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 RECIP. NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Forwards amend to licenses NPF-41, NPF-51 & NPF-74,
 respectively, consisting of proposed change, revising TS 3.2.1
 "LHR," & TS 3.2.4, "DNBR Margin," increasing ACTION from 1 h
 to 4 h for COLSS.

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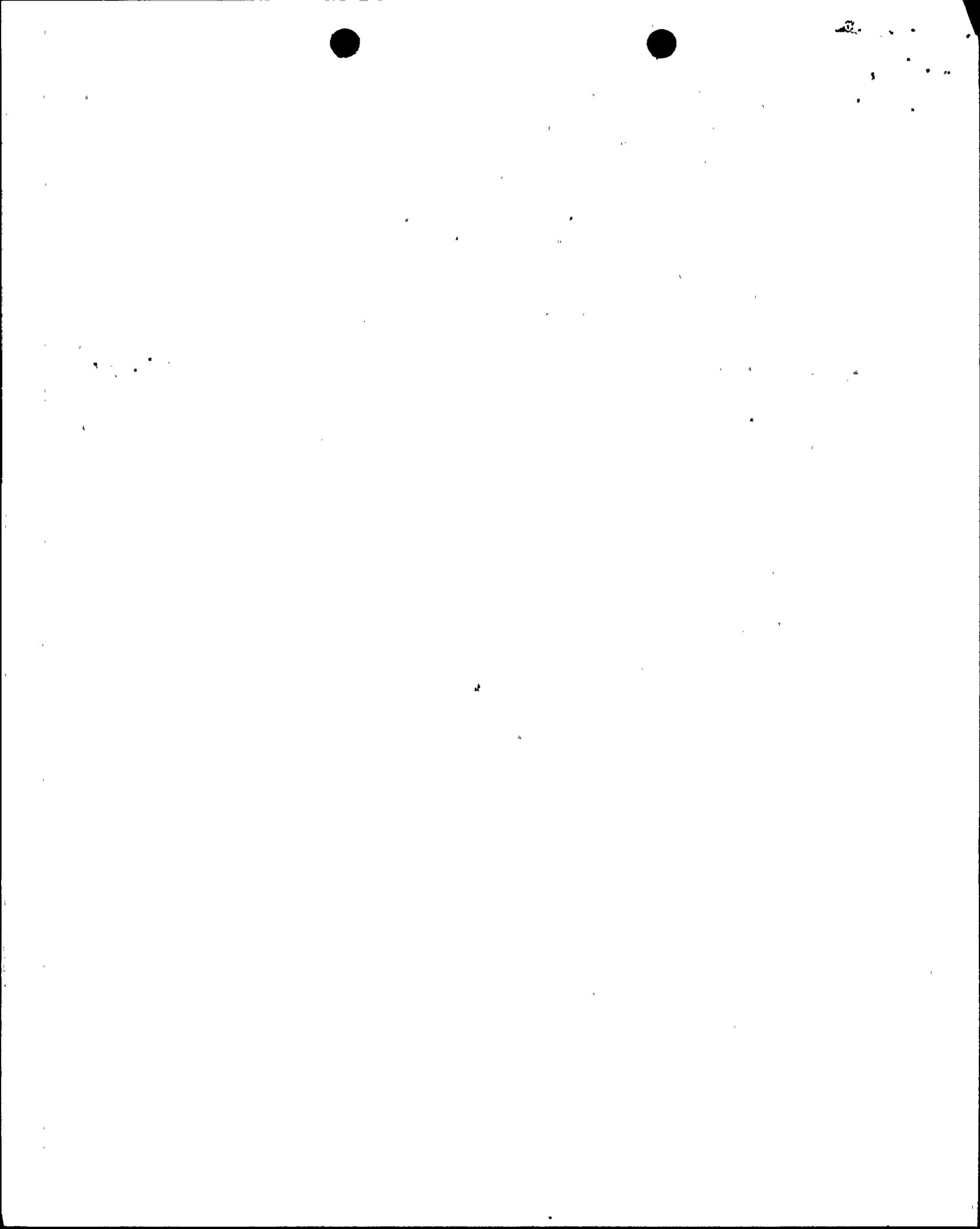
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WILLIAM F. CONWAY
EXECUTIVE VICE PRESIDENT
NUCLEAR

102-02352-WFC/NLT
November 20, 1992

U. S. Nuclear Regulatory Commission
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Washington, DC 20555

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Proposed Amendment to Technical Specification
Limiting Condition for Operation 3.2.1 and 3.2.4
and Associated Bases
File: 92-056-026; 92-005-419.05**

Arizona Public Service Company (APS) is requesting an amendment to the Technical Specification Limiting Condition for Operation 3.2.1, "Linear Heat Rate," and 3.2.4, "DNBR Margin." This amendment request increases the ACTION from 1 hour to 4 hours for the Core Operating Limit Supervisory System (COLSS) allowed out of service time before the requirements based on the more restrictive Core Protection Calculator limits apply.

