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AUTH. NAME: WOODY, C.O. AUTHOR AFFILIATION: Florida Power & Light Co. SEE Prop 01111111
 RECIP. NAME: Document Control Branch (Document Control Desk)

SUBJECT: Application for amends to Licenses DPR-31 & DPR-41, replacing Tech Specs w/TS submitted w/util 860929 & 1128 ltrs.

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JUNE 5 1989

L-89-201
10 CFR 50.90

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

Gentlemen:

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Proposed License Amendment
Revised Technical Specifications

In accordance with 10 CFR 50.90, Florida Power & Light Company (FPL) requests that Appendix A of Facility Operating Licenses DPR-31 and DPR 41 be amended to replace the current technical specifications with the Revised Technical Specifications. The Revised Technical Specifications were originally submitted by FPL letters, L-86-393, dated September 29, 1986 and, L-86-475, dated November 28, 1986. Following NRC Staff review and FPL comment, the Final Draft of the Revised Technical Specifications was issued by the NRC in letters dated March 14, 1989 and May 12, 1989.

Attachment I provides the proposed Technical Specifications. This document is a markup of the Final Draft to indicate minor revisions that have been identified since that document was issued. These revisions have been discussed with the NRC Staff. We certify that, to the best of our knowledge, the attached specifications are consistent with the updated FSAR and with the as-built plant, subject to the following clarifications:

1. Our review to date has identified several places where the FSAR will have to be revised to be consistent with the RTS. These items are listed in Attachment III. Because the probable implementation period for the RTS nearly coincides with the January 1990 cutoff date for the next issuance of the FSAR update, we would expect to submit these changes in the 1990 update to the FSAR.

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For Limited Draft

2. We have not questioned the validity of any current technical specifications which were transferred to the RTS. The setpoints in the current technical specifications were also assumed to be correct.
3. Our NSSS vendor has reviewed the Limiting Conditions for Operation (LCO) and Bases for the specifications in their scope of responsibility and has indicated that they are correct. Our certification process has taken credit for this assurance from the NSSS vendor.
4. Most of the specifications use the Standard Technical Specification (STS) wording, LCO times, action statements and surveillance requirements and intervals. As discussed in the no significant hazards evaluation for these items, we have adopted these STS requirements where we considered Turkey Point to be similar to the plant design which forms the basis for the STS. STS action times and surveillance intervals cannot be quantitatively justified for Turkey Point with our current level of knowledge of risk contributions.
5. This certification applies to both Units 3 and 4. Our technical specification manuals will continue to be issued in a combined form for ease of use by the operations staff.

Our reviews have also indicated that, to the best of our knowledge, we have accounted for each specification from the current technical specification to the RTS by:

1. direct transfer, except for format or editorial changes,
2. substitution of an appropriate STS, or
3. submittal of justification for other changes or deletions.

Attachment II provides the overall safety evaluation and the no significant hazards evaluations which are specific to the changes from the current technical specifications. Technical Specifications 3/4.5.2 and 3/4.6.2 added specific residual heat removal and containment spray pump flow requirements. Technical Specification 3/4.2.5 provides a more restrictive pressurizer pressure DNB limit. Evaluations performed to certify these parameters resulted in large break LOCA peak clad temperature (PCT) penalties of 7°F and 8°F, respectively. The current PCT value is now 2144°F, which is below the 2200°F PCT limit. Per the requirements of 10 CFR 50.46, these PCT penalties will be documented in an annual report to the NRC.

Attachment IV to this letter provides a listing of open licensing issues that have been tied to this project. These items can now be closed as a result of this submittal.

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Successful implementation of the RTS is a key part of the upgrade effort. We would like to meet with your Staff prior to issuance of this license amendment to discuss the implementation method and schedule. As previously discussed with the Staff, this implementation effort could take six months, or longer.

The discussion of the interim nature of the Electrical Power Systems Specifications in the NRC's May 12, 1989 letter is fully understood by FPL. The technical specification changes which we plan to submit to support the Emergency Power Enhancement Program will take the form of a markup of the Proof and Review version of the STS.

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

The proposed amendment has been reviewed by the Turkey Point Plant Nuclear Safety Committee and the FPL Company Nuclear Review Board.

Should there be any questions on this request, please contact us.

Very truly yours,



C. O. Woody
Acting Senior Vice President - Nuclear

COW/PLP/gp

Attachments

cc: Stewart D. Ebnetter, Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
Mr. Jacob Daniel Nash, Florida Department of Health and
Rehabilitative Services



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STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

C. O. Woody being first duly sworn, deposes and says:

That he is Acting Senior Vice President - Nuclear, of Florida Power and Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensee.

C. O. Woody

Subscribed and sworn to before me this
5th day of JUNE, 1989.

Notary Public

NOTARY PUBLIC, in and for the County of
Dade, State of Florida

My Commission expires _____
Notary Public, State of Florida
My Commission Expires May 30, 1991
Bonded thru _____

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: QUADRANT POWER TILT RATIO (QPTR)

NO: 3/4.2.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.6h and i.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

A reporting requirement in the current Technical Specification to report the QPTR violation as an abnormal occurrence is included as a requirement for a SPECIAL REPORT as defined in Section 6.9.2 of the proposed Technical Specifications with a 30 day reporting requirement.

A current requirement to notify the NRC if core hot channel factors are not determined is deleted.

- b. The revision is more restrictive than the current Technical Specification as follows:

1. Larger reductions in power level and trip setpoints are required in the proposed Technical Specification for a given QPTR penalty (3% versus 2% for each % the QPTR exceeds 1.0).
2. If the QPTR is not restored within its limit within 24 hours for a QPTR violation less than 1.09, or within 2 hours if the QPTR violation is greater than 1.09, the core power level and hi-flux trip setpoints must be reduced to 50% and 55% respectively.
3. Surveillance intervals are explicitly defined, including increased surveillance frequency if the associated QPTR alarm is inoperable (once per 12 hours versus once per 7 days). In-core detectors are also required for QPTR surveillance if an ex-core detector is inoperable.

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4. The proposed Technical Specification requires power and trip setpoint reductions with an indicated QPTR violation. The current Technical Specification allows the option of re-measuring core peaking factors and basing operating limits with the QPTR violation on the incore measurements rather than the QPTR violation.

c. The revision relaxes the following current requirements:

1. MODE APPLICABILITY is relaxed to MODE-1, POWER above 50%.
2. A current requirement to reduce the overtemperature and overpower delta-T (OTd-T and OPd-T) trip setpoints, in addition to the hi-flux trip setpoint is deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

[illegible]

- 2) The proposed changes as described in Items 2.b.1 through 2.b.4 are similar to example (ii) of 48 FR 14870 in that the added restrictions on the required power and Trip Setpoint reductions are larger, surveillance requirements are made more restrictive if related monitoring alarms or instruments are inoperable and options for using in-core instrumentation as an alternative to the ex-core nuclear instruments are less flexible. The proposed Technical Specification reduces core power and trip setpoints 3% per % violation, rather than 2% per % violation. If a QPTR violation of 9% or less lasts for 24 hours, or a 9% or greater violation lasts for 2 hours, core power must be further reduced to 50% or less and the hi-flux trip setpoint must be reduced to 55% or less.

Surveillance frequencies increase with inoperable instruments includes increasing from 7 days to 12 hours the QPTR surveillance when a QPTR alarm is inoperable. With a power range nuclear instrument channel inoperable the proposed Technical Specification requires that the QPTR surveillance be based on data from two sets of four symmetric in-core thimbles or a full core flux map.

The proposed changes are more restrictive in that core power and trip setpoint reductions are required when a QPTR limit violation occurs regardless of a violation in the power distribution limits.

- 3) The proposed change to relax the MODE APPLICABILITY requirement to MODE 1 above 50% power and to delete the OTd-T and OPd-T setpoint reductions, does not involve a significant hazards consideration because these changes would not:

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

The MODE APPLICABILITY relaxation will not significantly increase the probability of or consequences of an accident previously evaluated because the core design organization has determined generically that at 50% power and below QUADRANT POWER TILTS cannot contribute to any significant core thermal penalty.

The current Technical Specification includes setpoint reductions in the high flux, OT-Delta-T and OP-Delta-T trip setpoints. The proposed Technical Specification includes setpoint reductions in the high flux trip setpoint only. However, when compared to the current Technical Specification requirements for trip point reduction, the proposed Technical Specification requires a large reduction in one setpoint rather than smaller reductions in several setpoints. It is judged that the proposed Technical Specification results in a negligible

safety reduction compared to the current Technical Specification because the setpoint reduction in the hi flux setpoint adequately compensates for the QPTR penalty. The added benefit associated with other setpoint reductions only contributes to overall trip system reliability because of the increased diversity of the trip system when multiple diverse trip signals are included. With the coincidence trip system logic using multiple redundant trip channels each trip function is highly reliable and the benefit resulting from diverse trips is minimal.

In addition, the relaxed requirements described above are consistent with industry practice in that the proposed MODE APPLICABILITY and trip channel setpoint reductions are consistent with the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the core design organization has determined generically that at 50% power and below the inherent safety margin gained from the power reduction exceeds any potential safety margin reduction from a QUADRANT POWER TILT.

The deletion of the OTd-T and OPd-T trip setpoint reductions will also not significantly reduce any safety margin because of the required reduction in the hi-flux setpoint, as explained above.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.2.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: DNB PARAMETERS

NO: 3/4.2.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.6.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current Technical Specification as follows:
 1. The indicated values of DNB parameters are listed as limits and include allowances for instrumentation uncertainty.
 2. The SURVEILLANCE REQUIREMENT specifies verification of RCS flow at least once per 12 hours.
 3. The SURVEILLANCE REQUIREMENT specifies Channel Calibration of RCS flow rate indicators at least once per 18 months.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by including an allowance for instrument uncertainty, a more frequent RCS flow surveillance and a requirement to calibrate the RCS flow indicator.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.2.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR TRIP SYSTEM INSTRUMENTATION

NO: 3/4.3.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.5.1 and Table 4.1-1.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. A complete list of trip channel and trip actuation devices (reactor trip breakers) is included in Table 3.3-1.
2. Trip Channel OPERABILITY requirements are included for MODES 3, 4, and 5.

c. The revision relaxes the following current requirements:

1. The current bi-weekly surveillance interval for the OTd-T and OPd-T analog channel operational test is relaxed to monthly.
2. The 480 V Load Centers, Reactor Trip Breaker and Automatic Trip and Interlock Logic Surveillance interval is relaxed from monthly to bi-monthly on a staggered test basis.
3. The CTS Table 3.5-1 implies applicability for Modes 1 and 2 for;

| | |
|---------|----------------------------|
| Item 5 | Pressurizer Low Pressure |
| Item 7 | Pressurizer Hi Water Level |
| Item 8 | Low Loop Flow |
| Item 9A | 4 KV Bus Undervoltage |
| Item 9B | 4 KV Bus Underfrequency |
| Item 9C | RCP Breakers |

and the RTS Table 3.3-1 indicates only Mode 1 applicability for those channels.
4. The proposed change relaxes the channel out of service requirements by permitting an inoperable channel in a 2 out of 4 logic to be bypassed for up to 2 hours to provide for surveillance testing of the other three channels.



5. The applicability of the Calorimetric Power to Nuclear Instrumentation power indication comparison surveillance is relaxed from 10% to 15% of RATED THERMAL POWER.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that additional controls in the form of a more complete list of trip channels is included in the list of trip channels required to be OPERABLE and trip channel OPERABILITY requirements for MODES 3, 4, and 5 are included. A surveillance requirement on the reactor trip breaker is also included.
- 3) The proposed change as described in Items 2.c.1 and 2.c.2 to relax the OTd-T and OPd-T trip channel surveillance intervals from bi-weekly to monthly, and the trip channel actuation logic surveillance interval from monthly to bi-monthly on a staggered test basis, does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The analog channel operational test verifies that the trip channels are able to perform their trip function. Past experience at Turkey Point over a typical 12 month interval consisting of OT T and OP T bi-weekly trip functional surveillance tests have shown that trip channels failed the surveillance procedure acceptance criteria on



only 5 of 150 tests. Furthermore, the surveillance procedure acceptance criteria is more restrictive than the Technical Specification acceptance criteria for setpoints and includes both high and low side setpoint drift.

Based on this observed trip channel reliability the proposed relaxed surveillance interval will not degrade the trip system reliability. Therefore, this change will not significantly increase the probability of or consequences of any previously evaluated accident.

In addition, the Westinghouse owner's group has recently completed a reliability and risk analysis of the reactor trip system which is documented in the WCAP-10271 series of documents. This analysis shows that the analog channel surveillance test intervals in the reactor trip system can be relaxed from monthly to quarterly with no increase in risk as estimated by the core melt frequency prediction. This analysis also contains some calculations on the sensitivity of the trip system reliability to changes in the actuation logic test interval. These calculations show that the system reliability is insensitive to relaxation of the actuation logic test interval. Therefore, these changes will not significantly increase the probability of or consequences of any previously evaluated accident.

Also, the monthly surveillance of OTd-T and OPd-T trip channels and the bi-monthly staggered actuation logic test interval is consistent with industry practice in that it is the surveillance interval in the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because of the high reliability of the OTd-T and OPd-T trip channels and actuation logic as demonstrated by the current surveillance test results and owner's group programs which quantify the reactor trip system reliability and contribution to total plant risk.
- 4) The proposed change to relax the applicability for the reactor trip channels identified in 2.c.3 above, does not involve a significant hazards consideration because the change would not:
- a. Involve a significant increase in probability of or consequences of an accident previously evaluated.

These trip channels are blocked for operation below the P-7 setpoint of 10% power. As this block functions under 10% power, it effectively makes the trip inoperable in modes other than Mode 1 (as defined in the RTS). The change to show Mode 1 applicability is consistent with and does not change the actual function of these protective trips and consequently does not increase the probability of or consequences of an accident previously evaluated.



- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change does not introduce a new mode of operation or involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the protective function of the reactor trips has not been changed.
- 5) The proposed change as described in 2.c.4 to provide for a bypass of the inoperable channel of a 2 out of 4 logic for 2 hours does not involve a significant hazards consideration because the change does not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The channel bypass relaxation is justified, as a 2 out of 4 signal logic provides sufficient redundancy. When the inoperable channel is bypassed, the logic becomes 2 out of 3 and with the channel under surveillance being put into the tripped mode, any one of the remaining 2 channels is sufficient to make up the trip signal. As the makeup of the trip signal is not impaired, there is no increase in the probability of or consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously evaluated because the proposed change does not introduce a new mode of plant operation or involve a physical modification to the plant.
 - c. Involve a significant reduction in the margin of safety as the change does not alter the generation of a trip signal from an actuation signal of two channels.
- 6) The proposed change as described in Item 2.c.5 to relax the applicability of the Calorimetric Power to Nuclear Instrumentation power indication comparison does not involve a significant hazards consideration because the change does not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

Applicability of this surveillance at 15% is in accordance with industry practice and is the value used in the Standard Technical Specifications. Due to accuracy considerations, Calorimetric measurements below 15% RTP have no practical value.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.

- c. Involve a significant reduction in a margin of safety because the proposed change in applicable power level does not involve changes in plant design, mode of operation or affect any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ENGINEERED SAFETY FEATURE ACTUATION (ESFAS)

NO: 3/4.3.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.5, Table 3.5-2, 3.5-3, 3.5-4, Table 4.1-1.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The ESFAS instrumentation Table 3.3-2 defining channel operability and mode applicability contains a more complete list of ESFAS instrumentation.
 2. The minimum channels operable column has been changed in detail such that Table 3.3-2 is more restrictive than the current requirements.
 3. The ACTION requirements for inoperable channels have been rewritten and are more restrictive than the current requirements, except as noted below in 2.c.
 4. The ESFAS instrument surveillance testing includes a more detailed list of components in the EFSAS channels.
- c. The revision relaxes the following current requirements:
 1. In the event that one channel of manual initiation of selected ESFAS functions is inoperable, a 48 hour allowed outage time is included for restoration of the channel to OPERABLE status before shutdown is required. For the manual initiation of a steamline isolation, a 48 hour allowed outage time is included for restoration of the channel to OPERABLE status before following the action required by Specification 3.7.1.5. The current specifications allow only 1 hour before initiating a plant status change.
 2. In the ESFAS trip setpoint table, an allowance for channel drift is included in each setpoint allowable value.

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3. The trip channel actuation logic surveillance interval is relaxed from monthly to bi-monthly on a staggered test basis.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, and 2.b.4 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations and controls by including additional instruments in Table 3.3-2, requiring a greater number of channels and more restrictive ACTION statements for same instrument channels, and expanded instrument component details in the surveillance tables.
- 3) The proposed change as described in Item 2.c.1 to relax the action time to recover an inoperable manual ESFAS initiation channel from one hour to 48 hours does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Manual initiation of ESFAS by the operator is considered a backup to the automatic trip functions. One channel of manual initiation remains OPERABLE during the time allowed to recover the out of service channel.



The proposed revision is consistent with industry practice in that the 48 hour outage time is the same as that required in the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the operator has one channel of manual initiation available during the allowed ACTION statement time.
- 4) The proposed change as described in Item 2.c.1 to relax the action time to recover an inoperable manual steamline isolation channel from one hour to 48 hours does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Manual initiation of Steam Line Isolation by the operator is considered a backup to the automatic trip functions.

The specification is consistent with industry practice in that the 48 hour outage time is the same as that required in the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the automatic methods of steamline isolation initiation are available during the allowed ACTION statement time.
- 5) The proposed change to relax the Instrument Setpoint Table by including an Allowable Value column does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. This proposed technical specification provides an ALLOWABLES column only, but does not provide allowable values. Therefore, the setpoint values are still the limiting values.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety because the required limiting setpoints are the same as the current technical specification.
- 5) The proposed change as described in Item 2.c.2 to relax the actuation logic test interval from monthly to bi-monthly on a staggered test basis does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. In the 10271 series of WCAP's that document the owner's group reliability and risk evaluation of the reactor trip and ESFAS systems it is shown that components other than the actuation logic tend to dominate the system unavailability and the dominant failure mechanism is a common mode failure of the redundant components. Because the proposed relaxation of the actuation logic test interval requires the tests to be done on a staggered basis, at least one of the two redundant actuation logic trip channels will be tested each month and common failure modes would be detectable at this frequency, which is equal to the current test interval.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation or involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because of an owner's group program which has shown that the proposed test interval relaxation has no significant impact on the ESFAS system unavailability and plant risk.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIATION MONITORING FOR PLANT OPERATION

NO: 3/4.3.3.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification Table 3.5-3 Item 4, Table 3.5-4 Item 10, Table 4.1-1 Item 18A, 18B, 38a, and 38b, Table 3.5-5 Item 13a and 13b.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The ACTION statement requiring that the alarm Setpoints meet the tabulated limits has been added.
 2. The containment radioactivity monitors are required to be operable in all modes.
 3. The spent fuel radioactivity monitors have been added and are required to be operable whenever there is irradiated fuel in the spent fuel pits.
 4. The control room air intake radiation monitors are added.
 5. The CHANNEL CHECK of containment radiation monitors is required to be performed once per shift instead of daily.
 6. Calibration of containment radioactivity monitors is added to SURVEILLANCE REQUIREMENTS.
- c. The revision relaxes the following requirements:
 1. The SURVEILLANCE REQUIREMENT of area radiation monitors is deleted.
 2. The proposed revision relaxes the current requirements in that the applicability of the gaseous radiation monitors for the spent fuel pit is changed from "at all times" to "at all times irradiated fuel is in the spent fuel pit".

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.5 and 2.b.6 are similar to example (ii) of 48 FR 14870 in that they provide additional limitation, restrictions and controls by including an ACTION statement requiring alarm/setpoints meet tabulated limits or a channel is to be declared inoperable and applicability for the containment radioactivity monitor has been extended to all modes. Both spent fuel and control room air intake radioactivity monitors have been added to the specification. Surveillance for CHANNEL CHECK on containment radiation monitors has been increased from daily to once per shift.
- 3) The proposed change as described in Item 2.c.1 to relax the requirement to include the Area Radiation Monitoring in the Technical Specification does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The Area Radiation Monitoring System is designed to monitor radiation levels at various locations within the operating area of the two units and provide an early

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warning of a potential unsafe health condition that may have developed. The area radiation monitor provides no automatic function for protection of reactor or plant systems during postulated accidents. Other radiation monitors that are included in the revised technical specifications would provide indications that a malfunction has occurred that has resulted in increased radiation levels in the containment building, reactor coolant, or other process systems.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the radiation monitors do not perform any automatic accident mitigating function. The area radiation monitors will be maintained OPERABLE in accordance with plant procedure and are backed up by area radiation surveys. The specification is consistent with industry practice in that area radiation monitors are not included in the Standard Technical Specification.
- 4) The proposed changes as described in 2.c.2 to relax the applicability of the spent fuel pit gaseous radiation monitors from "at all times" to "at all times irradiated fuel is in the spent fuel pit", does not involve a significant hazard consideration because these changes do not:

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

The instruments are present in order to detect any gaseous activity which may be released into the spent fuel pit area. This is a controlled ventilation area with the only source of potential release being the irradiated fuel. In the absence of the fuel, there is no longer a potential source and consequently no need to monitor for release. Limiting the applicability to the time when spent fuel is present is more technically descriptive of the function/purpose of the monitors and does not increase the probability of or consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change does not introduce a new mode of plant operation or involve a physical modification to the plant.
- c. Involve a significant reduction in margin of safety because the change does not alter the monitoring function of gaseous release from the irradiated fuel.

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Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.3.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: MOVABLE INCORE DETECTOR

NO: 3/4.3.3.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.7.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The total number of OPERABLE incore detector thimbles has been increased from 32% to 75% for some additional monitoring functions.
 2. The APPLICABILITY during monitoring of QPTR and measurement of F_{H}^N and $F_Q(Z)$ has been added.
 3. The current specification limits reactor power to 90% when the IN-CORE INSTRUMENTATION does not meet the operability requirement. ACTION statements in specification 4.2.2 and 4.2.3 do not allow for continued operation of the reactor if the Incore Detector System does not meet its operability requirement to support the surveillances required by those specifications.
 4. The new SURVEILLANCE requirements require that Incore Detection System be demonstrated operable at least once per 24 hours when required to make neutron flux measurements.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3 and 2.b.4 are similar to example (ii) of 48 FR 14870 in that they provide additional limitation by including an increase in the required number of operable detector thimbles in some cases and definition of the Applicability for the specification. Deletion of reduced power operation from the ACTION statement, the requirements of specifications 4.2.2 and 4.2.3 and adding the new surveillance requirements provide additional restrictions and controls on the Movable Incore Detectors.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ACCIDENT MONITORING INSTRUMENTATION

NO: 3/4.3.3.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Table 3.5-5 Items 1 through 11 and 13 through 15 and Table 4.1-1 Items 6, 15A, 15B, 16, 17A, 17B, 26, 27, 28, 29, 30, 34, 35, 36, 37, 38, 39, and 40.

2) Proposed Condition of License:

a.1. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

2. The monthly functional test of Containment High Range Area Radiation Monitor is deleted because the CHANNEL CHECK test performed every shift is the functional test. The deletion of functional test requirement is considered administrative in nature as CHANNEL CHECK is retained which meets the functional test requirement.

b. The revision is more complete than the current Technical Specification as follows:

1. The following instruments have been added:

- a) Reactor Coolant Pressure (wide range)
- b) Reactor Hot Leg Temperature (wide range)
- c) Reactor Cold Leg Temperature (wide range)
- d) RWST Level
- e) Neutron Flux, Backup NIS (Wide Range)

2. The submittal for special report is now required in 14 days rather than 30 days if either the Containment High Range Radiation Monitor or the High Range Noble Gas Monitor is INOPERABLE for more than 7 days.

c. The revision relaxes the following current requirements:

1. Monthly flowpath verification of the Post Accident Sampling System is deleted.



2. Refueling Water Storage Tank level instruments have a relaxed CHANNEL CHECK from weekly to monthly intervals.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a.1 and 2.a.2 are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations and controls by including the Reactor Coolant Pressure, Reactor Coolant Hot Leg Temperature, Reactor Coolant Cold Leg Temperature, Refueling Water Storage Tank Level and Neutron Flux Backup NIS (wide range), and decrease the reporting time limit.
- 3) The proposed change to relax the requirement for verification of the PASS Flow Paths does not involve a significant hazards consideration because this change would not:



- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The requirement of PASS flowpath verification is deleted as it is covered in proposed Technical Specification 6.8 that specifies a program be established for PASS. The PASS program ensures the capability to obtain and analyze the reactor coolant, radioactive iodines and particulates in the plant gaseous effluents, and containment atmosphere samples under accident conditions. The program also includes training of personnel, procedures for sampling and analysis equipment. The proposed changes are consistent with industry practice and the Standard Technical Specifications.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the PASS System functionally is assured by the program and procedural requirements of Specification 6.8.
- 4) The proposed change to relax the SURVEILLANCE REQUIREMENTS for the RWST level instrument channel check from weekly to monthly in MODES 1, 2, and 3 does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The RWST level channel check relaxation is justified because of the standby status of these components. Further, the weekly surveillance of the RWST liquid volume itself (as required by Technical Specification 3/4.1.2.5) serves as a channel check because the most probable channel failures result in instrument readings pegged at the upper or lower range limit of the instrument. Either of these readings would be a change from the expected reading and would alert the operator of a potential instrument problem. In addition, both high and low RWST level alarm annunciators are available to alert the operator of an abnormal level condition.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety. The relaxation of the RWST level instrument check surveillance will not significantly reduce any safety margin because of other SURVEILLANCE REQUIREMENTS and the presence of RWST level high and low alarms which will annunciate an abnormal RWST level condition.

