatively small PNPS containment volume and the large amount of zirconium in the core are such that the occurrence of a very limited (a percent or so) reaction of the zirconium and steam during a loss-of-coolant accident could lead to the liberation of hydrogen. If combined with an air atmosphere, this hydrogen could result in a flammable concentration in the containment. If a sufficient amount of hydrogen is generated and oxygen is available in stoichiometric quantities, the potential ignition of the hydrogen could lead to failure of the containment to maintain its assumed low leakage integrity.

Following the postulated design basis LOCA combined with degraded emergency core cooling system (ECCS) function, hydrogen may be produced by the postulated metal-water (zirconium-water) reaction. Hydrogen and oxygen may be produced by radiolysis of reactor coolant. Radiolysis of water is the only source of oxygen in the PNPS inerted containment. Under design basis accident conditions, oxygen would be produced in much more limited quantities than hydrogen and is therefore chosen as the parameter to control. PNPS maintains a limit of 4% oxygen concentration, which minimizes the possibility of hydrogen combustion following a loss-of-coolant accident.

Furthermore, the Emergency Operating Procedures and support procedures contain specific instructions for maintaining the concentrations of both hydrogen and oxygen below their respective thresholds for combustibility. The procedures are structured to effect containment purging with nitrogen and/or venting as the control method for reducing combustible gas concentrations inside containment. Containment oxygen concentration in excess of 5% in the presence of detectable hydrogen i.e., ≥ 1%, is not credible for design basis accidents and is considered beyond PNPS design basis.

10CFR50.44(b)(2)(i) requires an inerted atmosphere for the PNPS containment. The containment is provided with an inerted atmosphere to preclude the possibility of a hydrogen combustion event within the containment. The oxygen deficient atmosphere assures that hydrogen build-up due to metal-water reaction would not be a concern. During periods when the containment is deinerted (i.e., oxygen is present at greater than 4% by volume), containment integrity post-LOCA is ensured by monitoring the containment for hydrogen. Should hydrogen levels rise when deinerted, purging with air (dilution) or nitrogen can be used to maintain containment atmosphere hydrogen gas accumulation below stoichiometric proportions. In addition to operating with the primary containment atmosphere inerted with nitrogen, PNPS also maintains a safety grade purge/repressurization system in conformance with the general requirements of Criteria 41, 42, and 43 of Appendix A of 10CFR50.

4. Technical Analysis

4.1 Administrative reorganization of the drywell-to-suppression chamber differential pressure and the primary containment oxygen concentration limits is made to facilitate use and application by the operator. Since each of these requirements is proposed with unique "default actions" (i.e., actions applied when compliance is not achieved in the required time), which are discussed separately, segregation from the "default action" of existing 3.7.A.6 is warranted. This administrative change is a presentation preference to facilitate proper application and has no adverse impact.

4.2 Drywell-to-suppression chamber differential pressure

The existing TS 3.7.A.1.j defines when the drywell-to-suppression chamber differential pressure limit must be met (i.e., the applicability). The first portion ("24 hours of placing the reactor in the run mode following a shutdown") is revised as the new 3.7.A.8.a "RUN MODE" applicability and subpart stating, "24 hours after thermal power is greater than 15% rated thermal power following a startup." Note that "following a startup" rather than the existing "following a shutdown" reflects an editorial preference consistent with NUREG-1433 wording with no change in intent. The second portion ("24 hours prior to a scheduled shutdown") is revised as the new 3.7.A.8.a "RUN MODE" applicability and subpart stating, "24 hours prior to reducing thermal power to less than 15% rated thermal power prior to the next scheduled shutdown." This relaxes the initiation of the 24-hour period such that it commences at 15% rated thermal power starting up or shutting down, as applicable, rather than the currently required point of entering or exiting the Run Mode, which is typically closer to 10% rated thermal power.