In conjunction with NRC approval of this amendment request, APS will revise the surveillance test procedure for monitoring Linear Heat Rate (LHR) and the Departure from Nucleate Boiling Ratio (DNBR) margin. The revised procedure will require increased monitoring of LHR and DNBR margin while COLSS is out of service as described in the enclosed amendment application.

Provided in the enclosure to this letter are the following sections which support the proposed Technical Specification amendment:

- A. Description of the Proposed Amendment Request
- B. Purpose of the Technical Specification
- C. Need for the Technical Specification Amendment
- D. Safety Analysis of the Proposed Technical Specification Amendment
- E. No Significant Hazards Consideration Determination
- F. Environmental Impact Consideration Determination
- G. Marked-Up Technical Specification Change Pages

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Amendment to Section 3.2.1 and 3.2.4
Page 2

Pursuant to 10 CFR 50.91(b)(1), a copy of this request is being forwarded to the Arizona
Radiation Regulatory Agency.

If you have any questions, please contact Thomas R. Bradish at (602) 393-5421.

Sincerely,

James M. Levine
for WFC

WFC/NLT/nlt

Enclosure

cc: J. B. Martin
J. A. Sloan
W. A. Wright

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, W. F. Conway, represent that I am Executive Vice President - Nuclear, that the foregoing document has been signed by me on behalf of Arizona Public Service Company with full authority to do so, that I have read such document and know its contents, and that to the best of my knowledge and belief, the statements made therein are true and correct.