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Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.3.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FIRE DETECTION INSTRUMENTATION

NO: 3/4.3.3.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.14.1 and 4.15.1.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. An ACTION statement has been added to give direction for inoperable FIRE DETECTION INSTRUMENTATION which gives only alarm.
- c. The revision relaxes the following current requirements:
 1. Special reporting requirements on instruments inoperable greater than 14 days has been deleted.
 2. The allowable outage time (AOT) for up to one-half of the function A fire detection instruments has been increased from one (1) hour to 14 days.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

1. The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The change in item 2.b.1 is similar to example (ii) of 48 FR 14870 in that it provides additional restriction and control by including the ACTION statement for detection only instruments.
- 3) The proposed change to relax the special reporting requirements on inoperable instruments does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Expansion of the fire detection equipment and defense in depth through other plant modification has reduced the significance of the individual fire detector in the plant protection scheme.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because plant systems are not affected by the report which was for tracking the reliability of components.
- 4) The proposed change to relax the allowable outage time (AOT) for up to one-half of the function A fire detection instruments does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The current technical specification requirements for one-hour response was initiated prior to implementation of the Appendix R program at Turkey Point. The Appendix R design redundancy precludes severe consequences due to loss of a limited number of detection-only devices. In addition, the 14 day AOT is consistent with the STS requirements.



- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the compliance of the plant to Appendix R requirements ensures adequate redundancy of fire detection instrumentation.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.3.3.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTS

NO: 3/4.3.3.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.1.C, Tables 3.9-2 and 4.1-3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.3.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

NO: 3/4.3.3.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.2.C, Tables 3.9-3, 3.9-4, and 4.1-4.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. During condenser air ejector flow rate and sampler flow rate monitoring instrumentation inoperability, the revision requires that flow estimation be performed once per 4 hours. The current Technical Specification requires flow estimation once per 8 hours.
2. During plant vent or spent fuel vent sampler flow rate monitoring instrumentation inoperability, the revision requires that flow estimation be performed once per 4 hours. The current Technical Specification requires flow estimation once per 8 hours.
3. The revision requires that gas decay tank explosive gas monitoring instrumentation be calibrated using one volume percent hydrogen; four volume percent hydrogen; one volume percent oxygen; and four volume percent oxygen (all balance nitrogen). The current Technical Specification requires calibration using one volume percent oxygen; and four volume percent oxygen (balance nitrogen).
4. CHANNEL CALIBRATION of the Plant Vent Noble Gas Activity Monitor for both units is required every refueling interval in the current Technical Specifications and every 18 months in the revision.
5. A monthly SOURCE CHECK has been added for the Noble Gas Activity Monitor for both units.



6. Requirements for the Gas Decay Tank System - Noble Gas Activity Monitor and Effluent System Flow Rate Measuring Device have been added.
7. Requirements for the Plant Vent System - Effluent System Flow Rate Measuring Device have been added.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide more restrictions and limitations by reducing the time between grab samples from 8 to 4 hours for air ejector flow rate estimates and plant vent samples flow rate estimates.
- 3) The proposed change as described in Item 2.b.3 is similar to example (ii) of 48 FR 14870 in that it provides additional controls by requiring two additional concentrations of hydrogen or oxygen when calibrating the waste gas decay tank explosive gas monitor.
- 4) The proposed change described in Item 2.b.4 is similar to example (ii) of 48 FR 14870 in that it changes the CHANNEL CALIBRATION of the plant vent Noble Gas Activity Monitor from every refueling to 18 months. This restriction will increase the frequency of the calibration and creates a specific time limit rather than a varying refueling schedule.

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- 5) The proposed change as described in Items 2.b.5 is similar to example (ii) of 48 FR 14870 in that it adds a monthly SOURCE CHECK for the Plant Vent System - Noble Gas Activity Monitor.
- 6) The proposed changes as described in Items 2.b.6 and 2.b.7 are similar to example (ii) of 48 FR 14870. They add requirements for the Noble Gas Activity Monitor and the Effluent System Flow Rate Measuring Device.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.3.3.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT LOOPS AND COOLANT CIRCULATION - STARTUP AND POWER OPERATION

NO: 3/4.4.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.1.a.1, 3.1.1.a.3, 3.1.1.a.4, 3.4.1c and Table 4.1-2 Item 18.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

All coolant loops are required to be operating in startup and during power operation.

c. The revision relaxes the following current requirement:

The allowed outage time for a REACTOR COOLANT LOOP in MODE 1 is relaxed from one hour to six hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences or 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications; for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides added restrictions on the required number of operating RCS loops in MODES 1 and 2.
- 3) The proposed change to relax the allowed outage time for a REACTOR COOLANT LOOP from one to six hours, does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

Relaxing the time limit to be in HOT STANDBY from one to six hours will allow the plant additional time to restore the loop or perform a normal shutdown. Increasing this ACTION statement time limit will have a minimal impact on a previously evaluated accident because the ACTION statement only applies in the unlikely event of a single RCS loop being lost during MODE 1 or 2. With power above the P-8 interlock setpoint of 45% the loss of a loop will result in an automatic reactor trip. With power below the P-8 setpoint, a second plant accident transient during the time interval of the ACTION statement is unlikely. The Reactor Trip System continues to monitor plant conditions during the ACTION time interval and trip functions such as overtemperature delta-T, or loss of flow are available to provide protection during the ACTION time interval. Finally, adopting the proposed ACTION time has the potential benefit of reducing the number of reactor trip transients imposed on the plant.

The proposed allowed outage time limit of six hours is consistent with industry practice in that it is the allowed outage time limit in the Standard Technical Specifications.

These considerations demonstrate that the proposed six hour allowed outage time limit will not significantly increase the probability of or consequences of any previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety because of the extremely unlikely combination of events that are required to occur before the allowed outage time relaxation can impact the plant safety margin. These events include: the loss of one RCS pump while the remaining two pumps continue to operate, a core power level below the P-8 interlock setpoint operate, a core power level below the P-8 interlock setpoint (45%) and a second accident transient that occurs within the six hour allowed outage time which is not mitigated by the reactor trip system.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT LOOPS AND COOLANT CIRCULATION - HOT STANDBY

NO: 3/4.4.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.1.1.a.2, 3.4.1.d, and Table 4.1-2, Item 18.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

More coolant loops are required to be operating in a shutdown MODE if the scram breakers are closed.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences or 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications; for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides added restrictions on the required number of operating RCS loops in MODE 3 if the reactor trip system breakers are closed.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT LOOPS AND COOLANT CIRCULATION - HOT SHUTDOWN

NO: 3/4.4.1.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 1.23, 3.1.1.a.2, 3.1.1.a.5, 3.4.1.e and Table 4.1-2, Item 18.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

With less than the required number of loops operable, additional restrictions are placed on operation if the remaining operable loop is an RHR loop.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the technical specifications, correction of an



error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that added restrictions and controls are placed on MODE 3 operation by requiring the plant to be in COLD SHUTDOWN within 24 hours if only one loop is operable and that loop is an RHR loop.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.1.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT LOOPS AND COOLANT CIRCULATION -
COLD SHUTDOWN - LOOPS FILLED

NO: 3/4.4.1.4.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.1.a.2, 3.1.1.a.5, 3.4.1.e and Table 4.1-2 Item 18.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

The LCO provided applies to MODE 5 with the RCS loops filled. In this specification the operating COOLANT LOOP must be an RHR loop. Current requirements allow an RCS or RHR loop to be the required coolant loop.

c. The revision relaxes the following current requirements:

1. The current Technical Specification which requires an OPERABLE REACTOR COOLANT PUMP and a steam generator secondary water level of 10% or more when an RCS loop is used for decay heat dissipation is replaced with the requirement that the RCS loop steam generator secondary water level be above 10% in two steam generators.
2. The current Technical Specification requires that the OPERABLE Coolant Loop be tested once every 7 days to ensure operability. The revision will eliminate the requirement for this additional testing.
3. The footnote on the OPERABLE RHR loop allows the loop to be inoperable for up to 2 hours for surveillance testing provided the other RHR loop is OPERABLE.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications; for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that the more restrictive requirement, that the operating coolant loop be an RHR loop and that both OPERABLE coolant loops be RHR loops if the RCS loops are not full, is included.
- 3) The proposed changes described in A.2.c do not involve a significant hazards consideration because these changes would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The Standard Technical Specification allows use of a steam generator for backup residual heat removal. It has been shown generically by the core designer that with some inventory in the secondary side of the steam generator natural circulation will develop and a steam generator with the prescribed secondary water level can be used to dissipate decay heat in place of an RHR loop. However, the proposed Technical Specification only uses the steam generator as a backup heat sink to the required operating RHR loop.

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Using steam generator instead of an operable RCS loop as the backup heat sink to the operating RHR loop has no impact on any previously evaluated accident because the steam generator can effectively dissipate decay heat without the reactor coolant pump running. In addition, the proposed Technical Specification ACTION requirement, in the event that the RHR loop is lost, is to take immediate corrective ACTION to restore the RHR loop.

Eliminating the requirement to verify the operability of the second coolant loop every 7 days does not relax the requirements for operability. In the revised technical specifications, testing of all Class 1, 2, and 3 components in accordance with Section XI of the ASME code is required. In addition, the capability of the loop to perform its functions is still ensured because of the definition of the word OPERABLE. Therefore, any action by the plant which would make the RHR pump inoperable would result in entering the LCO action restriction. If the RHR loop that is not in operation becomes inoperable, ACTION A requires immediate action to restore the loop to operable status.

Allowing the standby RHR loop to be inoperable for surveillance testing would cause only one loop to be OPERABLE for the 2-hour period of time allowed for performing the tests. The potential exists that the remaining RHR pump could be de-energized for 1 hour (as allowed by another footnote) or that it would otherwise become inoperable, resulting in having no operating loop for the specified time period. This does not represent a significant increase in risk because the RCS thermal capacity, in conjunction with the requirement to keep core outlet temperature at least 10°F below saturation temperature, and procedures to mitigate the event, is sufficient to maintain the RCS temperature rise within acceptance limits during the time the RHR loop being surveilled is restored to its OPERABLE state.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed changes introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the above relaxations have been determined to have no impact on any previously evaluated accident.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.1.4.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT LOOPS AND COOLANT CIRCULATION -
COLD SHUTDOWN - LOOP NOT FILLED

NO: 3/4.4.1.4.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.1.1.a.2, 3.4.1.e and Table 4.1-2, Item 18.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The LCO provided applies to MODE-5 with the RCS loops not filled. The operating COOLANT LOOP must be an RHR loop. Current requirements allow an RCS or RHR loop to be the required coolant loop and do not explicitly address an unfilled RCS loop condition.

c. The revision relaxes the following current requirements:

1. The current Technical Specification requires that the OPERABLE Coolant Loop be tested once every 7 days to ensure operability. The revision will eliminate the requirement for this additional testing.
2. The footnote on the OPERABLE RHR loop allows the loop to be inoperable for up to 2 hours for surveillance testing provided the other RHR loop is OPERABLE.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

1. The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b are similar to example (ii) of 48 FR 14870 in that the more restrictive requirement that the operating coolant loop be an RHR loop and that both OPERABLE coolant loops be RHR loops if the RCS loops are not full is included.
- 3) The proposed changes as outlined in Item A.2.c do not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

Eliminating the requirement to verify the operability of the second RHR loop every 7 days does not relax the requirements for operability. In the revised technical specifications, testing of all Class 1, 2 and 3 components in accordance with section XI of the ASME code is required. In addition, the capability of the loop to perform its functions is still ensured because of the definition of the word OPERABLE. Therefore, any action by the plant which would make the RHR pump inoperable would result in entering the LCO action restriction. If the RHR loop that is not in operation becomes inoperable, ACTION A requires immediate action to restore the loop to operable status.

Allowing the standby RHR loop to be inoperable for surveillance testing would cause only one loop to be OPERABLE for the 2-hour period of time allowed for performing the tests. The potential exists that the remaining RHR pump could be de-energized for 1 hour (as allowed by another footnote) or that it would otherwise become inoperable, resulting in having no operating loop for the specified time period. This does not represent a significant increase in risk because the RCS thermal capacity, in conjunction with the requirements to keep core outlet temperature at least 10°F below saturation temperature, and procedures to mitigate the event, is sufficient to maintain the

RCS temperature rise within acceptable limits during this time period, while the RHR loop being surveilled is restored to its OPERABLE state.

- b. Create the possibility of a new or different kind of accident because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in the margin of safety because the above relaxation has been determined to have no impact on any previously evaluated accident.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.4.1.4.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SAFETY VALVES - SHUTDOWN

NO: 3/4.4.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.1.c.1, Table 4.1-2 Item 6 and B3.1.1.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO has the SAFETY VALVE setpoint and tolerance added.

2. The applicable modes have been defined more clearly.

3. An ACTION statement has been added which is more appropriate for the mode of plant operation covered by the specification.

4. The proposed revision references the SAFETY VALVE testing to the requirement of the ASME Section XI in Specification 4.0.5.

c. The revision is less restrictive than the current Technical Specification as follows:

1. The ACTION statement was modified so that an operable code safety valve is not required if the RCS is vented through an equivalent size vent pathway.

2. The requirement to test all safety valves every refueling outage has been revised to reference ASME Section XI. The ASME code requires that a fraction of the safety valves be tested every refueling outage. The current Technical Specification tests all valves each refueling.

3. MODE 6 operability of safety valves is not required in the proposed Technical Specifications. Current Technical Specifications require that one valve be operable whenever the head is on the reactor vessel.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3 and 2.b.4 are similar to example (ii) of 48 FR 14870 in that they provide additional limitation and control by adding the required Safety Valve Setpoint to the LCO and the applicable modes are more clearly defined. Also included is an ACTION statement appropriately worded for the SHUTDOWN mode and the reference of the SURVEILLANCE REQUIREMENT to Specification 4.0.5.
- 3) The proposed change as described in 2.c.1 to allow the RCS to be vented to containment rather than maintaining an operable code safety valve does not involve a significant hazards consideration because this change will not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The RCS code safety valves can not effectively mitigate cold overpressure accident transients because their setpoint is significantly above the cold RCS pressure limit. Hence, this class of accident is typically mitigated by the pressurizer PORVs with a reduced pressure setting. The analysis of cold overpressure accidents on Turkey Point has shown that an equivalent vent will also provide accident mitigation. Therefore, adding this option to the mode 5 code safety valve LCO will only include the same overpressure protection option in the code safety valve LCO that is already included in the PORV LCO.

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- b. Create the possibility of a new or different kind of accident because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in the margin of safety. The ability to prevent RCS overpressurization is not decreased, so the required margin of safety is not reduced.
- 4) The proposed change as outlined in Item C.2. above does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The current requirement to test all safety valves every refueling outage is unnecessarily conservative. The revision to test a fraction of the safety valves per the ASME Code provides an adequate verification of the operability of that portion of the Reactor Coolant System. Also, unsatisfactory results from the test sample requires testing of additional valves in order to ensure that any widespread problem is identified and corrected. The revised requirement is consistent with the Standard Technical Specifications and with industry practice.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the testing of a representative sample of the safety valves is sufficient to ensure the operability of the valves.
- 5) The proposed change as outlined in Item 2.c.3 above does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

Overpressure mitigation for MODE 6 is covered in proposed Technical Specification 3.4.9.3 which requires either two PORVs set at 415 ± 15 psig or RCS depressurized with an RCS vent ≥ 2.20 square inches in MODES 4, 5, and 6 with the reactor vessel head on. Also, the definition of MODE 6 requires $K_{eff} \leq 0.95$, 0% RTP, average coolant temperature ≤ 140 , and the vessel head closure bolts less than fully tensioned. In order to detension the closure bolts the vessel must be depressurized to approximately atmospheric pressure. The pressurizer safety valves are set to 2485 psig $\pm 1\%$ per proposed Technical Specification 3.4.2.1. The PORVs or vent would relieve a pressure spike long before the safety valve limit was reached. Also without the head fully tensioned the RCS would not be sealed and probably not hold significant pressure.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because overpressure mitigation is covered in proposed Technical Specification 3.4.9.3 for MODE 6. The PORV or vent is the means of relieving an overpressure event in MODE 6, not the safety valve set at 2485 psig $\pm 1\%$.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SAFETY VALVES - OPERATING

NO: 3/4.4.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.1.c.2, Table 4.1-2 Item 6 and B3.1.1.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The LCO has the SAFETY VALVE setpoint and tolerance added.
 2. An ACTION statement has been added to give the time allowed to make an inoperable valve operable 15 minutes.
 3. The proposed revision references Specification 4.0.5 for SAFETY VALVE testing.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional limitation and controls by adding the required Safety Valve Setpoint to the LCO, revising the ACTION statement to include the time to restore an inoperable safety valve and the reference of Specification 4.0.5 for the SURVEILLANCE REQUIREMENTS.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PRESSURIZER

NO: 3/4.4.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.1.d.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The LCO has included a maximum water level and increased the number of heater groups from one to two.
 2. An ACTION statement has been added.
 3. The following surveillance requirements have been added:
 - a) A surveillance requiring 12 hour checks of PRESSURIZER level,
 - b) A surveillance to measure heater group input power every 92 days and
 - c) A surveillance that verifies the pressurizer emergency power source once per refueling.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional limitation, restrictions and controls by including PRESSURIZER level limit to the LCO, ACTION statement requiring shutdown when the PRESSURIZER is inoperable and adding surveillances for PRESSURIZER level, heater input power and emergency power sources.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PORV BLOCK VALVES

NO: 3/4.4.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.1.e.1, 3.1.1.e.2 and 3.1.1.e.3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:

The revised Technical Specification requires that the PORV Block Valve be demonstrated OPERABLE at least once per 92 days by operating the valve through one complete cycle and observing valve position indication. The current Technical Specification does not specify valve cycling.

3) The revision relaxes the following current requirements:

- a. The PORVs have been deleted from the specification.
- b. The block valve MODE reduction in the ACTION has been relaxed from MODE 5 to MODE 4 in order to be consistent with the APPLICABILITY (MODES 1-3).

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restriction by requiring the PORV block valve be demonstrated operable by cycling the valve and verifying the position indication every 92 days.
- 3) The proposed change as outlined in Item c.1 above does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The Steam Generator tube rupture accident does require a means to depressurize to Reactor Coolant System to reduce coolant leakage to the secondary side of the Steam Generator. The primary means of depressurizing the primary system is by use of the normal pressurizer spray. Auxiliary pressurizer sprays can be used as a backup. While the PORV's can be used as a second backup, it is the least desirable because it tends to reduce Reactor Coolant System inventory. Reactor Coolant System overpressure protection is provided by the Pressurizer Safety Valves as addressed in Specification 3/4.4.2. No credit is taken in the safety analysis for PORV operation in MODES 1, 2, or 3. Thus the proposed specification will not increase the probability or consequences of a previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the proposed change deleting the PORV's from the specification does not involve changes in plant design, mode of operation or affect any safety analysis assumption.

4) The proposed change as outlined in Item c.2 above does not involve a significant hazards consideration because this change would not:

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

The MODE APPLICABILITY for the block valves is unchanged, and the relaxation still requires reducing modes below the requirement. This satisfies safety analysis assumptions regarding RCS integrity.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the function of the block valves is required in MODES 1-3 per the APPLICABILITY of the LCO, and operability in these modes is not affected.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: STEAM GENERATORS

NO: 3/4.4.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 4.2.5.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. An ACTION statement has been added.
 2. The inspection criteria and SURVEILLANCE REQUIREMENT tables have been converted to match the Inservice Inspection Program.
 3. The requirement for entry from the hot leg side of the steam generator to the first support of the cold leg has been modified to allow concurrent inspection from both hot and cold legs as long as inspection from the cold leg side goes completely around the tube to the tube sheet on the hot leg side.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restriction and controls by adding an ACTION statement and by more clearly stating the STEAM GENERATOR inspection criteria and SURVEILLANCE REQUIREMENTS. The tube inspection from the cold leg side provides operational convenience, but requires inspection of the entire tube.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: LEAKAGE DETECTION SYSTEMS

NO: 3/4.4.6.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.1.3.f and B3.1.3, and Table 4.1-1, Item 20.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The applicability of the LCO for LEAKAGE DETECTION SYSTEMS has been expanded from greater than 2 percent power to MODES 1, 2, 3, and 4.
 2. The proposed ACTION statement is more specific and appropriately worded for the two detection systems. The proposed revision requires eventual shutdown of the plant but provides alternative methods for monitoring while awaiting repair.
 3. Specific SURVEILLANCE REQUIREMENTS have been added for both gaseous and particulate radiation detection as well as the sump level system. The sump level channel is required to be calibrated every 18 months rather than each refueling.
- c. The revision relaxes the requirement to allow the radioactive monitoring system to be inoperable from 48 hours to 7 days and reduces the number of systems required to be operable during this time from two to one.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations by expanding the applicability from greater than 2 percent power to MODES 1, 2, 3, and 4 expanding the ACTION statement to cover three detection systems, and changing the sump level channel calibration interval from refueling to 18 months. Additional controls have been added by including specific SURVEILLANCE REQUIREMENTS for all three of the LEAKAGE DETECTION SYSTEMS.
- 3) The proposed change to relax the current requirements identified in 2c does not involve a significant hazards consideration because these changes will not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The design of the Turkey Point Units 3 and 4 radioactive particulate and gaseous air monitors is such that samples are drawn from a single containment penetration through common valves and equipment. The failure of a common component such as the pump unit or valve would cause both the particulate and gaseous detection systems to be inoperable until repairs were made.

The current technical specification allows 48 hours to troubleshoot the problem, make repairs, recalibrate the system and place it back into operation provided two other systems are operable and containment purge valves are maintained closed. Plant experience has indicated that the 48 hour repair time is not sufficient.

The proposed revision would allow both the gaseous and particulate systems to be inoperable for 7 days. This change would not cause a significant increase in the probability of or consequence of an accident previously evaluated because the revised technical specification would require that during the period the instruments are inoperable the following explicit requirements be implemented:

- 1) The reactor cavity sump level monitoring system be operable,
- 2) Grab samples be obtained and analyzed at least once per 24 hours, and
- 3) A reactor coolant system water inventory balance be performed at least once per 8 hours during steady state operation, except when operating in the shutdown cooling mode.
- 4) Containment purge exhaust and instrument air bleed valves are maintained closed.

The proposed change is consistent with industry practice in that other plants have similar technical specification requirements.

- b. Create the possibility of a new or different kind of accident because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant margin of safety. As discussed in 3a above the proposed revision requires that specific actions be taken to monitor potential leakage while the radioactive detection systems are inoperable. These actions are not specified in the current technical specifications. These new actions would increase the margin of safety during the time period that the radioactive detection systems were inoperable.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.6.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: OPERATIONAL LEAKAGE

NO: 3/4.4.6.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.1.3a, b, c, d, e and g, 3.16, 4.17 and Table 4.1-2 Item 11.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The proposed revision requires that with any pressure boundary leakage, the unit be placed in HOT STANDBY within 6 hours and in COLD SHUTDOWN within following 30 hours. The current Technical Specification states that if system boundary cannot be isolated the reactor be shutdown and cooldown initiated within 24 hours.

2. The proposed revision requires that any leakage greater than the stated LCO limits, excluding Pressure Boundary Leakage and Reactor Coolant System Pressure Isolation Valves, be reduced to within the LCO limit within 4 hours or the unit be shutdown. For Reactor Coolant System Pressure Isolation Valves the leakage is to be reduced to within 1 hour or the unit is to be shutdown.

The current Technical Specification requires that any leakage be investigated and evaluation initiated within 4 hours, (except for isolation valves) and if the leakage is proven real, reactor SHUTDOWN be initiated within 24 hours. For isolation valves the current Technical Specification requires restoration within the limit in 6 hours prior to SHUTDOWN action.

3. The proposed revision requires that the Leakage Detection Systems be monitored once per 12 hours. The current specification requires daily evaluation.

4. The proposed revision includes both Residual Heat Removal System Pump suction valves (MOV 750 and MOV 751) in the Pressure Isolation Valve list consistent with IST submittal letter L 85 204.