The existing applicability is associated with reactor mode switch movement into or out of "Run." The average power range monitor (APRM) scram function setpoint is varied based on the reactor mode switch being in or out of "Run." When not in "Run," TS Table 3.1.1 requires a scram setting of ≤ 15% power. Since this reactor power level reflects the upper-most bound on the existing applicability 24-hour timing, utilizing this power level as the proposed applicability limit does not result in any significant technical change. However, since the actual APRM trip setting is conservative with respect to this 15% power limit, operations typically do not exceed

10% rated thermal power prior to placing the reactor mode switch in "Run," which also restricts the above described activities to these lower power levels. Specifying the applicability based on power level versus the reactor mode switch position will allow operators to place the reactor mode switch in the run position sooner during startups. This will reduce the probability of spurious startup neutron monitoring instrumentation scrams and allow additional time for plant personnel to perform the necessary maintenance, inspection and testing activities in the primary containment. As such, this change will also indirectly allow an increase in overall plant reliability and capacity factor.

The minimal increase in allowed power level prior to requiring that the drywell-to-suppression chamber differential pressure limit be met provides additional operational flexibility, which is also chosen to be consistent with applicability requirements for primary containment oxygen concentration. During startup and shutdown periods various maintenance, inspection and testing activities (e.g., main steam isolation valve (MSIV) testing, MSIV limit switch adjustments, motor-operated valve testing, and inservice leak and hydrostatic test inspections, and repair) require access to the primary containment. For personnel protection and efficiency in timely completion of these activities, a de-inerted atmosphere is desirable. The process of inerting and deinerting involves nearly continuous feeding and bleeding of the primary containment and suppression pool atmospheres to reduce oxygen concentration with nitrogen addition. This precludes the ability to maintain the drywell-to-suppression pool differential pressure.

Additionally, the existing default action (3.7.A.1.l) for failure to establish or re-establish the required drywell-to-suppression chamber differential pressure is inconsistent with the existing required applicability for when the differential pressure is required to be maintained. Per the applicability, maintaining the differential pressure is not required during a shutdown once out of the Run Mode. However, existing 3.7.A.1.l requires restoring the required differential pressure or initiating a reactor shutdown with the reactor required to be in cold shutdown in 24 hours. The proposed change corrects this inconsistency by revising the default action (proposed 3.7.A.8.c) to reflect exiting the applicability. This change eliminates potential confusion and enhances the use and application of the TS for the operator.

The allowed time to restore the differential pressure prior to completing the shutdown action is currently a total of 30 hours per the existing TS 3.7.A.1.l (i.e., a 6-hour restoration time followed by a 24-hour requirement to complete shutdown to cold shutdown). The proposed TS 3.7.A.8.c revises the allowances to an 8-hour restoration time followed by a requirement to reduce power to less than 15% rated thermal power within the next 12 hours – for a total of 20 hours. The total allowed time is reduced in conjunction with limiting the shutdown to less than 15% rated thermal power as described above. These changes do not reflect any significant adverse impact to the overall risk of operating during brief periods without the required differential pressure since the total time for any occurrence is reduced in conjunction with clarifying the shutdown requirements to be consistent with the applicability. This more restrictive total time will not impose an undue burden on the operating staff or result in a significant increased likelihood of an unnecessary plant shutdown transient. Therefore, there is no adverse impact to the public health and safety as a result of this change.

Additionally, the proposed changes to the drywell-to-suppression chamber differential pressure applicability and default actions are consistent with NUREG-1433 (Reference 1) and with TS requirements that have been approved by the staff for other plants (Reference 2).

4.3 Primary containment oxygen concentration

The existing TS 3.7.A.5.a and b define when the primary containment oxygen concentration limit must be met; however, these two applicability statements are not consistent. TS 3.7.A.5.a states that the requirement applies "during reactor power operation above 100 psig" (i.e., "Startup" or "Run" above 1% rated thermal power and above 100 psig), except as specified in 3.7.A.5.b. Existing 3.7.A.5.b states that the requirement applies in conditions similar to the drywell-to-suppression chamber differential pressure requirements: "24 hour period subsequent to placing the reactor in the Run mode following a shutdown" and "deinerting may commence 24 hours prior to a shutdown" (note that the latter "prior to a shutdown" is not specific as to commencing or completing or whether intended to also be associated with Run mode transition).

The first portion ("24 hour period subsequent to placing the reactor in the Run mode following a shutdown") is revised as the new 3.7.A.6.a "RUN MODE" applicability and subpart stating, "24 hours after thermal power is greater than 15% rated thermal power following a startup." (Note that "following a startup" rather than the existing "following a shutdown" reflects an editorial preference consistent with NUREG-1433 wording with no change in intent.) The second portion ("deinerting may commence 24 hours prior to a shutdown") is revised as the new 3.7.A.6.a "RUN MODE" applicability and subpart stating, "24 hours prior to reducing thermal power to less than 15% rated thermal power prior to the next scheduled shutdown." This relaxes the initiation of the 24-hour period such that it commences at 15% rated thermal power starting up or shutting down, as applicable, rather than initiating the 24-hour period at the currently required point of entering the Run Mode (which is typically closer to 10% rated thermal power) or a reactor shutdown.