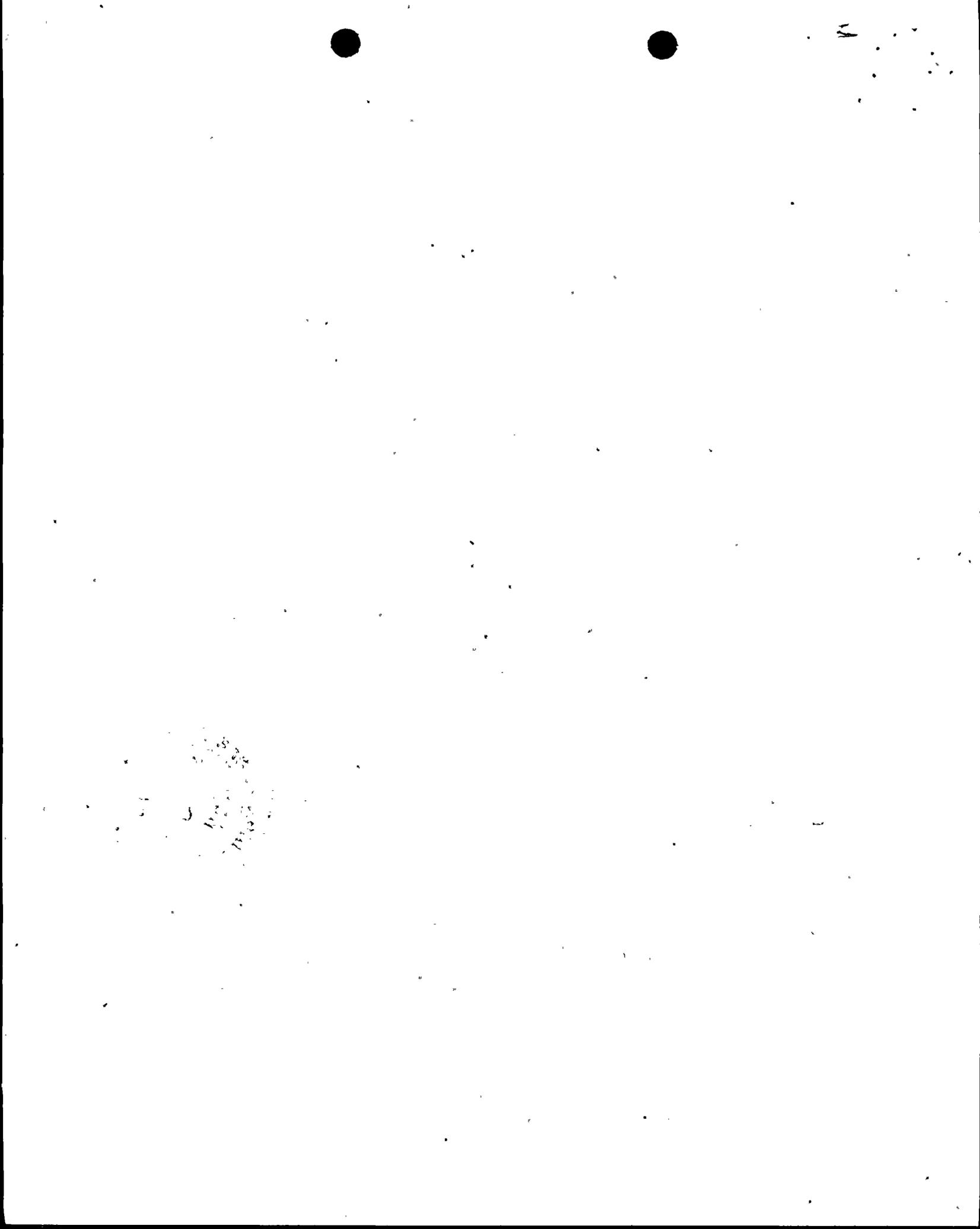
W. F. Conway
W. F. Conway

Sworn To Before Me This 20 Day Of November, 1992.

Linda B. Spill
Notary Public

My Commission Expires

March 31, 1994



ENCLOSURE

**PALO VERDE NUCLEAR GENERATING STATION OPERATING LICENSE
TECHNICAL SPECIFICATION LIMITING CONDITION FOR OPERATION
3.2.1. "LINEAR HEAT RATE", 3.2.4 "DNBR MARGIN,"
AND ASSOCIATED BASES LICENSE AMENDMENT REQUEST**



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ENCLOSURE

A. DESCRIPTION OF THE PROPOSED AMENDMENT REQUEST

This licensing document amendment request is to revise the Power Distribution Limits Technical Specification (TS) Limiting Condition for Operation (LCO) 3.2.1, "LINEAR HEAT RATE" (LHR) and TS 3.2.4, "DNBR MARGIN" and associated Bases for PVNGS Units 1, 2, and 3. The proposed changes will provide distinct ACTIONS for operating with and without the Core Operating Limits Supervisory System (COLSS). In addition, this amendment will increase the allowed COLSS out-of-service ACTION time from 1 hour to 4 hours before the ACTION requirements based on the more restrictive Core Protection Calculator (CPC) limits apply.

During normal operations, the COLSS is in service and the existing ACTION time limits are appropriate when LHR or the Departure from Nucleate Boiling Ratio (DNBR) margin is exceeded. However, the ACTION time limits are not appropriate when COLSS is not available. The existing TS 3.2.1 and 3.2.4 ACTIONS require corrective action (power reduction) to be initiated within 15 minutes and restoration of the LHR and DNBR to within the prescribed limits within 1 hour with COLSS out of service. An unnecessary power reduction is usually required when COLSS, the most accurate indication of core power distribution, is unavailable. The proposed amendment replaces the current 15 minute time limit for initiating corrective action with a requirement to restore LHR and DNBR margin limits as indicated using any operable CPC channel within 4 hours. This will provide a reasonable opportunity for restoration of the COLSS and will minimize unnecessary power reductions.

This amendment request consists of the following proposed changes to TS 3.2.1, "LINEAR HEAT RATE," TS 3.2.4, "DNBR MARGIN" and the associated Bases:

- 1) Replace the existing ACTIONS with new ACTIONS which distinguish between COLSS in service and COLSS out of service;
- 2) Replace the current 15 minute time limit for initiating corrective action with a requirement to restore the LHR and DNBR limits within 4 hours when COLSS is out of service thereby increasing the time before the more restrictive CPC limits apply from 1 hour to 4 hours;
- 3) Add two paragraphs to the Bases of TS 3.2.1 and TS 3.2.4 to document the principal elements of the proposed changes.

The proposed changes do not affect the LCOs for DNBR margin and LHR, or the applicability of these limits. The specific changes to the PVNGS Units 1, 2, and 3 Technical Specifications are as follows:



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TS 3/4.2.1 "LINEAR HEAT RATE"

The existing ACTIONS are to be replaced with the following:

- a. If the linear heat rate cannot be maintained within the LCO limits, perform the following:
 1. If COLSS is in service, within 15 minutes initiate corrective action to restore the linear heat rate to within the LCO limits within 1 hour, or
 2. If COLSS is out of service, restore the linear heat rate to within the LCO limits within 4 hours.
- b. If linear heat rate cannot be restored to within the LCO limits, as required by ACTION a., reduce THERMAL POWER to less than or equal to 20% RATED THERMAL POWER within the next 6 hours.