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5. The proposed revision defines flow to RCP seals as CONTROLLED LEAKAGE in the Definition section. The current Technical Specification allows up to 30 gpm leakage, some of which would be considered part of IDENTIFIED LEAKAGE in the proposed revision.

c. The revision relaxes the following current requirements:

1. The proposed revision requires that the Reactor Coolant System Leakage be determined every 24 hours only if during steady state operation.
2. The proposed revision requires daily surveillance leak testing on other valves in the same line as the valve which exceeds its allowed limit. The current Technical Specification requires all valves, listed in Table 3.16-1 to be checked for leakage when any one of them exceeds the allowed leakage limit. Manual valves inside containment are excluded from this daily surveillance.
3. The current Technical Specification states the valve leak testing is applicable in Modes 1 thru 6. The proposed revision described the leak testing and limits to be applicable in Modes 1 thru 4.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.



- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4, and 2.b.5 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by including shorter times before initiating a plant shutdown if leakage exceeds the established limits, additional and more restrictive surveillance requirements, a more frequent evaluation of plant leakage, and additional limitations and leakage.
- 3) The proposed change as described in Item 2.c.1 to not perform the RCS water inventory balance when the plant is in a transient does not involve a significant hazards consideration because this change will not:

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

Performing a RCS water balance during transient conditions represents a situation where there is an increased likelihood of getting erroneous measurements. This could result in entering an ACTION statement restriction due to apparent RCS leakage when in fact the apparent RCS leakage was simply due to measurement error.

Because there is a low probability that the plant will not be in steady state, the chance of not performing the water balance daily is minimal. Also, the Technical Specifications require that the time between tests not exceed 48 hours, so there is a limited time period between tests.

- b. Create the possibility of a new or different kind of accident because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in margin of safety because of the extremely unlikely combination of events that are required to occur before a RCS leakage would not be identified because of plant transient conditions.
- 4) The proposed changes as described in Item 2.c.2 to apply the daily surveillance leak testing to only valves in the same line as that valve which exceeds the specified leakage limit and to exclude manual valves inside containment do not involve a significant hazards consideration because this change will not:

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

The small amount of leakage shown on the limits table results from valve wear and valve seating and are not reflective of the structural integrity of the valve as part of the Reactor Coolant System pressure boundary. This statement is consistent with I&E Bulletin on this subject. Structural integrity is assured through ASME Section XI In-Service Testing.



The manual valves in containment in the same line as the valve which exceeds the specified leakage limit are excluded from the daily surveillance requirement. This is considered to be justified because it is prudent to limit the frequency of containment access during MODES 1 through 4. The containment is a highly controlled area during this time and there is normally no possibility that a containment manual valve position can be changed without the knowledge and approval of the plant operators.

- b. Create the possibility of a new or different kind of accident because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in margin of safety.

The daily testing of the valves in the affected line provides assurance of their continued leakage barrier function. The function of the valves in the other lines are not affected by the valve leakage in the affected line and there is no effect on their margin of safety.

- 5) The proposed change as described in Item 2.c.3 to apply the leak test limits to operation modes 1 through 4 does not involve a significant hazards consideration because the change will not:

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

The small amounts of allowed leakage provide a demonstration of valve isolation tightness and are not a demonstration of valve integrity. The lack of leak testing in modes 5 and 6 does not increase the probability of a LOCA or the consequences of a LOCA as such an accident is not postulated in modes 5 and 6 operation.

- b. Create the possibility of a new or different kind of accident because the proposed change does not introduce a new mode of plant operation or a physical modification to the plant.
- c. Involve a significant reduction in the margin of safety because of the low probability of a LOCA in modes 5 and 6 operation.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.6.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT SYSTEM - CHEMISTRY

NO: 3/4.4.7

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.5 and Table 4.1-2 Item 1b.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1) The proposed revision restates the ACTION statement to separate the 24 hours of corrective action into mode related statements.

2) The proposed revision requires that at other times (other than Modes 1, 2, 3, and 4) if the steady state limit is exceeded for more than 24 hours or the transient limit is exceeded, pressurizer pressure be reduced to less than or equal to 500 psig, if applicable, and an engineering evaluation be performed. The current Technical Specification requires that the unit be placed in cold shutdown and corrective action be taken.

c. The revision relaxes the following current requirement:

The Chloride and Fluoride Chemistry Limits are not required when the reactor is defueled and RCS forced circulation is unavailable.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specification and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by including mode related ACTION statement and requiring reduction of plant operating pressure and an engineering evaluation if CHEMISTRY LIMITS are exceeded in MODES other than 1, 2, 3 or 4.
- 3) The proposed change as outlined in Item c. above to remove the requirement when the reactor is defueled and RCS forced circulation is no longer available does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The purpose of the proposed change is to recognize an existing plant limitation in that it is not possible to take a representative sample in this condition. This is consistent with FPL/NRC discussions on this subject. Also, in the defueled condition, temperature effects which increase the severity of high fluoride/chloride levels are minimized. Since the proposed requirement only recognizes an existing plant limitation and provides an exemption to a requirement which in fact is impossible to comply with, the proposed applicability statement will not significantly increase the probability of or consequences of an accident previously evaluated.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the proposed change in applicability does not involve changes in plant design, mode of operation or affect any safety analysis assumption.



Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.7 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT SYSTEM - SPECIFIC ACTIVITY

NO: 3/4.4.8

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.4, B3.1.4 and Table 4.1-2 Item 1.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The proposed revision specifically states the modes in which sample and analysis are required.
 2. The proposed revision requires that gross radioactivity be determined at least once per 72 hours. The current requirement is for Gross Beta, and Gamma determination and allows 3 days time between samples. The revision is equivalent as specification 4.0.2 allows a grace period consistent with the Current Technical Specifications.
- c. The revision relaxes the following current requirements:
 1. The revision removes the current accumulative time reporting requirement for the iodine activity limit. The change is consistent with Generic Letter No. 85-19, 9/27/85.
 2. The revision requires gross radioactivity determination every 72 hours. The current Technical Specifications require the determination 5 times per week, with not more than 72 hours between samples.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement. Example (vii) relates to a change to make a license conform to changes in regulations where the license change results in very minor changes to facility operation clearly in keeping with regulations.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by including the specific modes for sample analysis every 72 hours.
- 3) The proposed change as outlined in Item 2.c.1 above does not involve a significant hazards consideration because this change would not:

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

The quality of nuclear fuel has been greatly improved over the past decade with the result that normal coolant iodine activity is well below the limit. Generic Letter 85-19 concludes that appropriate actions would be initiated long before accumulating 800 hours above the iodine activity limit. In addition, 10 CFR, 50.72 (b)(1)(ii) requires the NRC to be immediately notified of fuel cladding failures that exceed expected values or that are caused by unexpected factors. Also proposed Technical Specification 6.9.1.2 requires reporting the time duration when specific activity exceeds 1.0 microcurie per gram DOSE EQUIVALENT I-131 in the annual report.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because proper fuel management and existing reporting requirements should preclude ever approaching the current limit.

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- 4) The proposed change as outlined in Item 2.c.2 above does not involve a significant hazards consideration because this change would not:

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

The Gross Radioactivity Determination is performed at least once per 72 hours in both the current and proposed Technical Specifications; however, the current requirement also requires that the determination be made 5/week. Since the maximum time between surveillances has not changed the revision would not create a significant decrease in the probability of detecting a fuel leak. Also this is consistent with the Standard Technical Specifications which do include the requirement of 5/week.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

- c. Involve a significant reduction in a margin of safety because the time interval between required surveillances has not changed.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.8 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PRESSURE/TEMPERATURE LIMITS - REACTOR COOLANT SYSTEM

NO: 3/4.4.9.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.2, B3.1.2, 4.20 and B4.20.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The revision adds a requirement that during heatup, cooldown or pressure testing the RCS temperature and pressure be determined to be within the limits once per 30 minutes.

2. The revision clearly states the surveillance requirement that reactor vessel material specimens be removed and examined to determine changes in material properties as specified by 10 CFR50, Appendix H, in accordance with the schedule in Table 4.4-5.

c. The revision relaxes the following current requirements:

1. The revision deletes Figure 3.1-2.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restriction and controls by including an added surveillance requirement to determine RCS temperature and pressure compliance every 30 minutes during plant status changes plus a reactor vessel material examination schedule.
- 3) The proposed change as outlined in Item c.1 above does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

This figure is obsolete, is not referenced in any current Technical Specification and has no impact on the operation of the plant.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because this figure has no effect on the accident analysis or the normal operation of the plant.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.9.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PRESSURE/TEMPERATURE LIMITS - PRESSURIZER

NO: 3/4.4.9.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.1.2 and B3.1.2.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The revision adds a requirement that the PRESSURIZER TEMPERATURES be verified to be within the limits at least once per 30 minutes during heatup or cooldown.
 2. The revision adds a requirement that the spray water temperature differential be determined to be within the limit at least once per 12 hours during auxiliary spray operation.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by including an added surveillance requirement to verify pressurizer temperature every 30 minutes during pressurizer heatup or cooldown and to determine a required temperature differential every 12 hours if pressurizer auxiliary spray is in operation.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.9.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: OVERPRESSURE PROTECTION SYSTEM

NO: 3/4.4.9.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.15, 4.16, B3.15 and B4.15.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The revision requires that surveillance of the open PORV Isolation Valve be performed more frequently by reducing the interval from weekly to every 72 hours.
2. The revision requires the RCS vent(s) shall be verified to be open at least once per 12 hours when the vent(s) is being used for overpressure protection.
3. The revision requires that the high-head safety injection be isolated from the RCS within 4 hours.
4. The revision changes the surveillance requirement to verify specific valve positions to a requirement to verify isolation of the high pressure injection capability to the RCS.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by requiring more frequent surveillance on the PORV's and RCS vent valves when used for overpressure protection.
- 3) The proposed changes as described in Items 2.b.3 and 2.b.4 do not involve a significant hazards consideration because these changes will not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

This is essentially an administrative change rather than a relaxation. Although the valve numbers are not stated explicitly, the requirement to isolate the high-head safety injection still exists. Making this change gives flexibility to the operators to use alternate methods/valves to isolate the flow path in the event that the primary method is not available and specifies the maximum time allowed.

- b. Create the possibility of a new or different kind of accident because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the intent of the Technical Specification remains the same, only the method of implementation is allowed to change.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.9.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT SYSTEM - STRUCTURAL INTEGRITY

NO: 3/4.4.10

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 4.2 and 4.3.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The revision incorporates LCO and ACTION statements regarding structural integrity of ASME Code Class 1, 2, and 3 components. The current Technical Specification only addresses RCS pressure boundary components.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional limitation by specifying ASME 1, 2, and 3 components rather than just the Reactor Coolant System. The specification is consistent with industry practice in that the intent of the Specification is the same as that required in the Standard Technical Specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.4.10 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR COOLANT SYSTEM VENTS

NO: 3/4.4.11

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.1.1.f, 4.19, B3.1.1 and B4.19.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 2/4.4.11 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ACCUMULATORS

NO: 3/4.5.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.1.a.3, 3.4.1.b.1, 4.5.2.b.3, Table 4.1-1 Item 21 and Table 4.1-2 Item 10.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

1. The LCO applicability includes MODE 3.

2. An upper bound on boron concentration of 2350 ppm is included.

3. An upper bound on the ACCUMULATOR nitrogen cover pressure of 675 psig is included.

4. Analog channel operational tests on the level and pressure channels are included.

5. Surveillances are included to verify once per 12 hours: (1) the contained borated water volume and nitrogen cover pressure in the tanks, and (2) that the isolation valves are open.

c. The revision relaxes the following current requirements:

1. The surveillance to perform CHANNEL CHECKS on the accumulator level and pressure channels at least once per shift has been deleted.

2. The proposed revision ACTION requires reducing to MODE 3 with pressurizer pressure below 1000 psig. The current Technical Specification goes to MODE 5.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 through 2.b.5 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions in the form of MODE applicability requirements, upper bounds on the accumulator boron concentration and pressure, and more restrictive surveillances on isolation valve position and on the pressure and level instruments.
- 3) The proposed deletion of a CHANNEL CHECK of the accumulator level and pressure instrumentation does not involve a significant hazard consideration because the deletion does not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The proposed Technical Specification adds a SURVEILLANCE requirement to verify the water volume and pressure of each ACCUMULATOR once per shift. This provides the equivalent of a CHANNEL CHECK in that, consistent with STS practice, a SURVEILLANCE requirement has the implicit requirement that the instrumentation used is operating properly.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification of the plant.

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- c. Involve a significant reduction in a margin of safety because the proposed additional SURVEILLANCE requirement provides an equivalent level of assurance that the instrumentation is OPERABLE.
4. The proposed change in MODE reduction does not involve a significant hazards consideration because the change does not:

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

The proposed revision follows Standard Technical Specification format by reducing MODES to a MODE where the LCO does not apply. The accumulators are no longer needed to prevent unacceptably high peak cladding temperatures below MODE 3 with the pressurizer pressure below 1000 psig.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification of the plant.
- c. Involve a significant reduction in a margin of safety because the proposed time for reducing MODES to a condition where the accumulators are no longer required is equivalent to the current Technical Specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.5.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ECCS SUBSYSTEMS - T_{AVG} GREATER THAN OR EQUAL TO 350°F

NO: 3/4.5.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.1.a.4 thru a.7, 3.4.1.b.2, 3.4.1.b.4 thru b.7, 4.5.1, 4.5.2.a, 4.5.2.b.1, and b.2, 4.5.2.b.4, and Table 4.18-1 Items 1 and 2.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

1. The applicability is more restrictive than the current Technical Specification because it includes MODE 3.
2. The revision requires verification that the ECCS piping is full of water, each valve is in its correct position, and the containment is free of loose debris.
3. In the event that the outage time limit allowed by the ACTION statement is exceeded the revised Technical Specification requires a MODE reduction within 12 hours versus 48 hours allowed by the current Technical Specifications for the Mode reduction.
4. The revision requires verification of interlocks which prevent inadvertent pressurization of the RWST from the RHR System.
5. The revision requires visual inspections of the containment sump to verify that the sump suction inlets are not restricted by debris, and visual inspections of containment to verify that no loose debris is present which could be transported to the containment sump during LOCA conditions.
6. The revision requires surveillance to verify that the ECCS throttle valves are at the correct position stops.



c. The revision relaxes the following current requirement:

1. The ACTION statement requirement that inoperable equipment be returned to OPERABLE status within 24 hours has been relaxed to 72 hours.
2. The requirement to cycle the Boron Injection Tank Outlet Valves, Containment Sump Recirculation Valves and RWST Outlet Valves has been relaxed from once every 30 days to the period consistent with the requirements of the inservice inspection programs provided in Technical Specification 4.0.5.
3. The requirement to test the Safety Injection pumps has been relaxed from once every 30 days to the period consistent with the requirements of the inservice inspection program provided in Technical Specification 4.0.5, which is based on Section XI of the ASME Code. In addition, Section XI requires running the pumps for only 5 minutes instead of the current 15 minute requirement.
4. The current requirement to go to COLD SHUTDOWN if the LCO is not restored within the ACTION time limit is replaced with the requirement to go to HOT SHUTDOWN.
5. The surveillance requirement to demonstrate the operability of unaffected RHR and SI pumps or valves prior to initiating maintenance on an inoperable RHR pump, two inoperable SI pumps, or valves in duplicate flow paths has been removed.
6. The CTS requirement for surveillance testing of the RHR and the SI pumps is applicable in all operating modes. Requirements are relaxed in the RTS in that testing is required in Modes 1 through 4 for the RHR pumps and Modes 1 through 3 for the SI pumps.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 through 2.b.6 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by the added mode applicability (MODE 3), the more complete flow path surveillance which ensures proper valve lineup and the absence of voids in the flow path, containment sump surveillance to ensure the absence of loose debris, and verification that the ECCS throttle valves are at the correct position stops. The time allowed for a MODE reduction if the ACTION statement allowed outage time limit is exceeded is reduced from 48 hours to 12 hours. In addition, the SURVEILLANCE REQUIREMENTS require verification of interlocks which prevent inadvertent pressurization of the RWST from the RHR system.
- 3) The proposed changes in Items 2.c.1 through 2.c.5 to relax the ACTION statement allowed outage time limit, the pump and valve OPERABILITY surveillance test interval, and the MODE reduction for an LCO violation, does not involve a significant hazard consideration because these changes do not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The ACTION statement requirement that inoperable equipment be returned to OPERABLE status within 72 hours is consistent with industry practice in that it is the Standard Technical Specification requirement. The 72 hour outage time limit is discussed in a letter from Mr. V. Stello, Jr., Assistant Director for Reactor Safety, NRC to Mr. R. Vollmer, Chief, Quality Assurance Branch, RL, dated 12/75. This letter summarizes a study performed by Science Applications, Inc. (SAI) entitled "The Impact of Component Outages on ECCS Unavailability", SAI-75-550-WA, funded by the NRC. This study concluded that the increase in outage time from 24 to 72 hours has only a slight impact on the system average unreliability even if such an outage were to occur each month. (Mr. Stello went on to recommend that the PWR Standard Technical Specifications be revised to permit a single train of ECCS to be OOS for 72 hours rather than 48 hours.) The probability that a second equipment failure in the redundant ECCS equipment and a Loss of Coolant or Steam Line Rupture Accident that requires the ECCS for accident mitigation might occur within the allowed outage time limit is extremely remote. Therefore, the proposed 72 hour allowed outage time limit will not significantly increase the probability of or consequences of an accident previously evaluated.

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The current Technical Specifications require a Mode reduction to COLD SHUTDOWN if the allowed outage time limit is violated, while in MODE 1. The revised Technical Specifications require all ECCS components to be OPERABLE in MODES 1 thru 3 and a reduced subset of ECCS components to be OPERABLE in MODE 4 (HOT SHUTDOWN). The basis for this change is the reduced probability of a LOCA or Steam Line Rupture accident in MODE 4 and because of the reduced severity of either one of these accidents if initiated from MODE 4.

The revised requirements, by including a MODE 4 ECCS LCO are more flexible than the current requirements which can force a Mode reduction to COLD SHUTDOWN. Because the RHR pump and heat exchanger are common to the RHR and ECCS Subsystems, a forced Mode reduction to COLD SHUTDOWN may require using the RHR System when parts of it are inoperable. Therefore, the more flexible proposed requirements may avoid forcing RHR System operation with an inoperable RHR component.

Because the proposed requirements ensure ECCS capability applicable to MODE 4 conditions they do not significantly increase the probability of or consequences of any previously evaluated accident. They are also consistent with industry practice in that they are the Standard Technical Specification requirements.

The requirement to cycle the Boron Injection Tank (BIT) Outlet Valve, Containment Sump Recirculation Valves and the RWST Outlet Valves has been shifted from this Technical Specification to Technical Specification 4.0.5 which requires testing consistent with the inservice test program. The cycling frequency has been relaxed to:

| | |
|---------------------------|--------------------------|
| BIT Outlet Valves | - Every 3 months |
| Sump Recirculation Valves | - Every COLD SHUTDOWN |
| RWST Outlet Valves | - Every Refueling Outage |

Cycling the BIT Outlet Valves every 3 months is acceptable based on the standby status of the system and the Plant's prior experience with the more frequent testing interval which has demonstrated the high reliability of these valves.

The cycling of the Sump Recirculation Valves has been relaxed to every COLD SHUTDOWN consistent with the inservice testing program. Failure of these valves during testing could result in loss of containment integrity and potential loss of the recirculation mode of safety injection.

The cycling of the RWST Outlet Valves has been relaxed to each refueling outage consistent with the inservice testing program, because the failure of either of these valves in the non-open position by testing during plant operation would result in a total loss of system function for the associated Containment Spray System and Low Pressure Safety Injection System.

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In addition the failure of the RWST Outlet Valves in the non-open position, by testing during COLD SHUTDOWN, could jeopardize the ability of the associated High Pressure Safety Injection pumps to support a LOCA on the operating unit. These valves are required by Plant Technical Specifications to be open and the breakers locked open during plant operation.

The proposed requirement relaxes the safety injection and RHR pump surveillance from monthly to the requirements of the inservice test program which is based on Section XI of the ASME Code (quarterly). In addition, Section XI requires running the pumps for only 5 minutes instead of the current 15 minute requirement. This relaxation is justified based on the high reliability of the pumps as demonstrated by the insignificant number of pump failures detected by the current monthly surveillance tests. In addition, the relaxed surveillance frequency reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the affected components. The increased running time of the current Technical Specification provides no additional test data or assurance of operability.

The proposed requirement relaxes the need to test unaffected pumps and valves in the ECCS trains prior to initiating testing on the affected component. This relaxation is justified because current surveillance tests providing adequate verification of the OPERABILITY of the unaffected components. In addition, the relaxed testing requirement reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the tested components.

In summary, the proposed surveillance intervals will not significantly increase the probability of or consequences of a previously evaluated accident because of the demonstrated high reliability of the pumps and valves based on the Plant's prior test experience. The proposed surveillance also reduces component wear and the probability of a human error during the test that reduces system availability. The proposed surveillance is also consistent with industry practice in that it is the requirement in the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification of the plant.
- c. Involve a significant reduction in a margin of safety because the proposed allowed outage time limits, and surveillance intervals will continue to ensure the OPERABILITY of the ECCS System and the MODE reduction will allow a more flexible plant response which reduces dependence on RHR components that may be inoperable.

- 4) The proposed changes in Item 2.c.6 to relax the surveillance test applicability for the RHR and the SI pumps from all modes to Modes 1 through 4 for the RHR pumps and Modes 1 through 3 for the SI pumps does not involve a significant hazard consideration because these changes do not:

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

Relaxation of the testing requirements of the SI pumps in Modes 4 through 6 does not increase the probability or consequences of an accident as the SI pumps are not required to be operable in those modes.

The testing of the RHR pumps in Modes 5 and 6 is covered by 4.0.5 and requires quarterly testing which is compatible to the testing frequency specified in the LCO for Modes 1 through 4.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change does not introduce a different mode of plant operation or a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety as the testing surveillance covers those modes where the equipment is to be operational.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.5.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ECCS SUBSYSTEM - T_{AVG} LESS THAN 350° F

NO: 3/4.5.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

There is no corresponding LCO requirement in the current Turkey Point Technical Specifications.