The existing applicability is associated with reactor mode switch movement into "Run" or commencing shutdown activities with the intent to exit the Run mode. The average power range monitor (APRM) scram function setpoint is varied based on the reactor mode switch being in or out of "Run." When not in "Run," TS Table 3.1.1 requires a scram setting of $\leq$ 15% power. Since this reactor power level reflects the upper-most bound on the existing startup applicability 24-hour timing, utilizing this power level as the proposed applicability limit does not result in any significant technical change. However, since the actual APRM trip settings is conservative with respect to this 15% power limit, operations typically do not exceed 10% rated thermal power prior to placing the reactor mode switch in "Run," which also restricts the above described activities to these lower power levels. Specifying the applicability based on power level versus the reactor mode switch position, will allow operators to place the reactor mode switch in the Run position sooner during startups. This will reduce the probability of spurious startup neutron monitoring instrumentation scrams and allow additional time for plant personnel to perform the necessary maintenance, inspection and testing activities in the primary containment. As such, this change will also indirectly allow an increase overall plant reliability and capacity factor.

The minimal increase in allowed power level prior to requiring that the primary containment oxygen concentration limit be met provides additional operational flexibility, which is chosen to be consistent with applicability requirements for primary containment oxygen concentration in the Improved Standard TS, NUREG-1433. During startup and shutdown periods various maintenance, inspection and testing activities (e.g., main steam isolation valve (MSIV) testing, MSIV limit switch adjustments, motor-operated valve testing, and inservice leak and hydrostatic test inspections, and repair) require access to the primary containment. For personnel protection and efficiency in timely completion of these activities, a de-inerted atmosphere is desirable.

Additionally, the existing default action (3.7.A.6) for failure to establish or re-establish the required primary containment oxygen concentration is inconsistent with the existing required applicability for when the primary containment oxygen concentration limit is required to be maintained. Per the applicability, maintaining the primary containment oxygen concentration limit is not required within 24 hours of a shutdown. However, existing 3.7.A.6 applies and requires initiating a reactor shutdown with the reactor required to be in cold shutdown in 24 hours. The proposed change corrects this inconsistency by providing a specific primary containment oxygen concentration default action (proposed 3.7.A.6.b) to reflect exiting the applicability. This change eliminates potential confusion and enhances the use and application of the TS for the operator.

Currently, there is no allowed time to restore the primary containment oxygen concentration limit prior to entering the default shutdown action, which provides 24 hours to complete the shutdown to cold shutdown. The proposed TS 3.7.A.6.b revises the allowances to a 24-hour restoration time followed by a requirement to reduce power to less than 15% rated thermal power within the next 8 hours – for a total of 32 hours. These changes do not reflect any significant adverse impact to the overall risk of operating during brief periods without the required primary containment oxygen concentration since the total time for any occurrence is only marginally extended and reflects times recommended by NUREG-1433. Therefore, there is no adverse impact to the public health and safety as a result of this change.

Each of these proposed changes to the primary containment oxygen concentration applicability and default actions are consistent with NUREG-1433 (Reference 1) and with TS requirements that have been approved by the staff for other plants (Reference 2).

5. Regulatory Safety Analysis

5.1 No Significant Hazards Consideration

Entergy Nuclear Operations, Inc. (Entergy) is proposing to modify the Pilgrim Technical Specifications (TS) applicability requirements related to primary containment oxygen concentration and drywell-to-suppression chamber differential pressure limits. The associated required actions are also revised to be consistent with exiting the applicability for each specification.

Entergy has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No. The proposed applicability and associated default actions being revised do not involve the modification of any plant equipment or affect basic plant operation. Additionally, the associated limitations are not assumed to be an initiator of any analyzed event. Therefore, the proposed change does not involve a significant increase in the probability of an accident previously evaluated.