BASES 3/4.2.1 "LINEAR HEAT RATE"

Add the following paragraphs:

The core power distribution and a corresponding power operating limit based on LHR are more accurately determined by the COLSS which uses the incore detector system. The CPCs determine LHR less accurately and use the excore detectors. When COLSS is not available the TS LCOs are more restrictive due to the uncertainty of the CPCs. However, when COLSS becomes inoperable the added margin associated with CPC uncertainty is not immediately required and a 4-hour ACTION is provided for appropriate corrective action.

While operating with the COLSS out of service, the CPC calculated LHR is monitored at least every 15 minutes to identify any reduction in thermal margin. The increased monitoring of LHR during the 4-hour ACTION period ensures that adequate safety margin is maintained for anticipated operational occurrences and no postulated accident results in consequences more severe than those described in Chapter 15 of the UFSAR.

TS 3/4.2.4 "DNBR MARGIN"

The existing ACTIONS are to be replaced with the following:

- a. If the DNBR cannot be maintained within the LCO limits, perform the following:
 1. If COLSS is in service, within 15 minutes initiate corrective action to restore the DNBR to within the LCO limits within 1 hour, or



2. If COLSS is out of service, restore the DNBR within the LCO limits within 4 hours.
- b. If DNBR cannot be restored to within the LCO limits, as required by ACTION a., reduce THERMAL POWER to less than or equal to 20% RATED THERMAL POWER within the next 6 hours.

BASES 3/4.2.4 "DNBR MARGIN"

Add the following paragraphs:

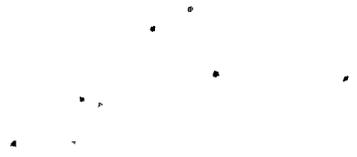
The core power distribution and a corresponding power operating limit based on DNBR are more accurately determined by the COLSS which uses the incore detector system. The CPCs determine DNBR less accurately and use the excore detectors. When COLSS is not available the TS LCOs are more restrictive due to the uncertainty of the CPCs. However, when COLSS becomes inoperable the added margin associated with CPC uncertainty is not immediately required and a 4-hour ACTION is provided for appropriate corrective action.

While operating with the COLSS out of service, the CPC calculated DNBR is monitored at least every 15 minutes to identify any reduction in thermal margin. The increased monitoring of DNBR during the 4-hour ACTION period ensures that adequate safety margin is maintained for anticipated operational occurrences and no postulated accident results in consequences more severe than those described in Chapter 15 of the UFSAR.

B. PURPOSE OF THE TECHNICAL SPECIFICATIONS

The purpose of Technical Specifications 3.2.1 and 3.2.4 is to limit the core power distribution to the initial conditions assumed in the safety analysis. Maintaining the LHR and DNBR within the specified limits ensures that during normal operation and anticipated operational occurrences (AOOs), the fuel cladding will not exceed the limit set forth in 10 CFR 50.46 and the consequences of an accident will be bounded by the Updated Final Safety Analysis Report (UFSAR) Chapter 15 analysis.

During normal operations, core power distribution is continuously monitored by the COLSS to verify that the LHR and DNBR margin are within TS limits. When COLSS is not available, the TSs allow DNBR margin and LHR to be monitored using the CPCs. The core power distribution is more accurately determined with the incore detector system used by the COLSS than with the excore detectors used by the CPCs. Therefore, the TS LCOs are more restrictive when the CPCs are used and require larger margins of safety when operating without the COLSS.



TS 3.2.1 and TS 3.2.4 require the core power, as determined by the COLSS, to be below the COLSS calculated DNBR and LHR Power Operating Limits (POLs) while operating in MODE 1 above 20% rated thermal power. The CPCs are less accurate than the COLSS in determining DNBR and LHR. Each CPC channel uses one tri-level excore detector assembly as compared to the COLSS which uses a maximum of 61 five-level incore detector assemblies. Typically, when operating at full power with the core power below the COLSS LHR and DNBR POLs, the CPCs will indicate a DNBR margin outside the COLSS out-of-service TS LCO. Consequently, if COLSS becomes unavailable, the CPCs may indicate DNBR margin outside TS LCOs without any change in reactor operation and with DNBR margin still within the COLSS operable TS LCO limits.

The COLSS assists in maintaining core power at or below the operating license power limit. In addition, the COLSS provides indication and alarms for monitoring TS required LCOs including: DNBR Margin, Azimuthal Tilt, Axial Shape Index (ASI), Reactor Coolant System (RCS) flow rate, and LHR. When COLSS is not in service, TS 3.2.1 and TS 3.2.4 allow DNBR margin and LHR to be monitored using the CPCs.