2) Proposed Condition of License:

- a. The amendment adds a new Technical Specification that specifies the LCO, APPLICABLE MODES, ACTION statements and SURVEILLANCE REQUIREMENTS for ECCS SUBSYSTEMS in MODE 4.
- b. The revision is more complete than the current requirements as follows:
 1. A new LCO is added which contains ECCS SUBSYSTEMS requirements applicable to MODE 4.
 2. An explicit ACTION statement is included which requires restoration of the RWST flow path within 1 hour or go to COLD SHUTDOWN.
 3. An explicit ACTION statement is included which requires, in the event of an inoperable RHR component, that the RCS average coolant temperature be maintained less than 350°F by use of alternate heat removal methods.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (1) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The changes in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide a new LCO for controlling ECCS SUBSYSTEMS in MODE 4 and ACTION statements requiring restoration of the RWST flow path, or use alternate heat removal method, if an RHR component is inoperable.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.5.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING WATER STORAGE TANK

NO: 3/4.5.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.4.1.a.1 and Table 4.1-2 Item 2.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The revision requires that the RWST water temperature be maintained between 39F and 100F. The current specification does not include this requirement.
2. The revision requires applicability in MODES 1, 2, 3, and 4. The current Technical Specification requires applicability when the reactor is critical.
3. The revision requires that RWST water temperature be verified once per 24 hours whenever the outside air temperature is less than 39F or greater than 100 F.

c. The revision relaxes the following current requirement:

For single unit operation either RWST may be used to fulfill the requirement. The current Technical Specification requires that the RWST be aligned to the operating unit, which can be interpreted to mean a specific RWST.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 thru 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by including RWST temperature limits, a temperature surveillance when the ambient temperature exceeds the RWST temperature limits and a more restrictive MODE applicability requirement.
- 3) The proposed change as outlined in Item 2.c above does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

Revised Technical Specification 3.5.2.d requires an OPERABLE flow path from whichever RWST is used as the water source. Requirements also remain for water volume, boron concentration, and temperature. The requirement is the ability to deliver the required volume of water. Which tank the volume comes from is not significant.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the requirements of the RWST can be fulfilled regardless of which RWST is used.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.5.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT INTEGRITY

NO: 3/4.6.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.3.1.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. A monthly surveillance for outside containment and COLD SHUTDOWN for inside containment has been added to verify that all non-automatic valves, blind flanges and deactivated automatic valves are in the closed position.
 2. A monthly surveillance that verifies the containment air lock is operable has been added.
 3. A surveillance requiring retest of type B penetrations after each closing to verify that maximum allowable leakage rates have not been exceeded has been added.
- c. The revision relaxes the following current requirement:

A note has been added to state that an exception may be taken to maintaining primary containment integrity, this is done under Administrative Controls to open valves and airlocks necessary to perform surveillance testing requirements and/or corrective maintenance.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional controls by added surveillance requirement of periodic valve or penetration seal condition verification, OPERABILITY compliance verification for the air lock and verification that containment penetration leak rates are maintained within specified limits.
- 3) The proposed change as outlined in Item C above does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

This exception to the primary containment integrity requirement is exercised for a limited time only and is handled under Administrative controls where personnel are available to reestablish containment integrity, if necessary.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the capability to establish containment integrity is maintained. This action is performed under Administrative Controls and can be terminated at any time.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT LEAKAGE

NO: 3/4.6.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 4.4.1, 4.4.2, and 4.4.3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. ACTION statement has been added.
 2. LCO APPLICABILITY is for MODES 1, 2, 3, AND 4. The current Technical Specification does not specify MODE APPLICABILITY.
 3. The SURVEILLANCE REQUIREMENT concerning Type A testing is added.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications; for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in Item 2.b.1 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by adding ACTION statements and a SURVEILLANCE REQUIREMENT concerning Type A Testing. The change in Item 2.b.2 is similar to example (ii) of 48 FR 14870 in that it provides additional information by including applicable plant operating MODES.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT AIR LOCKS

NO: 3/4.6.1.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.3.4 and 4.4.2.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. LCO require that air lock shall be operable with an overall air lock leakage rate of less than or equal to $0.05 L_a$ at 49.9 psig. The current Technical Specification does not specifically state leakage rate limit for air lock.
 2. The surveillance specifies that provisions of specification 4.0.2 are not applicable for periodic air lock leak rate tests. The current Technical Specification does not have this requirement.
 3. The surveillance requirement of verifying that only one door can be opened at a time in each air lock is added.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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Proposed Technical Specification No. 3/4.6.1.3

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in Item 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional information on allowable leakage rate for the airlock, additional restriction on resting intervals and additional surveillance on airlock door interlocks.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT - INTERNAL PRESSURE

NO: 3/4.6.1.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.3.2.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

A surveillance requirement has been added that requires verification of containment internal pressure once per 12 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The change in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The change in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional control by specification of the frequency that containment pressure should be verified within Technical Specification limits.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT - AIR TEMPERATURE

NO: 3/4.6.1.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not specify requirements for CONTAINMENT AIR TEMPERATURE.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

The amendment adds requirements for containment air temperature including LCO, APPLICABILITY MODES, ACTION statement, and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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Proposed Technical Specification No. 3/4.6.1.5

- 1) The changes in Item 2.a are similar to example (ii) of 48 FR 14870 in that they provide requirements to monitor a plant parameter not included in the previous Technical Specifications. Additional controls have been provided by including a new surveillance for monitoring containment average temperature.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT VESSEL STRUCTURAL INTEGRITY

NO: 3/4.6.1.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 4.4.5, 4.4.6, and 4.4.7.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. Limiting Condition for Operation is stated.
 2. ACTION statements are specified.
 3. A specific acceptance criteria of a percentage of predicted lift off force on a tendon is stated.
 4. The number of tendons sampled is increased from 9 to 12, and a random sample of tendons is inspected.
 5. A specific value for minimum tendon material tensile strength is stated.
 6. Specific tolerances on tendon lift-off force during retensioning are stated.
 7. Specific inspection criteria for sheathing filler grease quality is stated.
 8. Requirements for surveillance of tendon end anchorages and containment surfaces have been added.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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Proposed Technical Specification No. 3/4.6.1.6

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in Item 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.5, 2.b.6, 2.b.7, and 2.b.8, are similar to example (ii) of 48 FR 14870 in that they provide additional information on requirements relating to the containment vessel structural integrity.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT VENTILATION SYSTEM

NO: 3/4.6.1.7

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.3.3 and 4.4.2.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. A Limiting Condition for Operation is stated that requires OPERABILITY of the Containment purge and exhaust valves and limits valve positions.
 2. APPLICABILITY in MODES 1, 2, 3, and 4 is required.
 3. ACTION statements are added per plant design.
 4. Surveillance requirements are added that require verification of valve position.
 5. A SURVEILLANCE REQUIREMENT and ACTION statement on individual valve leakage rates are included.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in Item 2.b.1, 2.b.2, 2.b.3, 2.b.4 and 2.b.5 are similar to example (ii) of 48 FR 14870 in that they provide additional controls and requirements by including a statement for the Limiting Condition for Operation, MODE APPLICABILITY, ACTION Statements and specific surveillances on the Containment Purge and Exhaust Valves.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.1.7 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT SPRAY SYSTEM

NO: 3/4.6.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.4.2, 4.6 and Table 4.18-1 Item 4.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1) The revision requires that if inoperable equipment is not restored within the time specified in the applicable ACTION, the unit shall be placed in COLD SHUTDOWN within 36 hours. The current Technical Specification requires 48 hours.

2) The LCO applicability includes MODES 3 and 4.

3) The revision requires that with two Containment Spray Systems inoperable, at least one shall be restored within one (1) hour or be in MODE 3 within the next 6 hours, and in MODE 5 within the following 30 hours. It also requires both systems to be restored with 72 hours of the initial loss or be in MODE 3 and MODE 5 within 6 and 30 hours respectively.

c. The revision relaxes the following current requirements:

1) The current Technical Specification allows one CONTAINMENT SPRAY SYSTEM INOPERABLE for up to 24 hours in MODE 1. The proposed revision allows one CONTAINMENT SPRAY SYSTEM INOPERABLE for up to 72 hours, in MODE 1.

2) The requirement to test the Containment Spray Pumps has been relaxed from once every 30 days to the period consistent with the requirements of the inservice inspection program provided in Technical Specification 4.0.5 (quarterly) and based on Section XI of the ASME Code. In addition, Section XI requires running the pumps for only 5 minutes rather than current 15 minute requirement.

3) The surveillance requirement to demonstrate the operability of unaffected containment spray pumps or valves prior to initiating maintenance on an inoperable system has been deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2b are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by decreasing the time allowed to place the plant in COLD SHUTDOWN when operating with an inoperable CONTAINMENT SPRAY SYSTEM train, extend applicability to MODES 3 and 4, and state requirements with two Containment Spray Systems inoperable.
- 3) The proposed changes to relax the out of service time requirement and the pump OPERABILITY surveillance test interval do not involve a significant hazards consideration because these changes would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The CONTAINMENT SPRAY SYSTEM provides post accident cooling of the containment atmosphere. The proposed revision would allow an increase in the allowed out of service time for one of the two containment spray trains from 24 hours to 72 hours. This change would not have a significant impact on consequences of a previously evaluated accident because of the following considerations. The 72 hour outage time limit is discussed in a letter from Mr. V. Stello, Jr., Assistant Director for Reactor Safety, NRC to Mr. R. Vollmer, Chief, Quality Assurance Branch, RL, dated 12/75. This letter summarizes a study performed by Science Applications, Inc. (SAI) entitled "The Impact of Component Outages on ECCS Unavailability", SAI-75-550-WA, funded by the NRC. This study concluded that the increase in outage time from 24 to 72 hours has



only a slight impact on the system average unreliability even if such an outage were to occur each month. (Mr. Stello went on to recommend that the PWR Standard Technical Specifications be revised to permit a single train of ECCS to be OOS for 72 hours rather than 48 hours.) Since the containment spray system is similar to the ECCS trains, it can be concluded that their allowed outage time can also be extended to 72 hours.

An additional consideration is that the proposed revision allowing 72 hours is more restrictive than industry practice in that 7 days is allowed for an inoperable spray pump in the Standard Technical Specifications.

The proposed revision relaxes the Containment Spray Pump surveillance from monthly to the requirements of the inservice test program which is based on Section XI of the ASME Code (quarterly). In addition, Section XI requires running the pumps for only 5 minutes rather than the current 15 minute requirement. This relaxation is justified based on the high reliability of the pumps as demonstrated by the insignificant number of pump failures detected by the current monthly surveillance tests. In addition, the relaxed surveillance frequency reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test and reduces wear on the affected components. The proposed revision is consistent with industry practice in that it is the required surveillance interval in the Standard Technical Specifications.

The proposed change to delete the redundant surveillance testing requirement relaxes the need to test the unaffected containment spray pumps and valves prior to initiating testing on the affected system. This relaxation is justified because current surveillance tests provide adequate verification of the OPERABILITY of the unaffected components. In addition, the relaxed testing requirement reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the tested components. The increased running time of the current Technical Specifications provides no additional test data or assurance of operability.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because of the remote probability that containment cooling would not be provided as discussed in Item a above. In addition the revised 72 hour out of service time would adequately allow time for potential repairs and, therefore, would not place the plant in a shutdown transient condition and subsequent startup.

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The proposed revision in surveillance intervals will not involve a significant reduction in a margin of safety because of the demonstrated high reliability of the Containment Spray Pumps based on the Plant's prior test experience. The proposed surveillance also reduces component wear and the potential for human error during current more frequent testing.

The proposed deletion of redundant surveillance tests do not involve a significant reduction in a margin of safety because the change has no impact on any safety analysis assumption.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.6.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: EMERGENCY CONTAINMENT COOLING SYSTEM

NO: 3/4.6.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.2, and 4.6.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The revision requires that if inoperable equipment is not restored within the time specified in the applicable LCO the unit shall be placed in COLD SHUTDOWN within 36 hours. The current Technical Specification requires 48 hours.

2. Applicability is extended from MODES 1 and 2 to MODES 1, 2, 3 and 4.

c. The revision relaxes the following current requirements:

1. The current Technical Specification allows one CONTAINMENT COOLING unit INOPERABLE for up to 24 hours in Mode 1. The proposed revision allows one EMERGENCY CONTAINMENT COOLING unit INOPERABLE for up to 72 hours, in Mode 1.

2. A surveillance of the heat transfer capability of the emergency containment coolers under normal containment conditions is deleted.

3. The surveillance requirement to demonstrate the operability of unaffected emergency containment coolers prior to initiating maintenance on an inoperable emergency containment cooler has been removed.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by decreasing the time allowed to place the plant in COLD SHUTDOWN when operating with an inoperable EMERGENCY CONTAINMENT COOLING UNIT, and by stating APPLICABILITY in MODES 1, 2, 3, and 4.
- 3) The proposed change to relax the out-of-service time requirement for one EMERGENCY CONTAINMENT COOLING UNIT, does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The EMERGENCY CONTAINMENT COOLING SYSTEM provides post-accident cooling of the containment atmosphere. The proposed revision would allow an increase in the allowed out-of-service time for one of the three Emergency Containment Cooling Units from 24 hours to 72 hours. This change would not have a significant impact on consequences of a previously evaluated accident because of the following considerations.

The 72 hour outage time limit is discussed in a letter from Mr. V. Stello, Jr., Assistant Director for Reactor Safety, NRC to Mr. R. Vollmer, Chief, Quality Assurance Branch, RL, dated 12/75. This letter summarizes a study performed by Science Applications, Inc. (SAI) entitled, "The Impact of Component Outages on ECCS Unavailability", SAI-75-550-WA, funded by the NRC. This study concluded that the increase in outage time from 24 to 72 hours has only a slight impact on the system average unreliability even if such an outage were to occur each month. Mr. Stello went on to recommend that the PWR Standard Technical Specifications be revised to permit a single train of ECCS to be OOS for 72 hours. Since the EMERGENCY CONTAINMENT COOLING SYSTEM is similar to the ECCS, it can be concluded that their allowed outage time can also be extended to 72 hours.

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An additional consideration is that the Standard Technical Specification is less restrictive in that it allows 7 days for an inoperable Containment Cooling Unit.

Deleting the requirement to test the EMERGENCY CONTAINMENT COOLING SYSTEM heat transfer capability under normal containment conditions will not increase the probability of or consequences of a previously evaluated accident because the heat transfer characteristics of the system are fixed by the system design. Surveillances on system variables which can impact the system heat transfer capability such as cooling water flow rate are included. In addition, testing the system under normal rather than accident conditions does not permit an accurate determination of the system heat transfer capability.

Deleting the requirement to test the redundant train of the EMERGENCY CONTAINMENT COOLING SYSTEM prior to initiating maintenance on either train will not increase the probability of or consequences of a previously evaluated accident because current surveillance tests provide adequate verification of the OPERABILITY of the redundant components. In addition, the relaxed testing requirement reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the tested components.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because of the remote probability that containment cooling would not be provided as discussed in item a. above. In addition, the revised 72 hour out-of-service time would adequately allow time for potential repairs and, therefore, would not place the plant in a shutdown transient condition and subsequent startup.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.6.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: EMERGENCY CONTAINMENT FILTERING SYSTEM

NO: 3/4.6.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.3a, 3.4.3b, and 4.7.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1) The LCO applicability is required in Mode 1, 2, 3 and 4. The current Technical Specification specifies applicability when reactor is critical.

2) Laboratory analysis of the System's filters is required within 31 days after removal. The current Technical Specification allows 45 days.

3) Verification of filter cooling spray solenoid valves opening by operator action and automatically on a loss of system air flow is required once per refueling. The current Technical Specification does not specify this requirement.

4) The bases section has additional explanation.

c. The revision relaxes the following current requirement:

The surveillance requirement to demonstrate the operability of the unaffected containment filtering system prior to initiating maintenance on an inoperable system has been removed.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3 and 2.b.4 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by: specifying applicable MODES of operation; requiring laboratory analysis of the filters within 31 days after removal from the system; verifying that filter cooling spray solenoid valves open by operator action and automatically on a loss of air flow; and adding more information to the bases.
- 3) The proposed change as described in Item 2.c to delete the redundant surveillance testing requirement does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed requirement relaxes the need to test unaffected filtering system prior to initiating testing on the affected component. This relaxation is justified because current surveillance tests provide adequate verification of the OPERABILITY of the unaffected components. In addition, the relaxed testing requirement reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the tested components.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed deletion of redundant surveillance tests have no impact on any safety analysis assumption.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.6.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT SYSTEMS - CONTAINMENT ISOLATION VALVES

NO: 3/4.6.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.3.3, B.3.3.3, Table 4.1-2, Item 8, and 4.4.3

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The revision adds surveillance that requires demonstration of OPERABILITY of valves prior to returning the valve to service after maintenance.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

Proposed Technical Specification No. 3/4.6.4

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b.1, is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions by adding SURVEILLANCE REQUIREMENTS that require a demonstration of valve OPERABILITY prior to returning a valve to service after maintenance.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT SYSTEMS - HYDROGEN MONITORS

NO: 3/4.6.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Table 3.5-5 Item 12, Table 4.1-1 Item 37, Table 4.18-1 Item 11, and B4.18.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The revision requires CHANNEL CALIBRATION of the monitors on a STAGGERED TEST BASIS which is more restrictive than the current requirements.
 2. The revised Specification LCO is applicable in MODES 1 and 2 which is consistent with Standard Technical Specification. The current Technical Specification applicability does not explicitly specify LCO Mode.
 3. The revision requires CHANNEL CHECK at least once per 12 hours. The current Technical Specification specifies CHANNEL CHECK once per shift. The revision is more specific in defining the time limit in which surveillance should be performed.
- c. The revision relaxes the following current requirement:

The revised specification surveillances are applicable in MODES 1 and 2. The current Technical Specification instrumentation surveillance applicability is MODES 1 through 4. The current Technical Specification flowpath verification surveillance applicability is MODES 1 through 6.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by: requiring CHANNEL CALIBRATION of the monitors on a STAGGERED TEST BASIS; specifying applicable LCO Modes; and stating more specific surveillance intervals for CHANNEL CHECKS.
- 3) The proposed change to relax the number of surveillance Modes, does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The Hydrogen Monitors are required for detection of Hydrogen buildup within the containment following a LOCA to allow operator action to reduce the hydrogen concentration below its flammable limit. The current footnote in current Table 4.1-1 Item 37 states that surveillance requirements

would be required in revised Technical Specification MODES 1 through 4. The current Technical Specification Table 4.18-1 Item 11 states that flowpath verification requirements are required in MODES 1 through 6. The probability of a LOCA requiring hydrogen monitors while in MODES 3 or 4 is significantly less than MODES 1 and 2 because of the short time the plant spends in MODES 3 and 4. In addition, a LOCA of a magnitude that would result in significant hydrogen buildup is less likely in MODES 3 and 4 because plant parameters are not close to design limits as is the case in MODES 1 and 2. A LOCA event leading to a significant accumulation of hydrogen while in MODES 5 or 6 is not a credible event. Based on these considerations, there would not be a significant increase in the probability of or the consequences of an accident previously evaluated. Finally, the proposed revision to only include applicability in MODES 1 and 2 is consistent with industry practice and is consistent with the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification the plant.
- c. Involve a significant reduction in a margin of safety because of the short operating time the plant spends in MODES 3 and 4 and that the operating parameters in these lower MODES are further from design limits.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.6.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: POST ACCIDENT CONTAINMENT VENT SYSTEM

NO: 3/4.6.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.6, 4.7.2, and Table 4.18-1 Item 9.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The revision requires carbon analysis of the system's filter within 31 days of obtaining a sample. The current Technical Specification allows 45 days.

c. The revision relaxes the following current requirement:

The surveillance requirement to demonstrate the operability of the unaffected post accident containment vent system prior to initiating maintenance on an inoperable system has been removed.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

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1. The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions on the time required for the carbon analysis of the system's filter.
- 3) The proposed change as described in Item 2.c to delete the redundant surveillance testing requirement does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed requirement relaxes the need to test unaffected post accident containment vent system prior to initiating maintenance on the affected component. This relaxation is justified because current surveillance tests provide adequate verification of the OPERABILITY of the unaffected components. In addition, the relaxed testing requirement reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the tested components.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the proposed deletion of redundant surveillance tests has no impact on any safety analysis assumption.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.6.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: TURBINE CYCLE - SAFETY VALVES

NO: 3/4.7.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.8.1a, Table 4.1-2 Item 7 and B3.8.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The proposed revision specifies the Main Steam Line Safety Valves lift settings and orifice sizes.
 2. The proposed revision ACTION statement requires that with one or more Main Steam Line Code Safety Valves inoperable, the unit be placed in HOT STANDBY within 6 hours if the Power Range Neutron Flux High Trip Setpoint is not reduced within 4 hours. The current Technical Specification allows unit operation up to 48 hours with an inoperable Main Steam Line Code Safety Valve.
- c. The revision relaxes the following current requirements:
 1. The proposed revision allows for operation with one or more inoperable Main Steam Line Code Safety Valve(s) at a reduced power level beyond the current Technical Specification 48 hour limit.
 2. The current requirement to test all safety valves every refueling outage has been revised to reference ASME Section XI. The ASME code requires that a fraction of the safety valves be tested every refueling outage.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility

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in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, and 2.b.2, are similar to example (ii) of 48 FR 14870 in that they provide additional information by including Main Steam Line Code Safety Valves lift settings and orifice size, and additional limitations on plant operation with an inoperable Main Steam Line Code Safety Valve.
- 3) The proposed change as described in Item 2.c.1 to relax unit operation to allow reduced power operation with one or more inoperable Main Steam Line Code Safety valves, does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The operability of the main steam line Code Safety Valves ensures overpressure protection of system components during the most severe anticipated transient of turbine trip from 100% rated thermal power coincident with an assumed loss of condenser heat sink. Operation in MODES 1, 2, and 3 with inoperable safety valves is justified based on a reduction in secondary steam flow and thermal power consistent with the reduced reactor trip settings of the Power Range Neutron Flux channels. These reduced setpoints would ensure overpressure protection of system components with inoperable safety valves.

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The revised technical specification allowing operation at reduced power levels with inoperable secondary safety valves is consistent with industry practice and Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant. Operation at a reduced power level is not a new mode of operation.
 - c. Involve a significant reduction in a margin of safety because the proposed revision requires reactor thermal power level to be reduced to accommodate the reduced Power Range Neutron Flux Setpoints. This reduction of thermal power level will ensure that the required margin for steam relief capacity is always within the number of OPERABLE SAFETY VALVES.
- 4) The proposed change as outlined in Item C.2. above does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequence of an accident previously evaluated. The current requirement to test all safety valves every refueling outage is unnecessarily conservative. The revision to test a fraction of the safety valves per the ASME code provides an adequate verification of the operability of that portion of the Reactor Coolant System. Also, unsatisfactory results from the test sample requires testing of additional valves in order to ensure that any widespread problem is identified and corrected. The revised requirement is consistent with the Standard Technical Specification and with industry practice.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the testing of a representative sample of the safety valves is sufficient to ensure the operability of the valves.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PLANT SYSTEMS - AUXILIARY FEEDWATER SYSTEM

NO: 3/4.7.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.18, 4.10 and Table 4.18-1, Item 3.

2) Proposed Condition of License:

- a. The amendment consolidates the current surveillance requirements and the above referenced Proposed Licensing Amendment into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limit and SURVEILLANCE REQUIREMENTS consistent with the Standard Technical Specifications.

The footnote in the current Technical Specification that requires 600 gpm of AUXILIARY FEEDWATER flow to Unit 4 steam generators, prior to steam generator replacement, is no longer required because Unit 4 steam generators have been replaced. This change is considered administrative.

- b. The revision is more complete than the current Technical Specification as follows:

The revision requires testing the steam turbine-driven pumps and verification of the flow paths on a STAGGERED TEST BASIS, which is more restrictive than the current requirements.

The revised technical specification ACTION statement which provides an exemption from a forced MODE reduction with a degraded AFW system is tied to the operability of the standby feedwater pumps.

- c. The revision relaxes the following current requirement:

The time limits for a forced MODE reduction to HOT STANDBY in both units due to Auxiliary Feedwater System inoperability is increased from 6 hours to 12 hours.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specification, for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions and controls by requiring surveillances on a STAGGERED TEST BASIS and imposes a more restrictive requirement to exempt the plant from a forced MODE reduction.
- 3) The proposed change as outlined in Item c. above does not involve a significant hazards consideration because this change would not:

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- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The purpose of the proposed change in time allowed for a forced MODE reduction is to avoid imposing a severe transient on the Florida electrical grid due to the simultaneous loss of Turkey Point units 3 and 4. Changing the time allowed to get to HOT STANDBY to 12 hours for both units will allow for a sequential power reduction and additional time for replacement power to be aligned to the grid. Since the offsite power source is the preferred source of power to the units in the shutdown modes (with emergency diesel generators as a backup power source) the reliability of the grid is related to the successful completion of a mode reduction. This improvement in offsite grid reliability tends to offset the risk increase as a result of the increase in time to HOT STANDBY in the proposed change. Thus the proposed specification will not increase the probability or consequences of a previously evaluated accident.
- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed change in allowable time does not involve changes in plant design, mode of operation or affect any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PLANT SYSTEMS - CONDENSATE STORAGE TANKS

NO: 3/4.7.1.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specifications in Specifications 3.19, B3.19 and 4.22.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision relaxes the following current requirement.

The time limits for a forced MODE reduction to HOT STANDBY in both units, due to CST inoperability, is increased from 7 hours for the first unit and 10 hours for the second unit to 13 hours for both units.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.



- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed action statement increases the time allowed for a forced MODE reduction. This change does not involve a significant hazard consideration because this change does not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The purpose of the proposed change in time allowed for a forced MODE reduction is to avoid imposing a severe transient on the Florida electrical grid due to the simultaneous loss of Turkey Point Units 3 and 4. Changing the time allowed to get to HOT STANDBY to 13 hours for both units will allow for a sequential power reduction and additional time for replacement power to be aligned to the grid. Since the offsite power source is the preferred source of power to the units in the shut down modes (with emergency diesel generators as a backup power source) the reliability of the grid is related to the successful completion of a mode reduction. This improvement in offsite grid reliability tends to offset the risk increase as a result of the increase in time to HOT STANDBY in the proposed change. Thus the proposed specification will not significantly increase the probability or consequences of a previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in margin of safety because the proposed change has no effect on any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.1.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PLANT SYSTEMS - SPECIFIC ACTIVITY

NO: 3/4.7.1.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.8.2.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The LCO specifies that the SPECIFIC ACTIVITY of secondary coolant be maintained less than or equal to 0.10 microcuries/gram DOSE EQUIVALENT I-131. The current Technical Specification requires that I-131 activity shall not exceed 0.67 microcuries/gram.
 2. The action statement specifies plant shutdown to HOT STANDBY within 6 hours if the activity limit is exceeded. The current Technical Specification allows 48 hours for activity level reduction before shutdown action is taken.
 3. The surveillance requirements for determination of Gross Radioactivity and isotopic analysis for DOSE EQUIVALENT I-131 concentration are specified. The current Technical Specification does not specify these requirements.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations, restrictions and controls. They specify that the activity of the secondary coolant be maintained less than or equal to 0.10 microcuries/gram DOSE EQUIVALENT I-131. They add more restrictive plant shutdown requirements if activity limit is exceeded and surveillance requirements for determination of Gross Radioactivity and isotopic analysis for DOSE EQUIVALENT I-131 concentration.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.1.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PLANT SYSTEMS - MAIN STEAM LINE ISOLATION VALVES

NO: 3/4.7.1.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical specifications in Specifications 3.8.1.b, and c, 3.8.3, 4.9, and B4.9.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1) The proposed ACTION statements specify that in MODE 1 with one MSIV inoperable but open, POWER OPERATION may continue provided the inoperable valve is restored to OPERABLE status within 24 hours; otherwise, the unit shall be in HOT STANDBY within the next 6 hours, and in HOT SHUTDOWN within the following 6 hours.