   The limits imposed by the associated specifications remain unchanged. The consequences of analyzed events are therefore not affected. Brief periods where the requirements for maintaining these limits are relaxed are currently

considered in the TS and associated licensing basis. The proposed change clarifies and modifies the definition of these periods, however, any changes are not considered significant and are supported by remaining consistent with the recommended allowances of NUREG-1433, Rev. 3, "Standard Technical Specifications, General Electric Plants, BWR/4." Therefore, the proposed change does not involve a significant increase in the consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No. The proposed change does not involve any physical alteration of plant equipment and does not change the method by which any safety-related system performs its function. As such, no new or different types of equipment will be installed, and the basic operation of installed equipment is unchanged. The methods governing plant operation and testing remain consistent with current safety analysis assumptions. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No. The proposed applicability and associated default actions being revised do not involve the modification of any plant equipment or affect basic plant operation. Additionally, the associated limitations remain unchanged. These changes do not negate any existing requirement, and do not adversely affect existing plant safety margins or the reliability of the equipment assumed to operate in the safety analysis. As such, there are no changes being made to safety analysis assumptions, safety limits or safety system settings that would adversely affect plant safety as a result of the proposed change. The revised plant conditions reflecting the applicability and the duration allowed to restore limits are not credited in any design basis event. These changes do not reflect any significant adverse impact to the overall risk of operating during brief periods without the required primary containment oxygen concentration since the total time for any occurrence is only marginally extended and reflects times recommended by NUREG-1433. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Pilgrim concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Environmental Consideration

A review has determined that the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need to be prepared in connection with the proposed amendment.

6. Precedents

The NRC has approved similar changes to the applicability and default actions for the primary containment oxygen concentrations and for the drywell-to-suppression chamber differential pressure in Reference 2.

7. References

1. NUREG-1433, Rev. 3, "Standard Technical Specifications, General Electric Plants, BWR/4"

2. James A. FitzPatrick Nuclear Power Plant Amendment No. 221 dated December 28, 1994

ATTACHMENT 1

PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.7 CONTAINMENT SYSTEMS (Cont)	4.7 CONTAINMENT SYSTEMS (Cont)
A. Primary Containment (Cont)	A. Primary Containment (Cont)
e. In order to continue reactor power operation, the suppression chamber pool bulk temperature must be reduced to ≤80°F within 24 hours.	d. Whenever there is indication of relief valve operation with the local temperature of the suppression pool T-quencher reaching 200°F or more, an external visual examination of the suppression chamber shall be conducted before resuming power operation.
f. If the suppression pool bulk temperature exceeds the limits of Specification 3.7.A.1.d, RCIC, HPCI or ADS testing shall be terminated and suppression pool cooling shall be initiated.	e. A visual inspection of the suppression chamber interior, including water line regions, shall be made at each major refueling outage. (Deleted)
g. If the suppression pool bulk temperature during reactor power operation exceeds 110°F, the reactor shall be scrammed.	f. The pressure differential between the drywell and suppression chamber shall be recorded at least once each shift when the differential pressure is required.
h. During reactor isolation conditions, the reactor pressure vessel shall be depressurized to less than 200 psig at normal cool down rates if the pool bulk temperature reaches 120°F.	g. Suppression chamber water level shall be recorded at least once each shift when the differential pressure is required.
i. Differential pressure between the drywell and suppression chamber shall be maintained at equal to or greater than 1.17 psid, except as specified in ~~j and k~~ 3.7.A.8.b and c.	
j. ~~The differential pressure shall be established within 24 hours of placing the reactor in the run mode following a shutdown. The differential pressure may be reduced to less than 1.17 psid 24 hours prior to a scheduled shutdown.~~	

(Deleted)

3.7.A.8.a

INSERT 1

4.7.A.8.g

MOVE TO NEW 3/4 7.A.8 on page 3/4.7-10

INSERT 1 [page 3/4.7-2]

... while in RUN MODE during the time period:

i. From 24 hours after thermal power is greater than 15% rated thermal power following startup, to

ii. 24 hours prior to reducing thermal power to less than 15% rated thermal power prior to the next scheduled shutdown,

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.7 CONTAINMENT SYSTEMS (CONT)	4.7 CONTAINMENT SYSTEMS (Cont)

A. Primary Containment (Cont)

k. The differential pressure may be reduced to less than 1.17 psid for a maximum of ~~four~~ (4) hours for maintenance activities on the differential pressure control system and during required operability testing of the HPCI system, the relief valves, the RCIC system and the drywell-suppression chamber vacuum breakers.