C. NEED FOR THE TECHNICAL SPECIFICATION AMENDMENT

When COLSS becomes unavailable, the DNBR TS limits cannot usually be satisfied without a reduction in core power. This is because the DNBR as determined using the CPCs exceeds the COLSS out-of-service TS limits at full power. Therefore, if COLSS becomes inoperable for greater than 15 minutes, full power operation cannot be maintained in accordance with TS ACTIONS. The amount of power reduction depends on the cycle specific core design and the existing core conditions at the time COLSS becomes inoperable.

The existing DNBR and LHR TS ACTION time limits originated from estimated time requirements for returning COLSS to service and optimistic anticipated power reduction requirements. These time limits were established prior to initial plant operation without the benefit of practical experience. Currently, reinitializing the Plant Monitoring System (PMS) computer requires approximately 15 minutes. Therefore, a potential situation exists in which a power reduction would be required when the non-safety related COLSS is lost, because inadequate time is provided by TSs for appropriate corrective action.

A 25% power reduction is usually required when COLSS is lost to restore CPC DNBR margin to within TS limits. According to TSs, this power reduction must be completed within 1 hour following a loss of the COLSS. However, during the last third of the operating cycle, when boron concentration is low and xenon concentration is high, large power reductions could result in a reactor trip. In addition, this power maneuver will be required when the most accurate means of monitoring reactor conditions (i.e., the COLSS) is not available. Consequently, the existing TS may contribute to reduced plant



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reliability by unnecessarily increasing the potential for a Reactor Protection System (RPS) actuation.