2) The surveillance requirement specifies verification of MSIV operability per specification 4.0.5. The IST program requires closure time testing of these valves every COLD SHUTDOWN. The current Technical Specification specifies closure time testing once per refueling.

c. The revision relaxes the following current requirement:

In MODES 2 and 3 with one MSIV inoperable, the proposed revision allows subsequent operation provided the isolation valve is maintained closed; otherwise, the unit shall be in HOT STANDBY within the next 6 hours, and in HOT SHUTDOWN within the following 6 hours. The current requirement in MODES 2 and 3 is reduction to MODE 4 if an isolation valve is inoperable for 48 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidated the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions. The revised ACTION statement provides a more restrictive allowed operation time with an INOPERABLE MSIV. The revised SURVEILLANCE REQUIREMENT provides for a more restrictive MSIV closure time test frequency.
- 3) The proposed change to allow continued operation in MODES 2 or 3 with one MSIV inoperable provided the valve is maintained closed, does not involve a significant hazard consideration because the change does not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

With the inoperable MSIV maintained closed, the safety function of closing the valve is not needed since the valve is already closed.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification of the plant.
 - c. Involve a significant reduction in a margin of safety because the safety function of closing the valve is not needed since the valve is already closed.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.1.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PLANT SYSTEMS - STANDBY FEEDWATER SYSTEM

NO: 3/4.7.1.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical specifications in Specifications 3.20, 4.21, B3.20 and B4.21.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the Current Technical Specification because the requirement to "verify operability of the respective standby feedwater pump by powering from the non-safety grade diesel generators and providing feedwater to the steam generators" has been changed from "during each refueling outage" to "once per 18 months".

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

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- 2) The proposed change described in Item 2.b. is similar to example (ii) of 48 FR 14870 in that it provides an additional restriction by explicitly specifying the frequency of the operability verification of the pumps powered by the diesel generators. This verification frequency is changed to a specific time limit instead of being tied to a varying refueling schedule.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.1.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: COMPONENT COOLING WATER SYSTEM

NO: 3/4.7.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.4.4, Table 4.18-1 Item 6 and B3.4.4.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. A surveillance requirement is added that requires verification that two CCW heat exchangers and one pump are available and capable of removing design basis heat loads.
 2. A surveillance requirement is added that requires verification of system equipment operation on safety injection test signal.
 3. A surveillance requirement is added that requires a performance test to verify the heat exchanger surveillance curves.
- c. The revision relaxes the following current requirements.
 1. The current technical specification allows one CCW pump to be inoperable for 7 days. The revision allows one CCW pump to be inoperable for 30 days if the remaining two CCW pumps are operable from independent power supplies.
 2. The current technical specification allows two CCW pumps to be inoperable up to 24 hours. The revision allows two CCW pumps to be inoperable up to 72 hours.
 3. The current technical specification requires three CCW heat exchangers but allows one CCW heat exchanger to be inoperable up to 72 hours. The revision requires two heat exchangers to be operable but requires that the two be capable of removing design basis heat loads.

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4. The current technical specification requires valves, interlocks and piping associated with the CCW pumps and heat exchangers be operable. The revision does not explicitly state this but incorporates this philosophy into the operability determination for the required components.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by including SURVEILLANCE REQUIREMENTS that: verify that two operational heat exchangers and one operational pump are capable of removing design basis heat loads; verify safety-related equipment actuates to its correct position on a SI test signal; and verify the heat exchanger surveillance curves.
- 3) The proposed changes in item 2.c do not involve a significant hazards consideration because these changes would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

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The revision allows operation with two operable CCW pumps for 30 days provided they are powered from independent power supplies. The current technical specification allows operation with two CCW pumps for up to 7 days. The Turkey Point plant has three 100% capacity CCW pumps, two of these pumps are powered from independent power sources and the remaining pump is a standby pump normally powered from the "A" power source. The safety analysis requires one CCW pump and two heat exchangers to remove design basis heat loads. Operability of two CCW pumps from independent power supplies provides redundancy and assurance that at least one pump is operable assuming a single failure thus meeting the design intent of Section 9.2.2 of the Standard Review Plan. The requirement for a third CCW pump with a 30 day AOT provides additional assurance of pump availability.

The revision allows operation with one operable CCW pump for up to 72 hours. The current technical specification allows operation with one CCW pump for up to 24 hours. The loss of redundant equipment is extremely remote as it would require loss of offsite power, the inability of the diesel generator to power the redundant pump and third CCW pump also inoperable during the additional 48 hours. Also, the 24 hour limit for continued operation may not provide an adequate time to effect repairs and place the inoperable equipment back into service prior to placing the plant in a transient condition for achieving shutdown. In addition, the revised technical specification requirements for three CCW pumps is more conservative than current industry practices and the Standard Technical Specifications.

The revision requires that two CCW heat exchangers capable of removing design basis heat loads be in service. The current technical specification requires three heat exchangers, and allows operation with two heat exchangers for up to 72 hours. The CCW system has three heat exchangers. Two of three are capable of removing design basis heat loads. The CCW system is designed for a single active failure. Although provisions are available for isolating passive failures, a passive failure of a heat exchanger is not a postulated design basis. A surveillance program closely monitors heat exchanger performance characteristics and correlates them with intake cooling water inlet temperature and other system parameters to assure adequate system heat removal capability.

The revision removes specific reference to operability of valves, interlocks and piping associated with the ICW pump and heat exchangers. These requirements are considered to be incorporated into the operability requirements for the required components. Inoperability of any of these features would be evaluated for its impact on required equipment and the associated technical specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety. The redundant pump capacity required by the proposed specification is consistent with the current situation. The extended time to 30 days for one CCW pump to be inoperable, provided the two operable pumps are independently powered, does not impact the ability of the system to accommodate a single active failure and to remove design basis heat loads.

The extended time to 72 hours for two CCW pumps to be inoperable does not involve a significant reduction in the margin of safety because of the unlikely sequence of events that would be required during the additional 48 hours resulting in the loss of all CCW.

The design and current technical specification (BASES) requirement for two heat exchangers to remove design basis heat loads is maintained. The surveillance program provides additional assurance of heat exchangers availability and capability.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: INTAKE COOLING WATER SYSTEM

NO: 3/4.7.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.4.5, Table 4.18-1 Item 7 and B3.4.5.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The revision requires applicability in Modes 1, 2, 3, and 4. The current Technical Specification specifies applicability only for reactor criticality.
 2. A surveillance requirement is added that requires verification of system equipment operation on a safety injection test signal.
- c. The revision relaxes the following current requirements:
 1. The current technical specification allows one ICW pump to be inoperable for 24 hours. The revision allows one ICW pump to be inoperable for 7 days if the remaining two ICW pumps are operable from independent power supplies.
 2. The current technical specification requires unit shutdown if two ICW pumps are inoperable. The revision allows two ICW pumps to be inoperable up to 72 hours.
 3. The current technical specifications allows one ICW Header to be inoperable for 24 hours. The revision allows one ICW Header to be inoperable up to 72 hours.
 4. The current technical specification requires valves, interlocks and piping associated with the ICW pumps to be operable. The revision does not explicitly state this but incorporates this philosophy into the operability determination for the required components.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by: increasing the applicable Modes of operation; and verifying correct automatic valve actuation and automatic pump start on a safety injection test signal.
- 3) The proposed changes in item 2.c do not involve a significant hazards consideration because these changes would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.



The revision allows operation with two operable ICW pumps for 7 days provided they are powered from independent power supplies. The current technical specification allows operation with two ICW pumps for up to 24 hours. Turkey Point plant has three 100% capacity ICW pumps, two of these pumps are powered from independent power sources and the remaining pump is a standby pump normally powered from the "B" power source. The safety analysis requires one ICW pump to remove design basis heat loads. Operability of two ICW pumps from independent power supplies provides redundancy and assurance that at least one pump is operable assuming a single failure. The requirement for a third ICW pump with a 7 day AOT provides additional assurance of pump availability.

The revision allows operation with one operable ICW pump for up to 72 hours. The current technical specification allows operation with one ICW pump for up to 24 hours. The loss of redundant equipment is extremely remote as it would require loss of offsite power, the inability of the diesel generator to power the redundant pump and third ICW pump also inoperable during the additional 48 hour period. The revised technical specification also provides additional time which may be necessary to effect repairs and place the inoperable equipment back into service prior to placing the plant in a transient condition for achieving shutdown. In addition, the revised technical specification requirements for three ICW pumps is more conservative than current industry practices and the Standard Technical Specifications.

The revised Technical Specifications provide additional time which may be necessary to effect repairs and place the inoperable ICW Header back into service prior to placing the plant in a transient condition for achieving shutdown. The loss of redundant equipment is extremely remote as the header is essentially a passive component.

The revision removes specific reference to operability of valves, interlocks and piping associated with the ICW pump. These requirements are considered to be incorporated into the operability requirements for the required components. Inoperability of any of these features would be evaluated for its impact on required equipment and the associated technical specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety. The redundant pump capacity required by the proposed specification is consistent with the current situation. The extended time to 30 days for one ICW pump to be inoperable, provided the two operable pumps are independently powered, does not impact the ability of the system to accommodate a single active failure and to remove design basis heat loads.



The extended time to 72 hours for two ICW pumps and/or a header to be inoperable does not involve a significant reduction in the margin of safety because of the unlikely sequence of events that would be required during the additional 48 hours resulting in the loss of all ICW.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ULTIMATE HEAT SINK

NO: 3/4.7.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The Current Turkey Point Units 3 and 4 Technical Specification does not specify requirements for ULTIMATE HEAT SINK.

2) Proposed Condition of License:

- a. The revision is more complete than the Current Technical Specification as follows:

The amendment adds requirements for ULTIMATE HEAT SINK including LCO, APPLICABILITY MODES, ACTION statement, and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions by including a new technical specification for the ULTIMATE HEAT SINK.

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Proposed Technical Specification No. 3/4.7.4

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTROL ROOM EMERGENCY VENTILATION SYSTEM

NO: 3/4.7.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.7, 4.7.3, and B4.7.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current Technical Specification as follows:
 1. The revision specifies LCO applicability in all modes. The current Technical Specification specifies applicability before the reactor is made critical and provides exception during low power physics tests.
 2. The revised ACTION statement for MODES 1, 2, 3, and 4 includes suspension of all movement of fuel in the spent fuel pool, and the revised ACTION statement for MODES 5 and 6 includes suspension of core alterations or positive reactivity changes. The current Technical Specification has no similar requirements.
 3. The revision adds a SURVEILLANCE REQUIREMENT that requires verification of control room temperature.
 4. The revision requires carbon analysis of the system's filter within 31 days of obtaining a sample. Current Technical Specification allows 45 days.
- c. The surveillance requirements for the control room emergency air cleanup system have been relaxed as follows:
 1. The surveillance requirement to demonstrate the operability of unaffected valves in the CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM prior to initiating maintenance on an inoperable redundant valve has been removed.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specification.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by: specifying LCO applicability for all operational MODES; allowing less system inoperability time; adding an ACTION statement for MODES 5 and 6 and a SURVEILLANCE REQUIREMENT that verifies the control room temperature and requiring a more timely carbon analysis of the system's filter samples.
- 3) The proposed change in Item 2.c to delete the redundant surveillance testing requirement does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed requirement relaxes the need to test unaffected valves in the CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM prior to initiating maintenance on an inoperable redundant valve. This relaxation is justified because current surveillance tests provide adequate verification of the OPERABILITY of the unaffected components. In addition, the relaxed testing requirement reduces the probability of a system failure caused by human error which can be introduced at the time of the surveillance test itself and reduces wear on the tested components.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed deletion of redundant surveillance tests has no impact on any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SNUBBERS

NO: 3/4.7.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.13 and 4.14.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The amendment is more complete than the current Technical Specifications as follows:

The current Technical Specification applies to all safety related snubbers. The revised Technical Specifications apply to snubbers on nonsafety-related systems if their failure or failure of the system on which they are installed would have an adverse effect on the safety-related system.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions and limitations by adding snubbers on nonsafety-related systems if their failure or failure of the system on which they are installed would have an adverse effect on a safety-related system.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SEALED SOURCE CONTAMINATION

NO: 3/4.7.7

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical specification in Specifications 3.11, 4.13, and B3.11.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO requires that SEALED SOURCE containing radioactive material in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material shall be free of ≥ 0.005 microcurie of removable contamination. The current Technical Specification references 10 CFR 30.71 schedule B for by-product material for leak testing. 10 CFR 30.71 contains by-products that are not applicable to nuclear power plant.

2. The revision requires a submittal of a report to the Commission if SEALED SOURCE or Fission Detector Leakage tests reveal the presence of removable contamination greater than allowed by LCO. The current Technical Specification does not address this reporting requirement.

c. The revision relaxes the following current requirement:

The current Technical Specification references 10 CFR 30.71 Schedule B for the criteria for determining whether a sealed source requires contamination testing. 10 CFR 30.71 specifies quantities from 0.1 microcuries to 1000 microcuries, depending on the specific isotopes involved, whereas the revision specifies 100 microcuries beta/gamma and 5 microcuries alpha, independent of isotopic content.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by specifying SEALED SOURCE CONTAMINATION limits in the LCO and requiring a submittal of a report to the Commission if a SEALED SOURCE or Fission Detector Leakage test reveals the presence of a removable contamination greater than allowed by the LCO.
- 3) The proposed criteria of 100 microcuries beta/gamma and 5 microcuries alpha for contamination testing of sealed sources does not involve a significant hazard consideration because the change does not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The proposed threshold quantities of radioactive materials for contamination testing are consistent with industry practice in that they are the Standard Technical Specification requirements (NUREG 0452, Revision 5), replacing the current reference to 10 CFR 30.71 which includes radioactive isotopes that are not applicable to nuclear power plants.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification of the plant.
- c. Involve a significant reduction in a margin of safety because the proposed criteria have been approved in the Standard Technical Specification (NUREG 0452, Revision 5).

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.7.7 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



SAFETY/NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FIRE WATER SUPPLY SYSTEM

NO: 3/4.7.8.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.14.2 and 4.15.2.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The required volume of water storage for the fire protection systems has been upgraded to reflect recent plant improvements.
 2. Surveillance requirements for the diesel engine driven fire pump are included.
 3. Surveillance testing requirements for the diesel engine fire pump starting battery are included.
- c. The revision relaxes the following current requirement.
 1. The surveillance of water storage tank volumes has been extended from daily to weekly frequency.
 2. Special reporting requirements on FIRE WATER SUPPLY SYSTEM components inoperable for greater than 7 days has been deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional information and restriction by including the revised water storage volumes consistent with current plant configuration and surveillance requirements for the recently installed diesel driven fire water pump.
- 3) The proposed change to relax the surveillance frequency on the Water Supply Storage Tanks does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Recent plant improvements have replaced the previous storage tank with two larger tanks and one of the electric driven pumps has been replaced with a diesel driven pump. The water supplies are cross connectable but are normally dedicated to a specific pump. Elevated suction points for the other systems connected to the storage tanks prevents draw down below safe limit for fire protection needs hence less frequent surveillance is required.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety because the surveillance timing relates to the probability that other plant activities could reduce the volume of water available for fire fighting between tank level readings. The new tanks and system design reduce this possibility.
- 4) The proposed change to relax the special reporting requirements on inoperable Water Supply System components does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Expansion of the fire detection equipment and defense in depth through other plant modifications has reduced the significance of the individual component in the plant protection scheme.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because plant systems are not affected by the report which was for tracking the reliability of components.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.7.8.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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SAFETY/NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SPRAY AND/OR SPRINKLER SYSTEMS

NO: 3/4.7.8.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.14.3 and 4.15.3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The action statement has been expanded to require a continuous fire watch for those areas with inoperable sprinklers required for plant safe shutdown. The present requirement is a fire watch patrol.
 2. A detailed list of sprinkler systems which reflects plant Fire Protection Program commitments has been added to the LCO.
 3. Surveillance requirements have been increased to assure valve operability and availability of water to the sprinkler systems.
- c. The revision relaxes the following current requirements:
 1. Special reporting requirements on sprinklers inoperable for greater than 14 days have been deleted.
 2. The LCO list of sprinkler systems has been updated (see A.2, b.2 above), and sprinkler systems required by the current technical specifications have been deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant

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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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional controls and restriction by including the proper ACTION statement for the areas protected by sprinkler systems, increased surveillance requirements on system valves and more accurate control of those sprinkler systems required by the plant Fire Protection Program.
- 3) The proposed change to relax the special reporting requirements on inoperable sprinkler systems does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Expansion of the fire detection equipment and defense in depth through other plant improvements has reduced the significance of the individual sprinkler system in the plant protection scheme.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety because plant systems are not affected by the report which was for tracking the reliability of components.
- 4) The proposed change to delete some sprinkler systems from the LCO does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The deletion of the Unit 3 and 4 Switchgear Room louver spray system resulted from Appendix R modifications which replaced the louvers with 3-hour rated fire barriers. The louver spray system was intended to prevent infiltration of fire through the louvers; the installation of the 3-hour rated fire barrier replaces that function.
- The deletion of the EDG Building water curtain system is due to the addition of the EDG and Day Tank Rooms system to the LCO list. This new system provides superior protection of these areas.
- The Control Point Guard House sprinkler system was originally included as an Appendix A commitment to protect the guard house which was constructed of combustible materials (wood). The guard house has subsequently been replaced with a non-combustible structure, thus, eliminating the need for the sprinkler system.
- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed changes introduce no new mode of plant operation, and the physical modifications to the plant described above do not change the postulated accident (fire).

- c. Involve a significant reduction in a margin of safety because the safe shutdown capability of the plant in the event of a fire is not decreased.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.7.8.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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SAFETY/NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FIRE HOSE STATIONS

NO: 3/4.7.8.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.14.4 and 4.15.4.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision relaxes the following current requirements:

- 1) The ACTION requirement to run equivalent capacity fire hose to an inoperable hose station has been relaxed to require sufficient additional hose to be stored at an OPERABLE water source.
- 2) The allowable outage time for fire hose stations remains at one (1) hour for hose stations that are the primary source of fire suppression, but is relaxed to 24 hours if the hose station is the secondary means of fire suppression.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical

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Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change to relax the ACTION requirement to allow the additional hose to be stored at an OPERABLE water source does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The storage of the hose prevents the potential for personnel hazard and damage to the hose if it were run to the inoperable hose station. Also, personnel are required to go to the OPERABLE water source in order to hook up the hose and turn on the water supply.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.



- c. Involve a significant reduction in the margin of safety because little, if any, additional time is required to run the hose to the fire, and the likelihood of damage to the firehose is decreased.
- 4) The proposed change to relax the allowable outage time for secondary fire suppression means does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The protection of essential equipment is not relaxed where the fire hose station is the primary source of fire suppression. Where it is the secondary source, other technical specifications protect the primary source. Therefore, the primary source of fire suppression capability is always adequately protected.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in the margin of safety because the primary source of fire suppression capability has not been relaxed.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.7.8.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



SAFETY/NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FIRE HYDRANTS AND HYDRANT HOSE HOUSES

NO: 3/4:7.8.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

This Specification is not in the current Turkey Point Units 3 and 4 Technical Specification.

2) Proposed Condition of License:

- a. The amendment supplements the other fire protection requirements and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS. The proposed change also represents new requirements on plant equipment not covered in previous specifications.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides additional limitation, restriction and controls by including a new specification complete with LCO, ACTION statement and Surveillance for the YARD FIRE HYDRANT. It is consistent with industry practice in that the specification has the same intent as that required in the Standard Technical Specifications.



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Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.7.8.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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SHW/3-4-7-8.4



SAFETY/NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FIRE RATED ASSEMBLIES

NO: 3/4.7.9

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.14.5 and 4.15.5.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. Specific inspections of fire door assemblies have been added to insure that barriers which limit the spread of fire are maintained.
- c. The revision relaxes the following current requirements:
 1. Special reporting requirements on fire assembly inoperability for greater than 7 days has been deleted.
 2. The surveillance of sealed penetrations has been relaxed from 100% to 10%.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to App. A 3/4 7-45

achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional information by including the specific inspections to verify the fire door assembly functionality on a frequent basis.
- 3) The proposed change to relax the special reporting requirements on inoperable fire barrier assemblies does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Expansion of the fire detection equipment and defense in depth through other plant improvements has reduced the significance of the individual fire barrier in the plant protection scheme.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because plant systems are not affected by the report which was for tracking the reliability of components.
- 4) The proposed change to relax the surveillance of sealed penetrations from 100% to 10% does not involve a significant hazard consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. An inspection of 10% of each type of sealed penetration follows industry practice. The requirement to inspect additional penetrations, if unsatisfactory examples are found in the first sample, ensures that any common failures will be found. The current requirement of 100% surveillance is unnecessarily conservative, and negatively impacts plant ALARA considerations. In addition, the 10% sample size reflects the requirements of the standard technical specifications.

Proposed Tech. Spec. No. 3/4.7.9

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because inspection of a representative sample of penetrations is sufficient to ensure the integrity of the penetrations.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.7.9 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: A.C. SOURCES - OPERATING

NO: 3/4.8.1.1

A. DESCRIPTION OF CHANGES

1) Present Conditions of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.7, 4.8.1, Table 4.8-1, Table 4.1-2 Item 12, Table 4.18-1 Item 5, B3.7 and B4.8.

2) Proposed Condition of License:

a. 1. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO and ACTION STATEMENT requires that the diesel generator associated day and skid-mounted fuel tanks contain a minimum volume of 2,000 gallons and that the fuel storage tank contains a minimum volume of 38,000 gallons.
2. The LCO requires each diesel generator associated fuel oil transfer pump to be operable.
3. The ACTION statement requires that if a startup transformer is inoperable, operability of the other startup transformer must be demonstrated within 1 hour and every 24 hours thereafter and both diesel generators must be demonstrated operable within 24 hours and once per 24 hours thereafter. In addition, a more restrictive action statement for continued unit operation with a start-up transformer out-of-service has been imposed.
4. The ACTION statement requires that if one diesel generator is inoperable, operability of both startup transformers must be demonstrated within one hour and every 24 hours thereafter and the other diesel generator must be demonstrated operable within 24 hours and once per 24 hours thereafter.
5. The revision adds an ACTION statement for one startup transformer and one diesel generator inoperable.



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6. The SURVEILLANCE REQUIREMENTS for startup transformer operability are added.
 7. The SURVEILLANCE REQUIREMENT requires demonstration that the generator is capable of rejecting a load of at least 380 KW while maintaining voltage and frequency within limits. The current Technical Specification specifies load rejection of 200 KW.
 8. Special reporting requirement for diesel generator failures has been added.
 9. A more restrictive ACTION statement pertaining to the length of time one Diesel Generator may be out of service with continued operations is specified.
 10. A footnote has been added to Surveillance 4.8.1.1.2.a.4 permitting maintenance start procedures to be used for all test starts except one per 184 days to reduce wear from rapid diesel generator starts.
 11. A SURVEILLANCE REQUIREMENT is added for verification that the diesel generator is aligned to provide standby power to the associated emergency busses.
 12. An ACTION statement has been added to demonstrate the operability of the cranking diesels when a startup transformer is inoperable.
- c. The proposed revision relaxes the following current requirements:
1. Although not specifically stated the current Technical Specification would imply that if both start-up transformers are inoperable, both units be shutdown in accordance with Paragraph 3.0.1. The proposed revision ACTION statement requires that if both start-up transformers are inoperable, both the diesel generators be demonstrated operable within 8 hours unless the diesel generators are already operating, and if one of the start-up transformers is not restored to operable status within 24 hours then both units be shutdown.
 2. Although not specifically stated, the current Technical Specification would imply that if both diesel generators are inoperable both units be shut down in accordance with Paragraph 3.0.1. The proposed revision ACTION statement requires that if both diesel generators are inoperable, both start-up transformers be demonstrated operable within 1 hour and if one of the diesel generators is not restored to operable status within 2 hours then both units be sequentially shutdown.