(Deleted)

3.7.A.8.b

3.7.A.8.a and b

MOVE TO NEW 3/4 7.A.8 on page 3/4.7-10

l. If the specifications of ~~Item k.~~ above, cannot be met, and the differential pressure cannot be restored within the subsequent (8) hour period, ~~an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition in twenty-four (24) hours.~~

8

3.7.A.8.c

INSERT 2

m. Suppression chamber water level shall be between -6 to -1 inches on torus level instrument which corresponds to a downcomer submergence of 3 feet to 3 feet 5 inches.

n. The suppression chamber can be drained if the conditions as specified in Section 3.5.F.5 of this Technical Specification are adhered to.

INSERT 2 [page 3/4.7-3]

... reactor thermal power shall be less than 15% rated thermal power within the next 12 hours.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.7 CONTAINMENT SYSTEMS (Cont)	4.7 CONTAINMENT SYSTEMS (Cont)
A. Primary Containment (Cont)	A. Primary Containment (Cont)
d. If a failure of one of the two installed position alarm systems occurs for one or more vacuum breakers, reactor operation may continue provided that a differential pressure decay rate test is initiated immediately and performed every 15 days thereafter until the failure is corrected. The test shall meet the requirements of Specification 3.7.A.4.b.	
6 8. Oxygen Concentration	6 8. Oxygen Concentration
a. The primary containment atmosphere shall be reduced to less than 4% oxygen by volume with nitrogen gas ~~during reactor power operation with reactor coolant pressure above 100 psig~~, except as specified in 3.7.A.8.b.	The primary containment oxygen concentration shall be measured and recorded at least twice weekly.
INSERT 3	
6 b. ~~Within the 24-hour period subsequent to placing the reactor in the Run mode following a shutdown, the containment atmosphere oxygen concentration shall be reduced to less than 4% by volume and maintained in this condition. De-inerting may commence 24 hours prior to a shutdown.~~	
INSERT 4	
5 6. If the specifications of 4 3.7.A.1 thru 3.7.A.5 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in Cold Shutdown condition within 24 hours.	

INSERT 3 [page 3/4.7-9]

... while in RUN MODE during the time period:

i. From 24 hours after thermal power is greater than 15% rated thermal power following startup, to

ii. 24 hours prior to reducing thermal power to less than 15% rated thermal power prior to the next scheduled shutdown,

INSERT 4 [page 3/4.7-9]

If the specifications of 3.7.A.6.a above cannot be met, and the primary containment oxygen concentration cannot be restored to less than 4% oxygen by volume within the subsequent 24 hour period, reactor thermal power shall be less than 15% rated thermal power within the next 8 hours.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.7 CONTAINMENT SYSTEMS (Cont)	4.7 CONTAINMENT SYSTEMS (Cont)
A. Primary Containment (Cont)	A. Primary Containment (Cont)
7. Containment Atmosphere Dilution	7. Containment Atmosphere Dilution
a. Within the 24-hour period after placing the reactor in the Run Mode the Post - LOCA Containment Atmosphere Dilution System must be operable and capable of supplying nitrogen to the containment for atmosphere dilution. If this specification cannot be met, the system must be restored to an operable condition within 30 days or the reactor must be at least in Hot Shutdown within 12 hours.	a. The post-LOCA containment atmosphere dilution system shall be functionally tested once per operating cycle.
b. Within the 24-hour period after placing the reactor in the Run Mode, the Nitrogen Storage Tank shall contain a minimum of 1500 gallons of liquid N_2. If this specification cannot be met the minimum volume will be restored within 30 days or the reactor must be in at least Hot Shutdown within 12 hours.	b. The level in the liquid N_2 storage tank shall be recorded weekly.
	c. Not used.
	d. Once per month each manual or power operated valve in the CAD system flow path not locked, sealed or otherwise secured in position shall be observed and recorded to be in its correct position.
8. Drywell and Suppression Chamber Differential Pressure	8. Drywell and Suppression Chamber Differential Pressure
a. [INSERT FROM PAGE 3/4 7-2]	a. [INSERT FROM PAGE 3/4.7-2]
b. [INSERT FROM PAGE 3/4 7-3]	
c.	