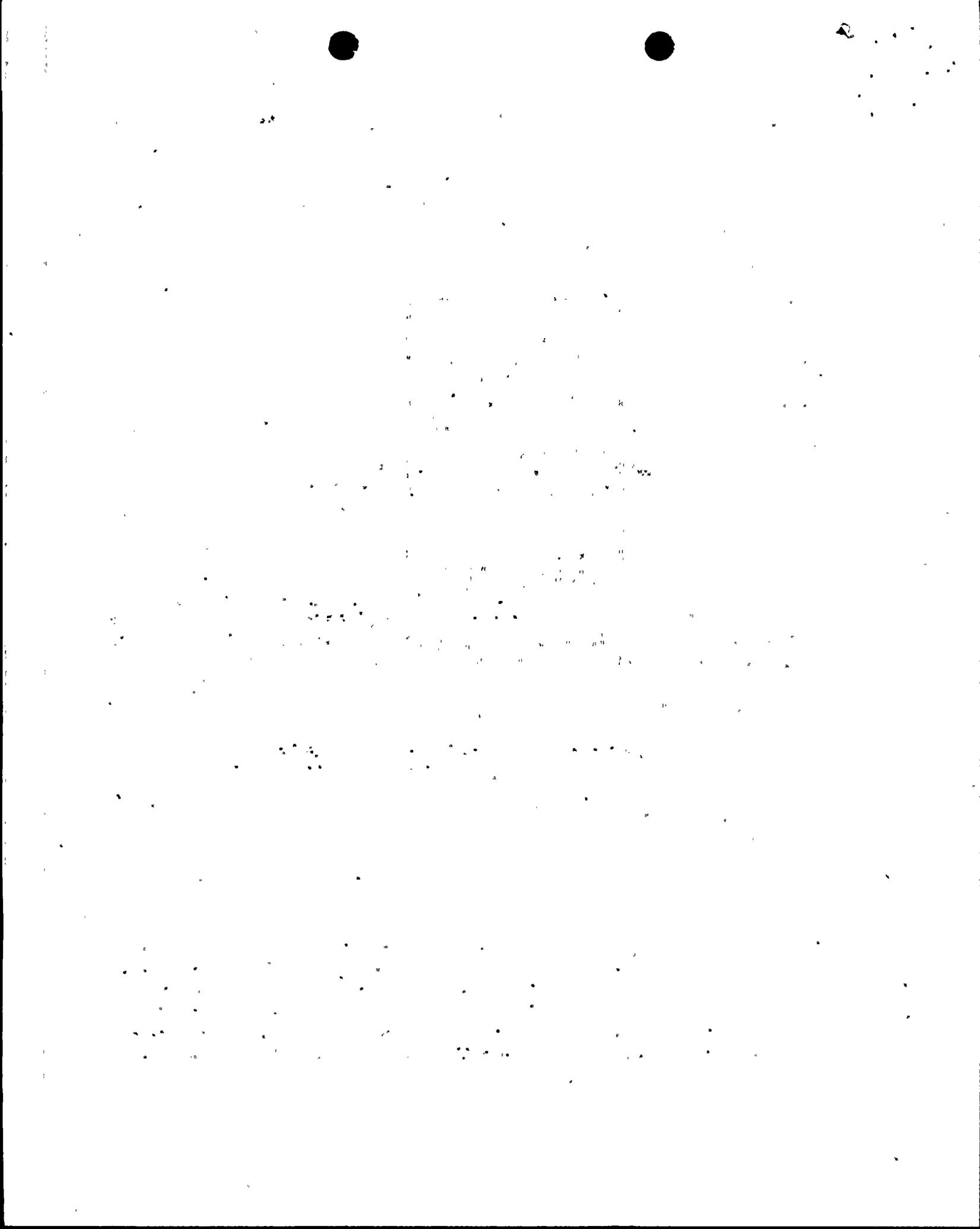
D. SAFETY ANALYSIS OF THE PROPOSED TECHNICAL SPECIFICATION AMENDMENT

The COLSS is a computer program run on the PMS which consists of the Plant Computer (PC) and Core Monitoring Computer (CMC). The PC and the CMC do not provide any safety trip function nor are they required for safe shutdown. The COLSS program performs several calculations to determine ASI, azimuthal power tilt, LHR POL, DNBR POL, and licensed core power. The COLSS calculated POLs for DNBR and LHR equate to the core power at which the corresponding TS LCO would be exceeded. Core power distribution is continuously determined using the incore detector assemblies spaced throughout the core. These calculations are used to accurately monitor TS LCOs for LHR, DNBR margin, ASI and azimuthal power tilt. The CMC runs an identical COLSS program in parallel with the PC for use when the PC is not available. The COLSS provides highly accurate data, however it lacks the necessary speed and redundancy required for the RPS.

The CPCs are designed to initiate an automatic reactor trip to ensure that the specified acceptable fuel design limits are not exceeded during AOOs. There is one excore detector assembly and one CPC for each independent channel of the RPS. The excore detectors provide the CPCs with the axial core power distribution data required for calculating DNBR and LHR. However, due to limitations of the excore detectors, the CPCs cannot calculate azimuthal tilt, which is required for determining core power distribution. Therefore, an azimuthal tilt allowance is manually entered into the CPCs as an addressable constant.

Increasing the amount of time available for restoring the LHR and DNBR when COLSS is not available will potentially reduce the number and rate of power reductions, thereby decreasing the probability of actuating the RPS. This proposed change accordingly increases TS 3.2.1 and TS 3.2.4 ACTION times for restoring LHR and DNBR margin when COLSS is out of service to provide a reasonable opportunity for appropriate corrective actions. The existing safety margins and the proposed increased LHR and DNBR monitoring will assure that this proposed change will not significantly increase the probability of exceeding the initial conditions assumed in the safety analysis.

The proposed amendment provides 4 hours to establish that both the DNBR margin and LHR are within the existing LCOs when COLSS becomes inoperable. The proposed 4-hour ACTION time is based on the following four considerations: 1) The loss of COLSS operability alone does not indicate an actual loss of safety margin, 2) The additional margin associated with the CPCs is not immediately required, 3) Compensatory actions will provide increased monitoring of DNBR and LHR to assure no loss of safety margin,



and 4) The benefits associated with a properly planned power reduction at a controllable rate.

The proposed amendment does not modify any RPS setpoints and the safety limits will not be exceeded in the event of an AOO. The TS LCOs for DNBR and LHR will not be affected by these changes and the core power distribution during all phases of normal operation and AOOs will remain bounded by the initial conditions assumed in Chapter 15 of the PVNGS UFSAR.

The COLSS and CPCs provide two different methods of independently determining the DNBR and LHR. The COLSS uses incore detectors to accurately determine core power distribution. The core power distribution is used for calculating COLSS POLs based on DNBR and LHR. The CPCs calculate DNBR and LHR using an axial power distribution from excore detectors and other inputs. The CPC method for calculating DNBR and LHR is less accurate than the COLSS method and requires additional safety margin. Due to the CPC uncertainties, the TS LCOs are accordingly more restrictive when the CPCs are used to determine DNBR and LHR. Therefore, during normal operations at full power, with the COLSS calculated core power below the COLSS POLs, the CPCs typically indicate a DNBR margin outside the TS LCO.

With the TS LCO not met, the associated TS ACTION must be taken within the specified time. The existing ACTION statement requires corrective action to be initiated within 15 minutes to restore LHR and the DNBR margin within 1 hour. This will typically require a power reduction to begin within 15 minutes if COLSS cannot be restored within the 15 minute ACTION. The magnitude of the required power reduction is dependent on core design and core life and will usually require a 25% power reduction within 1 hour if the COLSS is not restored. Therefore, the current TSs may require a reduction of power on the basis of COLSS unavailability alone.