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3. The current Technical Specification surveillance requires verification that the diesel generator is capable of rejecting complete load without exceeding 4160 ± 624 Volts. The proposed revision deletes the peak voltage requirement immediately following a complete diesel generator load rejection test. The proposed revision specifies that during this test the generator voltage shall return to less than or equal to 4784 Volts within 2 seconds following the load rejection.
4. The current Technical Specification requiring a check of diesel fuel inventory weekly has been modified to require a check when the diesel is demonstrated operable.
5. The current TECHNICAL SPECIFICATION implies that upon loss of a start-up transformer(s) and/or diesel generator that the remaining diesel generator(s) be demonstrated operable by starting, synchronizing and loading the diesel generator(s). The proposed revision specifies that the diesel generator(s) be started only.
6. The current TECHNICAL SPECIFICATION requirement to always demonstrate each diesel generator operable by performance of a fast start (starts from ambient conditions and accelerated to provide acceptable voltage and frequency within 15 seconds) has been relaxed to allow for performance of a fast start only at least once per 184 days and all other starts to be preceded by warmup procedures so that mechanical stress and wear is minimized.
7. The current TECHNICAL SPECIFICATION diesel generator surveillance test frequency (Table 4.8.1) has been changed to a 20-test sample method to be consistent with Generic Letter 84-15 surveillance test frequency. This change has resulted in some relaxations for example the current TECHNICAL SPECIFICATION maximum diesel generator surveillance test frequency of at least once per 30 days has been relaxed to at least once per 31 days.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) or amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a.1 is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.5, 2.b.9 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations and restrictions by including the following changes to the LCO and ACTION statements: diesel fuel day tank minimum inventory; specific time frames to prove operability of remaining power sources when the LCO, cannot be met; a new ACTION statement for the condition of one diesel generator and one startup transformer inoperable; and a more restrictive time limit a major power source can be out of service. The proposed changes described in Items 2.b.6 through 2.b.8, and 2.b.10 through 2.b.12 are similar to example (ii) of 48 FR 14870 in that they provide additional more restrictive controls by including surveillance requirements: defining startup transformer operability; higher kilowatt load for load rejection test; new requirement for reporting diesel generator failures; a new footnote specifying frequency of rapid starts for diesel generator surveillance tests; and a new requirement to verify operability of the cranking diesels.
- 3) The proposed change to relax the immediate shutdown if both startup transformers are inoperable does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed ACTION statement allows the operator to recover one or both startup transformers if both diesel generators are proven operable or place both units in hot standby within 24 hours and in cold shutdown within the next 30 hours. The current Technical Specification requirement of an immediate shutdown would require a one or two unit natural circulation shutdown using onsite emergency power.

The revised technical specification has the advantage of maintaining the plant in a stable condition, with onsite emergency power available, while the situation is addressed and repairs are made. If one or both startup transformers can be returned to service, a

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natural circulation cooldown with reliance on the diesel generators is avoided. If repairs to one or both startup transformers cannot be made within a short time, both units would be orderly shutdown.

The 24-hour time period is consistent with industry practice in that it is the time allowed by the Standard Technical Specifications for loss of both required offsite A.C. circuits.

Because the proposed change would maintain the plant in a stable initial condition that has been considered in the accident analysis, the change would not involve a significant increase in the probability of or the consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the revision allows time to recover one or both startup transformers while maintaining the plants in a stable condition. Maintaining the plant in a stable condition would allow time to make repairs and avoid a natural circulation cooldown condition with reliance on the diesel generators. FPL believes the advantages of these operational considerations to maintain a stable plant condition and re-establish off-site power to the vital busses, and then preceded with a normal cooldown procedure, would increase the margin of safety in the unlikely event that both startup transformers are inoperable. However, if off-site power cannot be restored, then both units will be placed in hot standby within 24 hours and in cold shutdown within the next 30 hours.
- 4) The proposed change to relax the immediate shutdown if both diesel generators are inoperable does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed ACTION statement allows 2 hours for the operator to recover one or both diesel generators if both startup transformers are proven operable. The current Technical Specification implies the requirement of an immediate shutdown after 1 hour which does not allow adequate time for an organized shutdown.

The additional time provided by the revised Technical Specification has the advantage of maintaining the plant in a stable condition while repairs are made. If repairs to one or both diesel generator(s) cannot be made within the 2 hours, the additional time to prepare for the shutdown would provide for a more organized procedure.

The 2 hour time period is consistent with industry practice in that it is the time period allowed by the Standard Technical Specifications for both diesel generators unavailable.



Because the proposed change would allow additional time to prepare to shutdown the units and the likelihood of an accident being initiated during the additional 2 hours is remote, the change would not involve a significant increase in the probability of or consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the revision allows time to recover one or both diesel generator(s) while preparing for an organized shutdown. Maintaining the plant in a stable condition would allow time to make repairs and avoid a transient cooldown condition. FPL believes the advantages of these operational considerations would increase the margin of safety in the unlikely event that both diesel generators are inoperable.
- 5) The proposed change to delete the peak voltage requirement immediately following a full diesel generator load rejection test does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The subject surveillance is to verify the proper operation of the voltage regulator under transient conditions. The ability of the diesel generator to regulate voltage under transient conditions is verified by proposed surveillance requirements 4.8.1.1.2a.4, 4.8.1.1.2.d.1.a, 4.8.1.1.2.d.1.b, 4.8.1.1.2.d.3.a, 4.8.1.1.2.d.3.b. Review of this surveillance requirement using more sensitive measurement devices indicates that the peak voltage observed depends on the mechanical response of the measuring instrument and, therefore, the technical and safety significance of this surveillance is minimal compared to that of proper voltage regulation following full load rejection. Because this change does not affect plant conditions or equipment prior to or during an accident, the proposed revision does not involve a significant increase in the probability of or consequences of an accident previously evaluated.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the diesel generator voltage peaks observed in previous full load rejection tests are well within the design limits of equipment and are much less in magnitude and duration than high voltage tests performed on all equipment and cables subjected to the diesel generator voltage peaks. Furthermore, the Commission has indicated that this change is consistent with recently licensed plants.

1. The first part of the document is a list of names and addresses of the members of the committee. The names are listed in alphabetical order, and the addresses are listed below each name. The list is as follows:

2. The second part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the chairperson. The names are listed in alphabetical order, and the addresses are listed below each name. The list is as follows:

3. The third part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the secretary. The names are listed in alphabetical order, and the addresses are listed below each name. The list is as follows:

4. The fourth part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the treasurer. The names are listed in alphabetical order, and the addresses are listed below each name. The list is as follows:

- 6) The proposed change to relax the check on diesel fuel inventory by deleting the weekly surveillance and maintaining the inventory surveillance when the diesel generator is demonstrated operable does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The most likely time that the diesel fuel storage volumes would change would be during diesel generator testing. Therefore, maintaining the current requirement to verify the minimum fuel storage volumes on a schedule commensurate with the testing frequency will provide an adequate surveillance frequency. The maximum testing frequency is 31 days for one diesel, however, the common fuel tank supplies both diesels which are tested on a staggered basis. In addition, tank level indicators, alarms and periodic plant inspections provide indication of tank volumes. The proposed change is consistent with industry practices in that the proposed change is in accordance with the Standard Technical Specifications. Based on the above considerations and the fact that the change proposes no change in plant operating parameters or equipment, the proposed revision would not involve a significant increase in the probability of or consequences of an accident previously evaluated.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the frequency of checking diesel fuel inventory matches frequent diesel operations, indicators or alarms are available for continuous monitoring and the proposed change is consistent with industry practice.
- 7) The proposed change to relax the implied requirement to demonstrate operability of the diesel generator(s) upon loss of a start-up transformer(s) and/or diesel generator from starting, synchronizing and loading to just starting does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. This change is consistent with the discussions contained in I.E. Information Notice No. 84-69, Supplement 0 and 1, whereby the diesel generators are to be kept independent of disturbances on the nonvital and off-site power systems that can affect emergency power availability.

The ability of the diesel generators to start, synchronize and load will still be demonstrated in accordance with the frequency specified in Table 4.8-1.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change keeps the diesel generator(s) independent of disturbances on the nonvital and offsite power systems that can affect emergency power availability. Additionally, this change does not involve a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety as this revision allows the diesel generator(s) to be kept independent of disturbances on the nonvital and off-site power systems but will still be demonstrated operable by verification of diesel generator(s) ability to start. Additionally the ability of the diesel generator(s) to start, synchronizing and load will still be demonstrated in accordance with the frequency specified in Table 4.8-1.
- 8) The proposed change to relax the requirement to always demonstrate each diesel generator operable by performance of a fast start to allow for performance of a fast start only at least once per 184 days and all other starts to be preceded by warmup procedures does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Generic Letter 85-15 requested Licensees to reduce the number of cold fast start surveillance tests from ambient conditions for diesel generators. The industry has agreed that a reduction in diesel generator cold fast start testing would improve diesel generator reliability. The proposed change is intended to enhance diesel generator reliability by eliminating excessive cold fast start testing which can lead to premature diesel generator failures. Since the proposed change would serve to enhance the diesel generator reliability and overall plant safety there would be no significant increase in either the probability or consequences of previously evaluated accidents.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the reduced cold fast start testing frequency provides increased diesel generator reliability by eliminating excessive testing that could lead to premature failures.
- 9) The proposed change to revise the current TECHNICAL SPECIFICATION diesel generator surveillance test frequency to a 20-test sample method to be consistent with Generic Letter 84-15 surveillance test frequency does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

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The proposed revision is consistent with Generic Letter 84-15. Because this change does not affect plant conditions or equipment prior to or during an accident, the proposed revision does not involve a significant increase in the probability of or consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the diesel generator surveillance test frequency has not been significantly revised. Additionally, this change is consistent with Generic Letter 84-15.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: A.C. SOURCES - SHUTDOWN

NO: 3/4.8.1.2

A. DESCRIPTION OF CHANGES

1) Present Conditions of License:

- 1) The current Turkey Point Unit 3 and 4 Technical Specification does not explicitly specify requirements for A.C. SOURCES - SHUTDOWN.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be added. Addition of this specification will assure that proper normal A.C. Power and backup A.C. Power is available when both reactors are shut down.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides a new Technical Specification with stated limitations, restrictions and controls for the required Normal and Emergency Power Sources when both reactors are in MODES 5 and 6.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: D.C. SOURCES - OPERATING

NO: 3/4.8.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.7, 4.8.2, B3.7 and B4.8.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

The allowable value for the average specific gravity for all cells has been changed from 0.010 in the CTS to 0.020 in the bases of the RTS. The allowable value for an individual cell's specific gravity has been changed from 0.030 to 0.040.

This is considered an error in the bases of the CTS. The revised values agree with Table 4.8-2 and the Standard Technical Specification. The Table has not changed between the CTS and RTS.

- b. The revision is more restrictive than the current Technical Specification as follows:

1. The LCO requires a more restrictive alignment of battery chargers to be operable.
2. The ACTION statements for loss of battery chargers has been revised to be more restrictive.
3. An ACTION statement has been added to verify operability of the opposite train diesel generator within the specified time.

- c. The revision relaxes the following current requirements:

1. The current Technical Specifications require that if a battery is inoperable for 24 hours both units be placed in shutdown in accordance with Technical Specifications 3.0.1. The proposed revision ACTION statement allows for both units to be sequentially shutdown.



2. The current Technical Specification requiring inspection of battery cells, racks and connections, verification of connection resistance, and demonstration of battery and battery charger capabilities once per 12 months has been relaxed to once per 18 months.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a Technical Specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional controls by requiring a more restrictive alignment of battery chargers to be operable, and requiring verification of opposite train diesel generator operability.
- 3) The proposed change to relax the action requirements to allow for a sequential unit shutdown if a battery is inoperable does not involve a significant hazards consideration because this change would not:
 - a) Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed action statement requires within 24 hours of loss of a battery that one of the affected units be placed in HOT STANDBY within 6 hours followed by immediate shutdown of the other units to HOT STANDBY within the next 6 hours. Both units are required to be placed in COLD SHUTDOWN within 30 hours following achievement of HOT STANDBY. The proposed ACTION statement provides for a more organized method for a dual unit shutdown.



Because the proposed change would allow more preparation time to shutdown the second unit or restore the inoperable DC bus to operable status and as the likelihood of an accident being initiated during this additional short time is remote, this change would not involve a significant increase in the probability of or consequences of an accident previously evaluated.

- b) Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
 - c) Involve a significant reduction in a margin of safety because the revision allows time to recover the DC bus while shutting down one unit and preparing for an organized shutdown of the other unit. FPL believes the advantages of these operational considerations would increase the margin of safety in the unlikely event that dual unit shutdown is required.
- 4) The proposed change to relax the surveillance requirement frequency from 12 months to at least once per 18 months for the battery connection resistances and demonstration of the battery and battery charger capabilities does not involve a significant hazards consideration because this change would not:

- a) Involve a significant increase in the probability of or consequences of an accident previously evaluated. Another surveillance requirement specifies visual inspection for corrosion at battery terminals and connectors, and determination of connection resistance between the pole of each cell and its terminal lug at least once per 92 days. This verification will provide early detection of degraded condition.

Therefore visual inspection of the cells and racks, and other connection resistance verification performed at least once per 18 months would not have any significant affect on the DC System operation. In addition, performance of this verification every 18 months is consistent with industry practice and the Standard Technical Specification. The verification of battery and charger capability at least once per 18 months is consistent with the Standard Technical Specification and IEEE 450 recommendations.

- b) Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves change in the design function of the batteries and battery chargers.

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- c) Involve a significant reduction in a margin of safety because the revision requires verification of the battery and battery charger capability at least once per 18 months which is consistent with recommendation provided in the Standard Technical Specifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: D.C. SOURCES - SHUTDOWN

NO: 3/4.8.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Unit 3 and 4 Technical Specification does not explicitly specify requirements for D.C. SOURCES - SHUTDOWN.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be added. Addition of this specification will assure that proper D.C. POWER is available when both reactors are shutdown.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significance 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, then a no significant hazards determination can be made.

The commission has provided guidance concerning the application of the standards for determining whether a significance hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides a new Technical Specification with stated limitation, restriction and controls for the required D.C. POWER SOURCES when both reactors are in MODE 5 and 6.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ONSITE POWER DISTRIBUTION - OPERATING

NO: 3/4.8.3.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.7, Table 4.18-1 Item 10 and B3.7.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO requires operability of all safety-related 4160 V busses, MCC's and Load Centers. The current Technical Specification requires three 4160 V busses, three Load Centers and two MCC's.
2. The availability of a back-up source for MCC's 3A and D has been added to the LCO.
3. An ACTION statement has been added which requires that during inoperability of a train of A.C. buses, the train be reenergized within 8 hours or the associated unit be shutdown.
4. An ACTION statement has been added which requires that during inoperability of an opposite unit 4160 V bus, the bus be restored to OPERABLE status within a specified time or the unit in the applicable mode be shutdown.
5. Motor Control Center ACTION statements have been added for inoperability of an MCC. The action times for MCCs are based on the criticality of the loads being served and to represent design of the Turkey Point MCC distribution system.
6. An additional 7 day SURVEILLANCE REQUIREMENT has been added to verify breaker alignment and power availability.



c. The proposed revision relaxes the following current requirement:

1. Although not specifically stated the current Technical Specifications would imply that if one 4160 V bus or more than one load center or certain combinations of motor control centers are inoperable, the associated unit be shutdown in accordance with Paragraph 3.0.1. The proposed revision ACTION statement requires that with one of the required trains of A.C. busses not fully energized, reenergize the required train within 8 hours or shutdown the unit.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a Technical Specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.5 and 2.b.6 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations restrictions and controls by including additional equipment in the LCO, additional ACTION statements consistent with Turkey Point design and more frequent surveillance of the busses to insure proper alignment and energization.
- 3) The proposed change to relax the immediate shutdown if one 4160V bus or more than one load center or certain combinations of Motor Control Centers are inoperable does not involve a significant hazards consideration because this change would not:



- a) Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed ACTION statement allows 8 hours to recover the inoperable bus. The additional time provided by the revised Technical Specification has the advantage of maintaining the plant in a stable condition while repairs are made. If repairs cannot be made within the 8 hours, the additional time to prepare for the shutdown would provide for a more organized procedure.

The 8 hour time period is consistent with industry practice in that it is the time period allowed by the Standard Technical Specifications.

Because the proposed change would allow additional time to prepare to shutdown the units and the likelihood of an accident being initiated during the additional 8 hours is remote, the change would not involve a significant increase in the probability of or consequences of an accident previously evaluated.

- b) Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.
- c) Involve a significant reduction in a margin of safety because the revision allows time to recover the affected bus while preparing for an organized shutdown. Maintaining the plant in a stable condition would allow time to make repairs and avoid a transient cooldown condition.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.3.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ONSITE POWER DISTRIBUTION - SHUTDOWN

NO: 3/4.8.3.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Unit 3 and 4 Technical Specification does not explicitly specify requirements for ONSITE POWER DISTRIBUTION - SHUTDOWN.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be added. Addition of this specification will assure that proper electrical power circuits are available when both reactors are shutdown.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides a new Technical Specification with stated limitations, restrictions and controls for the required ONSITE POWER DISTRIBUTION when both reactors are in MODE 5 and 6.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - BORON CONCENTRATION

NO: 3/4.9.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specifications in Specifications 3.10.8, Table 4.1-2 Item 13 and B3.10.8.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The revision adds SURVEILLANCE REQUIREMENT 4.9.1.1 that requires determination of reactivity conditions prior to removing or unbolting the reactor vessel head, and withdrawal of any full length control rod in excess of 3 feet.
2. The revision adds SURVEILLANCE REQUIREMENT 4.9.1.3 that requires verification that primary water supply to the boric acid blender is closed.

c. The revision relaxes the following current requirement.

The boration rate required by the ACTION statement is reduced from 45 gpm of a 1950 ppm solution to 4 gpm of a 20,000 ppm solution, or equivalent.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidated the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b.1 and 2.b.2, are similar to example (ii) of 48 FR 14870 in that they provide additional limitations and controls by including additional surveillance requirements relating to valve line ups and boron concentration monitoring prior to head removal.
- 3) The proposed action statement to relax the required boration rate (proportional to 45 gpm times 1950 ppm) by approximately 10% does not involve a significant hazards consideration because this change does not:

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

The proposed action statement is invoked in the event that the required shutdown margin or RCS boron concentration in mode 6 is lost. The boration rate will determine the time required to restore the shutdown margin or boron concentration but will not otherwise impact the operation of the plant. Also no analyzed reactivity accident in mode 6 is sensitive to the boration rate for accident mitigation. Therefore the proposed action statement boration rate will not increase the probability of or consequences of a previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed boration rate introduces no new mode of plant operation nor involves a physical modification not the plant.
- c. Involve a significant reduction in a margin of safety because the proposed change has no affect on any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - INSTRUMENTATION

NO: 3/4.9.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specifications in Specifications 3.10.3, Table 4.1-1 Item 3 and B3.10.3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The LCO requires operability of audible indication in the control room and containment associated with Source Range Monitors.
 2. The revision adds SURVEILLANCE REQUIREMENTS that require ANALOG CHANNEL OPERATIONAL TEST of source range monitors at least once per 7 days.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional controls for source range monitors by including audible alarms and additional surveillance testing on a weekly basis for ANALOG CHANNEL OPERATIONAL TEST.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - DECAY TIME

NO: 3/4.9.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specifications in Specifications 3.10.5 and B3.10.5.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:

Adds additional SURVEILLANCE REQUIREMENTS to verify that the reactor has been subcritical for at least 100 hours prior to movement of irradiated fuel.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidated the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional controls by including the surveillance which verifies the time since reactor shutdown.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - CONTAINMENT BUILDING PENETRATIONS

NO: 3/4.9.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specifications in Specifications 3.10.1 and B3.10.1.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The revision adds SURVEILLANCE REQUIREMENTS for verification of closure of containment building penetrations.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidated the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional controls by including the surveillance requirements for verification of closure of containment building penetrations.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - COMMUNICATIONS

NO: 3/4.9.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specifications in Specifications 3.10.6 and B3.10.6.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The revision adds a SURVEILLANCE REQUIREMENT for periodic demonstration of communication between the control room and personnel at the refueling station.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidated the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional controls by including the surveillance which verifies communication between the control room and the refueling station.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - MANIPULATOR CRANE

NO: 3/4.9.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specifications in Specification Table 4.1-2 Item 9.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION LIMITS and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. Manipulator crane load capacity and overload cutoff set point have been added to the specification.
2. Auxiliary crane load capacity has been added to the specification.
3. LCO applicability and action statements have been added to the specification.
4. The time interval between surveillance testing and start of refueling operation was specified as 100 hours.
5. A load test of both the manipulator crane and the auxiliary hoist has been added to the surveillance testing.

c. The revision relaxes the following current requirement:

The current Technical Specification requires a functional check of the refueling system interlocks. The proposed Technical Specification requires specific load testing requirements.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidated the current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4, and 2.b.5 are similar to example (ii) of 48 FR 14870 in that they provide: additional limitations and restrictions. They include the manipulator crane and auxiliary hoist load ratings, manipulator crane overload cutoff point, LCO and ACTION statements, maximum time interval between tests and fuel handling operation, and additional surveillance load testing to the operability criteria.
- 3) The proposed change as outlined in Item 2.C above does not involve a significant hazards consideration because this change would not:

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

The current requirement to functionally check interlocks is vague. The proposed revision gives specific requirements to perform load and automatic load cut off tests. The plant performs a test of all crane interlocks including restrictions on crane movement. These additional interlocks are not required in the design basis of the fuel handling analysis. The current Technical Specifications do not give specific requirements. Also, the proposed revision is consistent with industry practice in that it is the same as standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the crane interlocks on crane movement are not required in the design basis of the fuel handling accident analysis.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CRANE TRAVEL - SPENT FUEL STORAGE AREAS

NO: 3/4.9.7

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.10.9 and B3.10.9.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification in that it adds a surveillance requirement that requires verification of total load on the spent fuel crane.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

Proposed Technical Specification No. 3/4.9.7

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b, is similar to example (ii) of 48 FR 14870 in that it provides additional limitations and controls by including a requirement that the total load on the spent fuel crane be determined and compared to the limit in the LCO.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.7 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION - HIGH WATER LEVEL

NO: 3/4.9.8.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.10.7.1, Table 4.1-1 Item 13, Table 4.1-2 Item 18 and B3.10.7.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The surveillance requirement in the revision specifies verification that RHR loop circulation flow is at least 3000 gpm. The current Technical Specification specifies verification of flow but does not specify a value. The circulation flow which is an alarmed parameter has been exchanged for core outlet temperature which does not alarm in the control room.

A surveillance requirement to calibrate the RHR flow indicator at least once per 18 months is included.

c. The revision relaxes the following current requirement:

The frequency of monitoring the RHR cooling system operation has been decreased from every 4 hours to every 12 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative changes which consolidates the current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional information by including the required minimum flow from the RHR cooling loop which is an alarmed parameter and a more restrictive surveillance for the CALIBRATION of the RHR flow indicator.
- 3) The proposed change to relax the time interval for checking RHR loop cooling operability does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. By exchanging the temperature measurement for the alarmed flow measurement to determine operability of the required RHR loop the probability of losing RHR cooling without being noticed by the operator is less. The low flow alarm will alert the operator to investigate and restore cooling. Increasing the surveillance time interval is justified by the continuous monitor provided by the low flow alarm.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because one method of monitoring RHR cooling capability is being exchanged for another and is consistent with industry practice in that it is the same as Standard Technical Specifications.



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Proposed Technical Specification No. 3/4.9.8.1

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.8.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

App. A 3/4 9-17

MM/3-4-9-8.1



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION - LOW WATER LEVEL

NO: 3/4.9.8.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.10.7.2, Table 4.1-2 Item 18 and B3.10.7.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The surveillance requirement in the revision specifies verification that RHR loop circulation flow is at least 3000 gpm. The current Technical Specification specifies verification of flow but does not specify a value. The circulation flow which is an alarmed parameter has been exchanged for core outlet temperature which does not alarm in the control room.

c. The revision relaxes the following current requirement:

The frequency of monitoring the RHR cooling system operation has been decreased from every 4 hours to every 12 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates the current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional information by including the flow from the RHR cooling loop which is an alarmed parameter.
- 3) The proposed change to relax the time interval for checking RHR loop cooling operability does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequence of an accident previously evaluated. By exchanging the temperature measurement for the alarmed flow measurement to determine operability of the required RHR loop the probability of losing RHR cooling without being noticed by the operator is less. The low flow alarm will alert the operator to investigate and restore cooling. Increasing the surveillance time interval is justified by the continuous monitor provided by the low flow alarm.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because one method of monitoring RHR cooling capability is being exchanged for another and is consistent with industry practice in that it is the same as Standard Technical Specifications.

Proposed Technical Specification No. 3/4.9.8.2

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.8.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

App. A 3/4 9-20

MM/3-4-9-8.2

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - CONTAINMENT VENTILATION ISOLATION SYSTEM

NO.: 3/4.9.9

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.10.2, Table 4.1-2 Item 8, B3.10.2.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

A Surveillance requirement has been added to verify that the Containment Ventilation Isolation System is operable within 100 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative changes which consolidates the current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional controls by adding a surveillance requirement to check the operability of the Containment Ventilation Isolation System.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.9 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - WATER LEVEL REACTOR VESSEL

NO: 3/4.9.10

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not explicitly specify requirements for WATER LEVEL - REACTOR VESSEL.