These rapid power reductions could result in unnecessary challenges to the RPS. The loss of the COLSS does not indicate that DNBR and LHR safety limits have been exceeded and operation is allowed without the COLSS. However, the existing TSs could require a change in power at a time when the most accurate method of monitoring the core power distribution is not available.

The surveillance test procedure for monitoring LHR and DNBR margin when COLSS is out of service will be revised to support the proposed increased ACTION time. The revised procedure will require more frequent monitoring of DNBR and LHR when the COLSS is out of service and the DNBR or LHR LCOs are not met. The LHR and DNBR will be monitored using any operable CPC channel with an initial determination made within the first 15 minutes after COLSS becomes inoperable and at least every 15 minutes thereafter. If any adverse change in DNBR margin or LHR is observed, the revised procedure will require operator action to restore the DNBR margin and LHR to within acceptable values. If LHR or DNBR cannot be restored within the COLSS out-of-service

4-hour ACTION time, procedures, in accordance with TSs, will require a power reduction to less than or equal to 20% rated thermal power within 6 hours. These changes will be reviewed and implemented in accordance with 10 CFR 50.59 and TS Administrative Controls. These changes to the procedure will provide added assurance that an adequate safety margin is maintained and the initial conditions specified in Chapter 15 of PVNGS UFSAR remain valid.

E. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has provided standards for determining whether a no significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves a no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Involve a significant reduction in a margin of safety.

A discussion of these standards as they relate to the amendment request follows:

Standard 1 -- Involve a significant increase in the probability or consequences of an accident previously evaluated.

This proposed amendment distinguishes between the ACTION requirements applicable when COLSS is either in service or out of service. If COLSS is in service the ACTIONS and time requirements remain unchanged. When COLSS is out of service the requirement for initiating corrective action within 15 minutes is replaced with the requirement to restore LHR and DNBR within 4 hours. The purpose of the proposed TS amendment is to provide a reasonable opportunity for appropriate corrective actions when the COLSS becomes inoperable.

The TS LCOs for DNBR margin and LHR are more restrictive when operating without the COLSS due to the uncertainties associated with the CPCs. Consequently, when the COLSS becomes inoperable, the existing LHR and DNBR limits based on CPC information can only be satisfied by either a power reduction or by restoring the COLSS to service. By itself, a loss of the COLSS or returning the COLSS to service does not affect plant operation and does not affect the actual DNBR or the LHR. In addition, a loss of the COLSS does not constitute a change in actual core power distribution. Therefore, during normal operation within the COLSS POLs, if there are no indications that the actual DNBR margin or LHR has degraded, a power reduction will not significantly improve the level of confidence that the existing margin is below the required margin discussed in Chapter 15 of the UFSAR.



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When either TS 3.2.1 or TS 3.2.4 is not satisfied, compensatory actions will provide additional assurance that the actual DNBR margin and LHR do not exceed the safety limits stated in the UFSAR. Compensatory actions will be provided in a revision to the surveillance test procedure for monitoring LHR and DNBR while in the 4-hour ACTION for COLSS out of service. The revised procedure will allow continued full power operation after COLSS becomes unavailable, consistent with the revised TS ACTIONS. In addition, the revised procedure will require LHR and DNBR to be monitored at least every 15 minutes for the 4-hour ACTION period when COLSS is out-of-service and the more restrictive CPC limits are not met as required by the LHR and DNBR TS LCOs.

The primary consideration in extending the COLSS out-of-service time limit is the remote possibility of a slow, undetectable transient that degrades the DNBR margin or LHR within the 4-hour ACTION time which is then followed by an anticipated operational occurrence or accident. The plant parameters monitored by COLSS which could affect DNBR margin and LHR include RCS flow rate, axial and radial power distribution, cold leg temperature, reactor core power, RCS pressure, and azimuthal tilt. Cold leg temperature, core power, and RCS pressure are monitored by operators using redundant, safety grade control room indications. Operating experience indicates that changes in RCS flow rate are rare and involve only large obvious step changes. Therefore, any change in RCS flow rate will be quickly identified by operators using other redundant, safety-grade instrumentation.