2) Proposed Condition of License:

- a. The proposed revision provides a new technical specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The proposed revision is more complete than the current Technical Specification as follows:

A new Technical Specification is being proposed to be added consistent with Standard Technical Specifications. Addition of this specification will assure that proper water level is verified above the reactor vessel during refueling operation.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



Proposed Technical Specification No. 3/4.9.10

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a and 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional limitations, restrictions and controls by adding a technical specification for Reactor Vessel Water Level.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.10 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - WATER LEVEL STORAGE POOL

NO: 3/4.9.11

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The Current Turkey Point Units 3 and 4 Technical Specification does not explicitly specify requirements for WATER LEVEL - STORAGE POOL.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be consistent with the Standard Technical Specifications. Addition of this specification will assure that minimum water level is maintained and verified in the storage pool.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



Proposed Technical Specification No. 3/4.9.11

- 1) The proposed changes as described in Items 2.a and 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions, limitations and controls by including a Technical Specification for STORAGE POOL WATER LEVEL.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.11 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING - CASK HANDLING

NO: 3/4.9.12

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.12, Table 4.1-2 Item 17, B3.12.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification in that it adds surveillance requirements to verify decay times.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

Proposed Technical Specification No. 3/4.9.12

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional limitations and controls by including surveillance requirements to ensure compliance with the LCO.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.12 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING OPERATIONS - RADIATION MONITORING

NO: 3/4.9.13

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.10.4, TABLE 4.1-1 Item 18A and B3.10.4.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. Surveillance time interval for the CHANNEL CHECK has been shortened from daily to once per shift (see Table 4.3-3).
 2. The CHANNEL CALIBRATION Surveillance once per refueling has been added.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by adding a new surveillance for CHANNEL CALIBRATION once per refueling and reducing the CHANNEL CHECK surveillance time interval from daily to once per shift.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.13 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REFUELING - SPENT FUEL STORAGE

NO: 3/4.9.14

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the Current Turkey Point Units 3 and 4 Technical Specification in Specification 3.17, Table 4.1-2 Item 13, B3.17.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:

The revision adds an ACTION statement which is appropriate for the LCO requirements. The current Technical Specification does not specify ACTION statements.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

Proposed Technical Specification No. 3/4.9.14

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restriction by including the ACTION STATEMENT in the revised technical specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.9.14 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SPECIAL TEST EXCEPTIONS - SHUTDOWN MARGIN

NO: 3/4.10.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.1f.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current Technical Specification as follows:

The SPECIAL TEST EXCEPTION to the SHUTDOWN MARGIN requirement is applicable to control rod worth and SHUTDOWN MARGIN measurements only. Also, SHUTDOWN reactivity equivalent to the highest worth control rod is required.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) related to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides more restrictive exceptions to the SHUTDOWN MARGIN LCO by excluding only control rod worth and SHUTDOWN MARGIN measurements from the SHUTDOWN MARGIN requirements of Technical Specification 3.1.1.1.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.10.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SPECIAL TEST EXCEPTIONS - GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITS

NO: 3/4.10.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.1a, b and c, and 3.2.6.d and h.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current Technical Specification as follows:

The SPECIAL TEST EXCEPTION to the control rod group height and insertion limits and selected power distribution limits requires that power be limited to 85% or less.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) related to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) related to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions on core power (85% or less) during PHYSICS TESTS.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.10.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SPECIAL TEST EXCEPTIONS - PHYSICS TESTS

NO: 3/4.10.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.2.1 and 3.2.1.a, b and c.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current Technical Specification as follows:

The RCS temperature is required to be 531°F or greater.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) related to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) related to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides an added restriction which requires a minimum RCS temperature of 531°F.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.10.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SPECIAL TEST EXCEPTIONS - POSITION INDICATION SYSTEM - SHUTDOWN

NO: 3/4.10.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

There is no corresponding LCO requirement in the current Turkey Point Technical Specifications.

2) Proposed Condition of License:

- a. The amendment adds a new technical specification that specifies the LCO, APPLICABLE MODES, ACTION statements and SURVEILLANCE REQUIREMENTS for SPECIAL TEST EXCEPTIONS during control rod drop time tests.
- b. The revision is more restrictive than the current requirements as follows:

The special test exceptions to the Rod Position Indication System, for rod drop testing, restrict bank withdrawal to one bank and require the rod position indicator to be OPERABLE during rod withdrawal.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) related to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) related to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides added restrictions and controls that restrict rod bank withdrawal to one bank and requires the rod position indicator to be OPERABLE during rod withdrawal for the rod drop tests.

Based on the above considerations, the changes included in the development of proposed Technical Specification 3/4.10.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: LIQUID EFFLUENTS - CONCENTRATION

NO: 3/4.11.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.1a, Table 3.9-1 and B3.9.1a.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:

The proposed revision does not allow the use of gross beta-gamma analysis in lieu of isotopic analysis as a basis for liquid releases. (See Table 4.11-1).

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



Proposed Technical Specification No. 3/4.11.1.1

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates the current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions, by allowing only isotopic analysis as a basis for liquid releases.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: LIQUID EFFLUENTS - DOSE

NO: 3/4.11.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.1.b, 6.9.3e and B3.9.1.b.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed changes as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates the current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.



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Proposed Technical Specification No. 3/4.11.1.2

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: LIQUID RADWASTE TREATMENT SYSTEM

NO: 3/4.11.1.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.1.d, B3.9.1.d, and 6.9.3.f.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

The revision clearly states that the release of radioactive materials be calculated for each unit.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

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Proposed Technical Specification No. 3/4.11.1.3

- 1) The proposed changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications. The proposed change as described is an administrative change in that it corrects an editorial error by including the requirement to calculate the release of radioactive materials for each unit when performing the surveillance for this specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.1.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: GASEOUS EFFLUENTS - DOSE RATE

NO: 3/4.11.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.2a, Table 3.9-3 and B3.9.2.a.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

Item D of Table 3.9-3 (current Technical Specification) has been reformatted into two explicit requirements which more clearly represent the plants' as-built configuration.

- b. The revision relaxes the following current requirement:

Table notation (g) on Table 3.9-3 of current Technical Specifications requires sampling and analysis if the DOSE EQUIVALENT I-131 concentration on the primary coolant has been increased by more than a factor of 3 or the noble gas activity monitor shows that effluent activity has increased by more than a factor of 3. The revised Technical Specification Table 4.11-2 Table Notation (6) requires sampling and analysis only if both conditions are met.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

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- 1) The proposed changes as described in Item 2.a. are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b. to sample and analyze only if both conditions are present does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The purpose of this Technical Specification is to monitor the dose rate to the public of gaseous effluents from a change in reactor power. Any increased dose rate resulting from a change in power will occur only if both the primary coolant activity and the effluent activity increase.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in the margin of safety because the pathway is continuously monitored by the rad effluent monitor.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOACTIVE EFFLUENTS/DOSE - NOBLE GASES

NO: 3/4.11.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.2b, B3.9.2b and 6.9.3.e.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.



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Proposed Technical Specification No. 3/4.11.2.2

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: DOSE - I-131, I-133, TRITIUM, AND RADIOACTIVE MATERIAL IN PARTICULATE FORM

NO: 3/4.11.2.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.9.2.c, B3.9.2.c and 6.9.3.e.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

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Proposed Technical Specification No. 3/4.11.2.3

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.2.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: GASEOUS RADWASTE TREATMENT SYSTEM

NO: 3/4.11.2.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.9.2e, B3.9.2e, and 6.9.3g.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Proposed Technical Specification No. 3/4.11.2.4

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.2.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: EXPLOSIVE GAS MIXTURES

NO: 3/4.11.2.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.2.g, Table 3.9-4 and B3.9.2.g.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS. The maximum concentration of hydrogen in ACTION b needed to suspend additions of waste gas is corrected from 2 to 4 volume percent.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

Proposed Technical Specification No. 3/4.11.2.5

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that administrative changes, which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications, and corrects an editorial error in order to bring an ACTION statement into conformance with an LCO, and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.2.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: GAS DECAY TANK

NO: 3/4.11.2.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.2.f, B3.9.2.f.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:

The revision requires that whenever the radioactive material limit in the tank is exceeded, the event should be described in the next semiannual radioactive effluent release report.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



Proposed Technical Specification No. 3/4.11.2.6

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restriction by requiring the event to be described in the semiannual report if the specification limit is exceeded.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.2.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SOLID RADIOACTIVE WASTES

NO: 3/4.11.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.9.3 and B3.9.3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification in that SOLIDIFICATION is addressed consistent with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



Proposed Technical Specification No. 3/4.11.3

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional controls by stating LCO ACTION and SURVEILLANCE REQUIREMENTS for SOLIDIFICATION in accordance with the Standard Technical Specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOACTIVE EFFLUENTS - TOTAL DOSE

NO: 3/4.11.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.9.2.h, B3.9.2.h and 6.9.3.h.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

The revision adds a surveillance requirement 4.11.4.2 that requires determination of dose contributions from direct radiation if release rates exceed twice the limits of other specific radioactive effluents specifications.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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Proposed Technical Specification No. 3/4.11.4

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional controls adding a surveillance requiring that direct radiation from the plant be included in offsite dose calculations when certain release limits are exceeded.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.11.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOLOGICAL ENVIRONMENTAL MONITORING - MONITORING PROGRAM

NO: 3/4.12.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 4.12.1, B4.12.1 and 6.9.3i.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into the proposed specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4 12.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOLOGICAL ENVIRONMENTAL MONITORING - LAND USE CENSUS

NO: 3/4.12.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 4.12.2, B4.12.2.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into the proposed specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.12.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIOLOGICAL ENVIRONMENTAL MONITORING - INTERLABORATORY
COMPARISON PROGRAM

NO: 3/4.12.3 .

A. DESCRIPTION OF CHANGES

1) .Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 4.12.3, B4.12.3.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into the proposed specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.12.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: DESIGN FEATURES - SITE

NO: 5.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 5.1.

2) Proposed Condition of License:

a. The amendment reformats the Site features depicted in the current Technical Specification for consistency with Standard Technical Specification. Release points are now shown on a separate figure.

b. The revision is more complete than the current technical specification as follows:

The LOW POPULATION ZONE area is identified on Figure 5.1-1.

c. The revision relaxes the following current requirement.

The exclusion area boundary is changed to be consistent with the safety analysis.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional information by including the LOW POPULATION ZONE in the revised technical specification figure.
- 3) The proposed change to relax the exclusion area boundaries does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The acceptance criteria for Standard Review Plan 15.6.5 recommends that the distances to the exclusion area boundary and to the low population zone outer boundary are acceptable if the total calculated radiological consequences (i.e., thyroid and whole body doses) for the hypothetical LOCA fall within the appropriate exposure guideline values specified in 10 CFR Part 100. The exclusion area boundary as depicted in the proposed Figure 5.1-1 is based on safety analyses that shows that the dose releases to the environment at the exclusion area boundary in the event of a LOCA are substantially less than the guidelines specified in 10 CFR Part 100.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the dose releases to the environment at the revised exclusion area boundary are as described in Chapter 14 of the FSAR, are based on existing safety analysis, and are substantially less than the guidelines specified in 10 CFR Part 100.



Based on the above considerations the changes included in the development of proposed Technical Specification 5.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT - CONFIGURATION

NO: 5.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not specify Containment - Configuration design features.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

Containment design features are specified for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards considerations are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2a is similar to example (ii) of 48 FR 14870 in that it provides additional information by including Containment design features.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTAINMENT DESIGN PRESSURE AND TEMPERATURE

NO: 5.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification 5.3.A.2.

2) Proposed Condition of License:

- a. The amendment reformats the design features identified in the current Technical Specification for consistency with Standard Technical Specification.
- b. The revision is more complete than the current requirements as follows:

The maximum design internal containment temperature is specified.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional information by including the maximum internal containment temperature in the proposed Technical Specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FUEL ASSEMBLIES

NO: 5.3.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification 5.2.1.

2) Proposed Condition of License:

- a. The amendment reformats the design features identified in the current Technical Specification into the proposed specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

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- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.3.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTROL ROD ASSEMBLIES

NO: 5.3.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 5.2.5

2) Proposed Condition of License:

- a. The proposed amendment reformats the design features described in the current Technical Specification for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

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- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Westinghouse Standard Technical Specifications and do not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RCS DESIGN PRESSURE AND TEMPERATURE

NO: 5.4.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not state RCS - Design pressure and temperature.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

RCS DESIGN PRESSURE and TEMPERATURES, and FSAR reference information are specified for consistency with Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.



- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Westinghouse Standard Technical Specifications and do not involve technical or plant modifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RCS DESIGN PRESSURE AND TEMPERATURE

NO: 5.4.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not state RCS - Design pressure and temperature.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

RCS DESIGN PRESSURE and TEMPERATURES, and FSAR reference information are specified for consistency with Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

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- 1) The proposed changes as described in Item 2.a are similar to example (ii) of 48 FR 14870 in that they provide additional design information by including RCS DESIGN PRESSURE AND TEMPERATURES and FSAR reference.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.4.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RCS - VOLUME

NO: 5.4.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 5.2.3 REACTOR COOLANT SYSTEM.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

The total water and steam volume of the RCS at a specified temperature is provided for consistency with the Standard Technical Specification. The current Technical Specification provides only the liquid volume of the RCS and does not specify a corresponding temperature.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (ii) of 48 FR 14870 in that they provide additional design information by including the total RCS VOLUME and the corresponding RCS temperature.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.4.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: METEOROLOGICAL TOWER LOCATION

NO: 5.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not identify the location of Meteorological Towers.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

The locations of the Meteorological Towers are identified in the revised Specification Figure 5.1-1. Addition of this information is consistent with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

[illegible]

- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides additional design information by including Meteorological Towers locations in the revised Technical Specification Figure 5.1-1.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FUEL STORAGE - CRITICALITY

NO: 5.6.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 5.4.2 and 5.4.3.

2) Proposed Condition of License:

- a. The amendment reformats the design information contained in current Technical Specification into this specification for consistency with the Standard Technical Specification.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The allowances for uncertainties, d-k/k, have been specified for all spent fuel storage rack regions.
 2. The nominal center-to-center distance between fuel assemblies have been specified for all spent fuel storage rack regions.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional information by including allowances for uncertainties and nominal center-to-center distances between fuel assemblies for all spent fuel storage rack regions.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.6.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FUEL STORAGE - DRAINAGE

NO: 5.6.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not include design information pertaining to inadvertent draining of storage pool.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

Design features of the fuel storage pool pertaining to inadvertent drainage have been specified for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.



- 1) The proposed changes as described in Item 2.a are similar to example (ii) of 48 FR 14870 in that it provides additional information by including features of the fuel storage pool pertaining to inadvertent drainage.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.6.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FUEL STORAGE CAPACITY

NO: 5.6.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not include design information pertaining to FUEL STORAGE CAPACITY.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specification as follows:

Design information on FUEL STORAGE CAPACITY has been specified for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.



- 1) The change in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides additional information by including the design capacity of the fuel storage pool.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.6.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: COMPONENT CYCLIC OR TRANSIENT LIMIT

NO: 5.7

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Units 3 and 4 Technical Specification does not contain information on COMPONENT CYCLIC OR TRANSIENT LIMIT.

2) The revision is more complete than the current Technical Specification as follows:

- a. The COMPONENT CYCLIC OR TRANSIENT LIMIT design features are included in the proposed Technical Specification for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (ii) of 48 FR 14870 in that they provide additional design features by including COMPONENT CYCLIC OR TRANSIENT LIMIT information.



Based on the above considerations the changes included in the development of proposed Technical Specification 5.7 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RESPONSIBILITY

NO: 6.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.1.1.

2) Proposed Condition of License:

- a. The amendment revised Technical Specification 6.1.1 to read "overall unit operation of both units" vs. "overall facility operation".
- b. The amendment adds a requirement that a management directive be issued annually by the Site Vice President identifying individuals who will be responsible for control room command function. The addition of this requirement is consistent with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it includes a change in nomenclature to be consistent with the Standard Technical Specifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional administrative controls by including a requirement that a management directive be issued annually by the Site Vice President identifying individuals who will be responsible for control room command function.

Based on the above considerations the changes included in the development of proposed Technical Specification 5.7.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ORGANIZATION OFFSITE

NO: 6.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.2.1.

2) Proposed Condition of License:

- a. The current Technical Specification is consistent with the Standard Technical Specification and therefore only minor reformatting changes are required.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which reformats the Technical specification consistent with the Standard Technical Specification.



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Based on the above considerations the changes included in the development of proposed Technical Specification 6.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ORGANIZATION - FACILITY

NO: 6.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.2.2.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification requirements for consistency with the Standard Technical Specification.

b. The revision is more complete than the current Technical Specification as follows:

The development of administrative procedures that limit the working hours of unit staff who perform safety-related functions is specified for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional administrative controls by specifying development of procedures to limit the working hours of unit staff who perform safety-related functions.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SHIFT TECHNICAL ADVISOR

NO: 6.2.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.3.1.

2) Proposed Condition of License:

- a. The amendment reformats the current Technical Specification requirements for SHIFT TECHNICAL ADVISOR for consistency with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

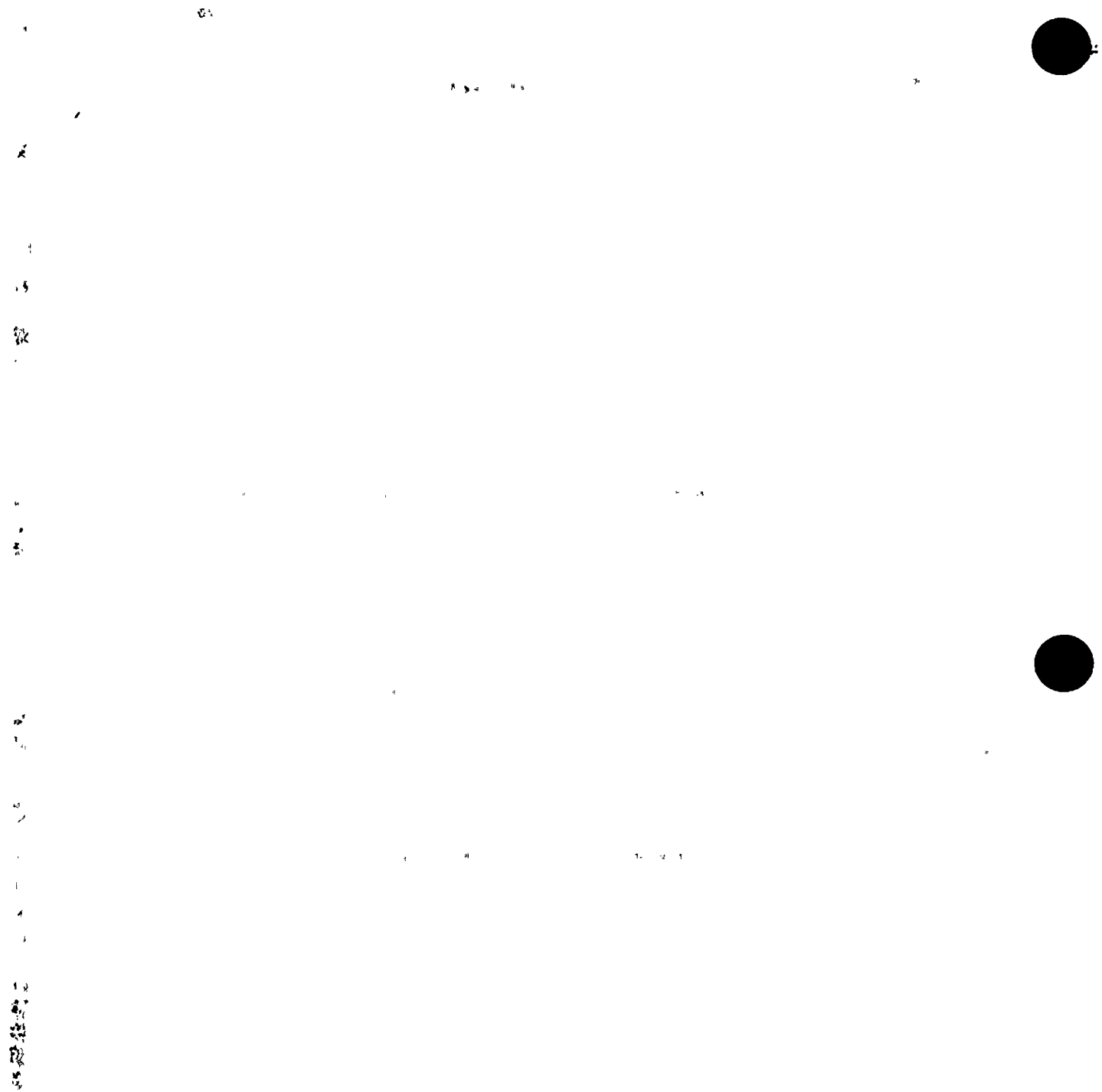
The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.



Proposed Tech. Spec. No. 6.2.3

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which reformats the requirements for the SHIFT TECHNICAL ADVISOR described in the current Technical Specification.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.2.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: FACILITY STAFF QUALIFICATIONS

NO: 6.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.3.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification requirements for Facility Staff. The proposed revision requires that the Health Physics Supervisor meet or exceed requirements of RG 1.8, September 1975 which are equal to the current requirements for this position.

b. The revision is more complete than the current Technical Specification as follows:

The licensed Operators and Senior Operators shall meet or exceed the minimum qualifications of the supplement requirements specified in 10 CFR Part 55 and ANSI 3.1, 1981.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specification.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by increasing licensed operators and senior operators qualification requirements.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: TRAINING

NO: 6.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.4.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into the proposed specification for consistency with the Standard Technical Specification.

b. The revision is more complete than the current Technical Specification as follows:

References ANSI 3.1, 1981 in addition to the existing requirements.

The TRAINING program shall include familiarization with relevant industry operational experience. This requirement is consistent with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specification.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides an additional requirement to familiarize facility staff with relevant industry operational experience and references ANSI 3.1, 1981 in addition to the existing requirements.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PLANT NUCLEAR SAFETY COMMITTEE (PNSC)

NO: 6.5.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.5.1

2) Proposed Condition of License:

- a. The amendment reformats the functions of the PNSC described in the current Technical Specification for consistency with Standard Technical Specification.

Specification 6.5.1.f (now 6.5.1.g) regarding review of facility organizations to detect potential hazards to nuclear safety was revised to clarify the requirement.

- b. The revision is more complete than the current Technical Specification as follows:

- 1. The composition of the PNSC is revised to include two additional members (the Quality Control Supervisor and the Operations Supervisor) adding additional expertise to the PNSC.
- 2. The responsibilities of the PNSC regarding review of procedures and programs are revised to take into account the addition of Specification 6.5.3, Technical Review and Control. These revisions are similar to NRC interpretations of current requirementsa.
- 3. The review of any accidental, unplanned, or uncontrolled radioactive release including the preparation of reports is specified as an additional responsibility of the PNSC.

- c. The revision relaxes the following current requirement:

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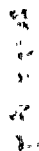
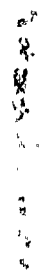
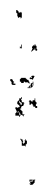
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1. The Chairman and Vice Chairman are no longer specified. The Chairman will be appointed by the Plant Manager from among the PNSC members, with alternate members also designated.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which reformat the PLANT NUCLEAR SAFETY COMMITTEE functions described in the current Technical Specification and provide clarification of the current requirement in 6.5.1.f.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that they add additional members, place additional requirements along with Specification 6.5.3, on technical review and control, and assign an additional responsibility to the PLANT NUCLEAR SAFETY COMMITTEE.
- 3) The proposed change described 2.C above does not constitute an unreviewed safety question since the change is administrative in nature and would not affect the design for operation of the facility: The PNSC functions to advise the Plant Manager - Nuclear on all matters related to nuclear safety. The change allows him to designate a chairman based on experience and technical ability, taking into account the makeup of the committee. The effectiveness of the PNSC to carry out its responsibilities would not be impacted by this change. Therefore the change would not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction on a margin of safety.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.5.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: COMPANY NUCLEAR REVIEW BOARD (CNRB)

NO: 6.5.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.5.2.

2) Proposed Condition of License:

The amendment reformats the current requirements for consistency with the Standard Technical Specification.

a. The composition of the CNRB is updated. The member titles have been revised to reflect recent reorganization changes.

b. Also the specific regulatory standards used for auditing effluent and environmental monitoring have been deleted for consistency with the STS.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

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Proposed Tech. Spec. No. 6.5.2

The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which reformats the CNRB functions described in the current Technical Specification and updates member titles to reflect recent organization changes.

In addition the deletion in Item 2.b of the specific regulatory references for effluent and environmental monitoring do not involve a significant hazards consideration because this change would not:

- a.&b. Involve a significant increase in the probability or consequences of an accident previously evaluated or create the possibility of a new or different kind of accident because this is a monitoring program that does not involve a physical modification in the plant.
- c. Involve a significant reduction in a margin of safety because we are adopting the NRC and industry standard wording for the requirement which are not significantly different from the current requirement.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.5.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLES: TECHNICAL REVIEW AND CONTROL

NO: 6.5.3

A. DESCRIPTION OF CHANGES

1) PRESENT CONDITION OF LICENSE:

Not specified in the current Turkey Point Unit 3 and 4 Technical Specification.