Azimuthal tilt variations occur either slowly over the entire cycle due to burnup variations or due to asymmetric events such as an inadvertent drop or misalignment of a Control Element Assembly (CEA). The probability of dropping or misaligning a CEA is remote, and it is very unlikely that a CEA would drop within a given 4-hour period. In the unlikely event this were to occur, the safety related Control Element Assembly Calculators (CEACs) would alert operators that corrective action was required. A large temperature difference (i.e. an asymmetric steam generator transient) could also produce a core tilt variation but the CPCs have been specifically designed to detect this type of event and ultimately provide the appropriate protection system response. Thus, during the proposed 4-hour ACTION statement any degradation of azimuthal tilt is very unlikely when the plant is operating at steady state conditions and would be quickly and positively identified. Additionally, an adverse change in azimuthal tilt would result in a degradation in the CPC monitored LHR and DNBR margin.

Axial xenon oscillations are a normal consequence of the PVNGS core designs, particularly near the end of a fuel cycle. The resultant axial core power fluctuations are strictly controlled to ensure efficient and even fuel burnup. As a result, axial power shape is strictly maintained by existing procedures well within the limits assumed in the safety analysis.



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Typically, one full xenon oscillation will take approximately 26 hours. It is unlikely that a change in ASI during the 4-hour ACTION period of steady state plant operation would either be undetected or lead to a condition outside the range of initial conditions assumed in the safety analysis since a change would have to be initiated by either a power transient or CEA movement. In the event of an inadvertent power transient or CEA movement, the CPCs would provide the appropriate protection system response. Additionally, any adverse change in ASI would result in a degradation in the CPC monitored LHR and DNBR margin.

The proposed amendment does not modify either the LHR or DNBR LCOs. The core power distribution during all phases of normal operation and anticipated operational occurrences will remain bounded by the initial conditions assumed in Chapter 15 of the UFSAR. The COLSS calculated POLs and the CPC based LHR and DNBR operating limits will remain unchanged. Increasing the time to 4 hours for restoration of LHR and DNBR to within limits would reduce the number and rate of power reductions. While decreasing the potential for RPS actuation, the proposed change would not significantly increase the probability of exceeding the core power operating limits based on LHR and DNBR. Therefore, this proposed change will not significantly increase the probability or consequences of an accident previously evaluated.

Standard 2 -- Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment is limited to changing administrative limits and does not involve any physical change to plant systems or to the COLSS and CPC software. These changes will not affect any safety-related equipment used in the mitigation of anticipated operational occurrences or design basis accidents. The only change resulting from this amendment will be to the procedure for operating when COLSS is out of service. The procedural changes will be reviewed and implemented in accordance with 10 CFR 50.59 and TS Administrative Controls. The DNBR and LHR LCOs are not affected by these changes. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

Standard 3 -- Involve a significant reduction in a margin of safety.

TS LCOs 3.2.1 and 3.2.4 ensure that operation of the reactor is within the range of conditions assumed in the Safety Analysis. Therefore, maintaining LHR and DNBR within the existing LCOs will ensure that no anticipated operational occurrence or postulated accident will result in core conditions exceeding Specified Acceptable Fuel Design Limits or the maximum peak cladding temperature of 2200° F specified by 10 CFR 50.46. The UFSAR Chapter 15 analysis remains bounding because there has been no change to the LHR and DNBR limits. Administrative limits will be in place to provide additional assurance that potential reductions in core thermal margin, while

in the extended 4-hour ACTION, will be quickly detected, and should it prove necessary, result in a decrease in reactor power and subsequent compliance with the LCOs. Therefore, this change will not result in a significant reduction in a margin of safety.

F. ENVIRONMENTAL IMPACT CONSIDERATION DETERMINATION

The proposed changes revise the allowed time for COLSS to be out of service and the provisions for monitoring LHR and DNBR. There is no change in the amount or type of effluent that may be released offsite, and no increase in individual or cumulative occupational radiation exposure as a result of the changes. Therefore, operation of PVNGS Units 1, 2, and 3 in accordance with the proposed amendment does not involve an unreviewed environmental question.

G. MARKED-UP TECHNICAL SPECIFICATION CHANGE PAGES

See attached pages 3/4 2-1, 3/4 2-5, B 3/4 2-1, B 3/4 2-3 and text to be inserted for PVNGS Units 1, 2, and 3.

INSERT A:

- a. If the linear heat rate cannot be maintained within the LCO limits, perform the following:
 1. If COLSS is in service, within 15 minutes initiate corrective action to restore the linear heat rate to within the LCO limits within 1 hour, or
 2. If COLSS is out of service, restore the linear heat rate to within the LCO limits within 4 hours.
- b. If linear heat rate cannot be restored to within the LCO limits, as required by ACTION a., reduce THERMAL POWER to less than or equal to 20% RATED THERMAL POWER within the next 6 hours.