2) Proposed Condition of License:

- a. The amendment provides specific requirements for technical review and control of certain activities that effect nuclear safety. It is more complete than the current Technical Specifications in that it provides the requirements for such reviews previously performed per NRC guidance on the responsibilities of the Plant Nuclear Safety Committee. It does, however, relax the requirement for the entire PNSC to review these changes in detail.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not:

- (1) involve a significant increase in the probability of 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration.



Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

The proposed change as described in Item 2 is similar to example (ii) of 48 FR 14870 in that it provides requirements for technical review and controls not in the current Technical Specifications.

The proposed change to use separate reviewers for procedures instead of the PNSC is consistent with current NRC interpretation of the PNSC requirements. The approval of the reviewed procedures can also be considered changed by this revision. Previously the Chairman of the PNSC (the Plant Manager) or his designee would sign the procedure change. Because the revised wording would allow a department head to approve some procedures, this could be considered a relaxation. This proposed change does not involve a significant hazards consideration because this change, in itself, would not:

- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated, nor
- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the procedures will still be approved by technically qualified individuals who have the responsibility for the subject area.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.5.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REPORTABLE EVENT ACTION

NO: 6.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.6.

2) Proposed Condition of License:

- a. The current Technical Specification is consistent with the Standard Technical Specification and therefore only minor reformatting changes are required.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which reformats the Technical specification consistent with the Standard Technical Specification.



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Proposed Tech. Spec. No. 6.6

Based on the above considerations the changes included in the development of proposed Technical Specification 6.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SAFETY LIMIT VIOLATION

NO: 6.7

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.7.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification. The existing Technical Specification requirement to comply with 10 CFR 50.36 (C) (1) (i) has been replaced by explicit criteria in Section 2.0 and the text of Section 6.7. Written reports are now required to be submitted in accordance with 10 CFR 73. These changes are considered administrative.

b. The revision is more complete than the current Technical Specification as follows:

1. The proposed revision specifically requires NRC notification by telephone as soon as practical and in all cases within 1 hour after the violation has been determined; this revision is consistent with the Standard Technical Specification and 10 CFR 50.72. The existing Technical Specification requires that the NRC be informed immediately.
2. The proposed revision requires that critical operation of the unit following a SAFETY LIMIT VIOLATION shall not be resumed until authorized by the Commission. This requirement is consistent with the Standard Technical Specification and current staff guidance.

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c. The revision relaxes the following current requirement.

1. The current specification requires notification of the Senior Vice President - Nuclear and the CNRB immediately. The proposed revision would relax that requirement to 24 hours consistent with the Standard Technical Specifications.
2. The current specification requires that a written report be submitted to the CNRB, the Senior Vice President - Nuclear and the Commission within 10 days of the violation. The proposed revision would relax that requirement to 30 days, consistent with the reporting requirements in 10 CFR 73.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and the regulations.
- 2) The proposed change as described in Item 2.b.1 is similar to example (ii) of 48 FR 14870 in that it provides an additional control by including a specific time interval for NRC notification.
- 3) The proposed change as described in Item 2.b.2 is similar to example (ii) of 48 FR 14870 in that it provides an additional control by requiring Commission's authorization prior to unit critical operation following a Safety Limit Violation.

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- 4) The proposed changes described in 2.c.1 and 2.c.2 above do not involve a significant hazards consideration because the changes are administrative in nature and would not effect the design or operation of the facility. They would continue to ensure timely notification of the Senior Vice President - Nuclear and to the CNRB consisted with the Standard Technical Specifications and 10 CFR 50.73. Therefore, they would not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.7 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PROCEDURES AND PROGRAMS

NO: 6.8

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.8, 6.13, 6.14, 6.15, and 6.16.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification requirements for consistency with the Standard Technical Specification.

b. The revision is more complete than the current Technical Specification as follows:

1. Requirements to establish, implement and maintain written procedures for Emergency Operating Procedures, Security and Emergency Plans have been included in the proposed specification for consistency with the Standard Technical Specification.

2. Requirement to establish a program for monitoring Secondary Water Chemistry has been included in the proposed specification for consistency with the Standard Technical Specification.

c. The revision relaxes the following current requirement:

The current specification requires that a program be implemented which will ensure the capability to accurately monitor the reactor coolant system subcooling margin. The proposed revision would delete this requirement. The Standard Technical Specification requirement for this program is for those PWRs with a single channel of monitoring instruments (Turkey Point has two channels).

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3. The third part of the document is a list of names and dates.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications.
- 2) The proposed change as described in Item 2.b.1 is similar to example (ii) of 48 FR 14870 in that it provides additional controls by including requirements to establish, implement and maintain written procedures and administrative policies for Emergency Operating Procedures, Security and Emergency Plans.
- 3) The proposed change as described in Item 2.b.2 is similar to example (ii) of 48 FR 14870 in that provides additional controls by including requirements to establish a program for monitoring Secondary Water Chemistry.
- 4) The proposed change to delete the requirement to have a program which will ensure the capability to accurately monitor the reactor coolant system subcooling margin does not involve a significant hazards consideration because this change would not:

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

The proposed change is an administrative change to be consistent with the Standard Technical Specifications, which include this requirement only for those PWRs with a single channel for monitoring instrumentation. The current and revised Technical Specifications require two channels of the reactor coolant system subcooling margin monitor to be operable. In addition the core exit thermocouples and reactor vessel and monitoring system are required to be operable, and can be used to monitor subcooling margin and inadequate core cooling. The proposed change introduces no new mode of operation nor involves a physical modification to the plant.

- b. Create the possibility of a new or different kind of accident because the proposed change is administrative, introduces no new mode of operation, nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed change is administrative, introduces no new mode of operation, nor involves a physical modification to the plant.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.8 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REPORTING REQUIREMENTS - ROUTINE REPORTS

NO: 6.9.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specifications 6.9, 6.9.1, 6.9.3. and 6.9.4.

2) Proposed Condition of License:

- a. The amendment consolidates the current Technical Specification requirements into the proposed specification for consistency with the Standard Technical Specification format.

The reporting requirements for release of radioactive materials in liquid or gaseous effluents, steam generator tube inspections, power tilt ratio, standby feedwater and shutdown margin have been placed in their individual proposed technical specifications.

The reporting requirement for submittal of the Peaking Factor Limit Report 60 days prior to cycle initial criticality is replaced by 30 days. This change is considered administrative in nature, because the fuel vendor has determined that the Peaking Factor Limit Report is not generally available 60 days prior to initial cycle criticality and the proposed 30 days requirement is consistent with other Westinghouse plants.

- b. The revision is more complete than the current Technical Specification as follows:

1. A reporting requirement for challenges to the PORVs or Safety Valves has been added. This requirement is consistent with the Standard Technical Specification.

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2. Clarification regarding the requirement for the analytical methods used to generate the peaking factor limits (proposed specification 6.9.1.6) was added.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications.
- 2) The proposed changes as described in Item 2.b are similar to example (ii) of 48 FR 14870 in that it provides an additional reporting requirement for challenges to the PORVS and safety valves and additional clarification regarding the analytical methods to be used in generating the Peaking Factor Limit Report.



Proposed Tech. Spec. No. 6.9.1

Based on the above considerations the changes included in the development of proposed Technical Specification 6.9.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SPECIAL REPORTING REQUIREMENTS

NO: 6.9.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specifications 6.9.3 a through c.

2) Proposed Condition of License:

- a. The amendment reformats the current Technical Specification reporting requirements into the proposed specification for consistency with Standard Technical Specification. This specification is referred to by individual proposed technical specifications for special report submittal when the individual specification conditions are not met.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.



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Proposed Tech. Spec. No. 6.9.2

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.9.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RECORD RETENTION

NO: 6.10

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specifications 6.10.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification requirement into the proposed specification for consistency with Standard Technical Specification.

b. The revision is more complete than the current Technical Specification as follows:

1. Records of reactor tests and experiments are to be retained for the duration of the facility operating license in lieu of existing requirement to retain them for at least 5 years, and

2. An additional requirement is proposed that requires the records of secondary water sampling and water quality are to be retained for the duration of the facility operating license.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications.
- 2) The proposed change as described in Item 2.b.1 is similar to example (ii) of 48 FR 14870 in that it provides additional control by requiring records of reactor tests and experiments retained for the duration of the facility operating license, in lieu of the existing 5 year requirement.
- 3) The proposed change as described in Item 2.b.2 is similar to example (ii) of 48 FR 14870 in that it provides additional information by requiring records of secondary water sampling and quality retained for the duration of the facility operating license.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.10 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: RADIATION PROTECTION PROGRAM

NO: 6.11

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.11.

2) Proposed Condition of License:

- a. The current Technical Specification is consistent with the Standard Technical Specification and therefore only minor reformatting changes are required.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which reformats the Technical specification consistent with the Standard Technical Specification.

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Proposed Tech. Spec. No. 6.11

Based on the above considerations the changes included in the development of proposed Technical Specification 6.11 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: HIGH RADIATION AREA

NO: 6.12

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.12.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification's HIGH RADIATION AREA requirements into the proposed technical specification for consistency with Standard Technical Specification.

b. The revision is more complete than the current Technical Specification as follows:

1. The high radiation intensity is specified to be measured at 18 inches from the radiation source. The current Technical Specification does not specify a distance at which radiation levels should be measured.
2. The revision specifies HIGH RADIATION AREAS that are located within large areas, such as inside the containment, where no enclosure can be reasonably constructed around the individual area shall be roped off, conspicuously posted and flashing lights activated as warning devices.
3. The revision specifies that Health Physics personnel and personnel escorted by them are allowed to enter a HIGH RADIATION AREA without a Radiation Work Permit (RWP) provided they are following Plant radiation protection procedures.

NOTE: The above additions are consistent with the Standard Technical Specifications.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications.
- 2) The proposed change as described in Item 2.b.1 is similar to example (ii) of 48 FR 14870. This change provides an additional requirement by specifying that radiation intensities be measured 18 inches from the radiation source.
- 3) The proposed change as described in Item 2.b.2 is similar to example (iii) of 48 FR 14870 in that they provide additional requirements by specifying an identification program for large hard to isolate, HIGH RADIATION AREAS.
- 4) The proposed change as described in Item 2.b.3 is similar to example (ii) of 48 FR 14870 in that it provides an additional control by specifying detailed HIGH RADIATION AREA access requirements.

Proposed Tech. Spec. No. 6.12

Based on the above considerations the changes included in the development of proposed Technical Specification 6.12 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: PROCESS CONTROL PROGRAM (PCP)

NO: 6.13

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.17.

2) Proposed Condition of License:

a. The amendment reformats the current Technical Specification into this specification for consistency with Standard Technical Specification.

b. The revision is more complete than the current Technical Specification as follows:

The revision requires PCP approval by the Commission prior to implementation. The current Technical Specification requires that the PCP be reviewed by PNSC prior to implementation. This requirement is consistent with the Standard Technical Specifications.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

1. The first part of the document is a list of names and addresses of the members of the committee.

2. The second part of the document is a list of names and addresses of the members of the committee.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications.
- 2) The proposed change as described in Item 2.b.1 is similar to example (ii) of 48 FR 14870. This change provides an additional administrative control by requiring the PCP be approved by the Commission prior to implementation.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.13 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: OFFSITE DOSE CALCULATION MANUAL (ODCM)

NO: 6.14

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 6.18.

2) Proposed Condition of License:

- a. The revision reformats the current Technical Specification requirements for consistency with Standard Technical Specification. The revision deletes current Specification 6.18.1 that requires the ODCM be reviewed by the PNSC prior to the Commission submittal. Deletion of this is administrative in nature because this one time requirement has already been completed. In addition, any changes to the ODCM are required to be reviewed by the PNSC prior to submittal to the Commission per proposed Technical Specification 6.14.2.b.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.



- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.14 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: MAJOR CHANGES TO LIQUID, GASEOUS AND SOLID RADWASTE TREATMENT SYSTEMS

NO: 6.15

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Unit 3 and 4 Technical Specifications does not contain this specification.

2) Proposed Condition of License:

- a. The revision is more complete than the current Technical Specifications as follows:

The specification requires that licensee initiated major changes to the Radwaste Treatment Systems be reported to the Commission in the Semiannual Radioactive Effluent Release Report. This proposed specification is consistent with the Standard Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides additional reporting requirements for major changes to the Radwaste Treatment Systems.

Based on the above considerations the changes included in the development of proposed Technical Specification 6.15 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: NOT APPLICABLE

NO: NOT APPLICABLE

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Technical Specification includes the following requirements:

Boron Injection Tank Contained Volume, Boron Concentration and Flow Path Heat Tracing. (3.4.1.a.2)

Instrumentation in table 4.1-1 covering:

- Charging Flow (item #12)
- Residual Heat Removal Pump Flow (item #13)
- Boric Acid Tank Level (item #14)
- Volume Control Tank Level (item #16)
- Boric Acid Control (item #19)
- Emergency Portable Survey Instruments (item #24)
- Seismograph (item #25)

Sampling frequencies in table 4.1-2 covering:

- Boron Injection Tank Boron Concentration (item #4)
- Refueling System Interlocks (item #9)
- Turbine Stop and Control Valves,
- Reheater Stop and Intercept Valves (item #15)
- LP Turbine Rotor Inspection (item #16)

Surveillance of "power availability" for components in safety related systems flowpaths in 4.18

Design Features for the following systems and components:

- Reactor Coolant System design and maximum potential seismic accelerations (5.2.2 a & b)
- Containment function (5.3.A.1)
- Containment design seismic accelerations (5.3.A.2)
- Containment Penetration and Isolation Valve Actuation System design details (5.3.B 1 & 2)
- Containment Cooling System design details (5.3.C 1, 2 & 3)
- Fuel Storage Pit design seismic loads (5.4.1)
- Burnable Poison RCC Assemblies (5.2.4)

2) Proposed Condition of License:

- a. The above current Technical Specification requirements are not included in the revised Technical Specifications.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The proposed changes described in A.1 and A.2 do not involve a significant hazards consideration because these changes would not:

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

From reference 11 of the current Technical Specification bases for 3.4, the requirement for Boron Injection Tank boric acid and heat tracing for accident mitigation has been removed from the safety analysis.

Deleting the calibration of the Charging Pump flow channel from the Technical Specifications has no impact on any previously evaluated accident because the flow signal is not used for any automatic or manual accident mitigation function. This change is also consistent with industry practice in that the calibration is not required by the Standard Technical Specifications.

Deleting the calibration of the RHR Pump flow channel from the Technical Specifications has no impact on any previously evaluated accident because the flow signal is not used for any automatic or manual accident mitigation function. The revised Technical Specifications include surveillance on RHR pump flow. Typically, the Standard Technical Specifications do not include instrumentation calibration requirements for instruments used to perform surveillances. Implicit in surveillance requirement is the assumption that the surveillance instrument is accurately calibrated and that an allowance for instrument inaccuracy is included.

Deleting the calibration of the BAT and VCT level channels and the BAT channel check from the Technical Specifications has no impact on any previously evaluated accident because these signals are not used for any automatic or manual accident mitigation function. The revised Technical Specifications include surveillance of BAT level. Typically, the Standard Technical Specifications do not include instrumentation calibration requirements for instruments used to perform surveillances. Implicit in surveillance requirement is the assumption that the surveillance instrument is accurately calibrated and that an allowance of instrument inaccuracy is included.



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For the NSHE evaluation of the Boric Acid Flow Controller see the NSHE for Revised Technical Specification 3/4.1.2.1.

The deletion of the calibration of Emergency Portable Survey Instruments from the current Technical Specifications is made because it is understood that when portable instrumentation is used it should have the same level of surveillance as required for instrumentation it replaces. The routine calibration of portable instrumentation is covered in plant procedures and its deletion from the proposed Technical Specifications is consistent with industry practice in that it is not required by the Standard Technical Specifications.

Deleting the quarterly test of the Seismic instrumentation from the Technical Specifications has no impact on any previously evaluated accident because the seismic signal is not used for any automatic or manual accident mitigation function.

Deleting the surveillance of the BIT boron concentration has no impact on any previously evaluated accident because the requirement for Boron Injection Tank boric acid for accident mitigation has been removed from the safety analysis.

Refueling System interlocks which are required to function for the mitigation of refueling accidents which are analyzed in the FSAR are explicitly included in section 3/4.9 of the Revised Technical Specifications. Other interlocks which function during routine refueling operations are not included. This practice is consistent with industry practice in that it is not required by the Standard Technical Specifications.

Deleting the monthly closure check for the Turbine Stop and Control Valves, Reheater Stop and Intercept Valves and deleting the requirement for visual, magnetic particle and dye penetrant inspection of the Low Pressure Turbine Rotor has no impact on any previously evaluated accident mitigation function. Components and systems, vital to safe shutdown, are protected from postulated missiles per FSAR Appendix 5E. Protection of such components and systems from the missiles is provided by either of the following:

1. Enclosure by either concrete or steel structures.
2. Redundancy and spacing of the components and equipment.

In addition, any serious degradation of the turbine rotating elements will cause a change in the monitored turbine parameters or be observed during the vendor's inspection program. In-service inspection of the turbines ensures that flaws arising during turbine operation are detected and repaired long before they become even a potential challenge to turbine structural integrity. FPL complies with the turbine vendor's NRC approved inspection schedule and refurbishment recommendations for the Turkey Point Plant turbines.



Elimination of the visual, magnetic particle and dye penetrant inspections is consistent with industry practice in that it is not included in the Standard Technical Specifications.

An explicit surveillance of "power availability" to components in safety related system flowpaths is deleted in the Revised Technical Specifications because the requirement for the availability of motive power to operate any safety system component is implicit in the definition of operability of the component.

Design features in the current Technical Specifications dealing with design details, component function, and seismic accelerations on certain systems and components are deleted in the Revised Technical Specifications. Design features which are included in the Standard Technical Specifications are retained in the Revised Technical Specifications. Design features in general have no operational significance in that LCO's, ACTION restrictions, surveillance requirements, and applicable MODES are not specified. Therefore, deleting these specific design features has no impact on the probability of or consequences of a previously evaluated accident.

- b. Deletion of the current Technical Specification requirements discussed above will not create the possibility of a new or different kind of accident from any previously analyzed because the proposed changes introduce no new mode of plant operation or involve a physical modification to the plant.
- c. Deletion of the current Technical Specification requirements discussed above will not involve a significant reduction in a margin of safety because these deletions have been determined to have no impact on any previously evaluated accident.

Based on the above considerations, the deletion of the above current Technical Specification requirements in the proposed Technical Specifications are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposal.

ATTACHMENT III
FSAR CHANGES DUE TO T/S CHANGES

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| 4.1.2.1.a | Heat Tracing & Boron Conc. | 9.2-6 |
| 3.1.2.4.a.2 | Heat Tracing & Boron Conc. | 9.2-6a |
| 3.1.2.5.a.2 | Heat Tracing & Boron Conc. | 9.2-23 |
| 3.4.9.2 | Pressurizer P/T Limits and Pressurizer- Max Spray Temp Diff. | 4.2-18 |
| 3.4.9.3 | PORV Lift Press | T 4.1-1 |
| 3.5.1.b | Accumulator Volume | T 6.2-4 |
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| 3.6.1.4 | Cont. Pressure and Temperature | 7.2-36 |
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| 3.1.3.2 | Control Rod Position | F 7.2-9a |
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| 3.1.1.3 | MTC | 14.1-10 |
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| 3.4.2.1&2 | Pressurizer Safety Lift Settings | T 4.1-1 |
| | | T 4.1-3 |



ATTACHMENT III
FSAR CHANGES DUE TO T/S CHANGES

| <u>TS No.</u> | <u>Title</u> | <u>FSAR</u> |
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| 2.2.1 | Source Range Neutron Flux | F 7.2-5 |
| 2.2.1 | Power Range Neutron Flux - High | F 7.2-5 |
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| 2.2.1 | Pressurizer Pressure - Low | F 7.2-5 |
| 2.2.1 | Pressurizer Pressure - High | F 7.2-5 |
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| 2.2.1 | SG Water Level Low - Low | F 7.2-5 |
| 2.2.1 | RCP Breaker Underfrequency | F 7.2-8C |
| 2.2.1 | Turbine Auto-Stop Oil Pressure - Low | F 7.2-5 |
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| 2.2.1 | RTS Interlock, Intermediate Range P-6 | F 7.2-5 |
| 2.2.1 | RTS Interlock, Low Power Trip Block, P-7 | F 7.2-5 |
| 2.2.1 | RTS Interlock Power Range P-10 | F 7.2-5 |
| B.2.2.1 | Flow Trip from <1 Loop (10-45% Power) | Pg 7.2-22 |
| B.2.2.1 | Flow Trip from 1 Loop (45-100% Power) | F 7.2-8C |
| 3.3.2 | SI - Pressurizer Lower Pressure | F 7.2-8A |
| 3.3.2 | ESFAS Interlock - Low Tavg | F 7.2-8C |
| 3.3.2 | SI - High dP between MSLS | F 7.2-8B |
| 3.3.2 | SI - High Steam Line Flow Coincident with Low Steam Line Pressure or low Tavg | F 7.2-8B |
| 3.3.2 | AFW - SF Water Level Low - Low | F 7.2-8B |
| 2.2.1 | Reactor Coolant Flow - Low | Pg 4.2-21 |

ATTACHMENT IV

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Proposed License Amendment
Revised Technical Specifications

OPEN LICENSING ACTIONS ADDRESSED BY SUBMITTAL
OF REVISED TECHNICAL SPECIFICATIONS

1. Proposed License Amendment Upgrade of Technical Specifications (L-86-393 dated September 29, 1986): This document submitted the original request under 10 CFR 50.90 to upgrade the technical specifications under the PEP project.
2. Proposed License Amendment - Sections 3.0 and 4.0 on the Applicability of Limiting Conditions for Operation and Surveillance Requirements (L-88-389, dated September 27, 1988): This request was a revision to implement Generic Letter 87-09. This item has been incorporated in the RTS effort and the separate action item should be withdrawn from consideration.
3. Proposed License Amendment - Electrical System Upgrade (L-88-511, dated December 20, 1988). This request has now been incorporated in the RTS effort. The separate action item should be withdrawn from consideration.
4. Generic Letter 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability": As previously discussed with the Staff, the technical specifications to address the GL 84-15 cold fast start restrictions have been included in the RTS. This item can now be considered closed.
5. Containment Purge and Vent Valves Technical Specifications: As previously discussed with the Staff, technical specifications to address this issue have been included in the RTS. This issue can now be considered closed.
6. Generic Letter 85-09, "Technical Specifications for Generic Letter 83-28, "Item 4.3": The tests for shunt trip operability requested by GL 85-28 Item 4.3 are addressed in the RTS. This item can now be considered closed.

3/4.8 ELECTRICAL POWER SYSTEMS3/4.8.1 AC SOURCESOPERATINGLIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following AC electrical power sources shall be OPERABLE:

- a. TWO 239 KV-4160 volt startup transformers with associated circuits,
- b. TWO diesel generators each with a day and skid-mounted fuel tank containing a minimum volume of 2,000 gallons of fuel, and
- c. A fuel storage system containing a minimum volume of 38,000 gallons of fuel and capable of transferring fuel to day tanks via a fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3, 4

ACTION:

- a. With either startup transformer inoperable,
 - 1) Demonstrate the OPERABILITY of both diesel generators by performing surveillance requirement 4.8.1.1.2.a.4 separately, for each diesel generator within 24 hours, if the diesel generator has not been successfully tested within the past 24 hours, and at least once per 24 hours while the startup transformer is inoperable,
 - 2) Notify the NRC within 24 hours of declaring a startup transformer inoperable,
 - 3) Demonstrate the OPERABILITY of at least two cranking diesel generators by performing surveillance requirement 4.8.1.1.4 within 12 hours. The requirements of specification 3.0.3 do not apply to this ACTION statement,
 - 4) Demonstrate the OPERABILITY of the other startup transformer and its associated circuits by performing surveillance requirement 4.8.1.1.1 within 1 hour and at least once per 24 hours thereafter, and
 - 5) a) For the unit with its startup transformer inoperable in MODE 1, restore the inoperable startup transformer to OPERABLE status within 24 hours or reduce THERMAL POWER to $\leq 30\%$ RATED POWER within the next 6 hours. Restore the inoperable startup transformer to OPERABLE status within 30 days or place both units in at least HOT STANDBY within the next 12 hours and in COLD SHUTDOWN within the following 30 hours.

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- b) With the unit in MODES 2, 3 or 4, restore the inoperable startup transformer to OPERABLE status within 24 hours or place the unit in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With either diesel generator inoperable, for reasons other than the performance of surveillance requirement 4.8.1.1.2.c,
 - 1) Demonstrate the OPERABILITY of the remaining diesel generator by performance of surveillance requirement 4.8.1.1.2.a.4 within 24 hours and once per 24 hours thereafter while the diesel generator is inoperable,
 - 2) Within 2 hours verify that the engineered safety features that depend on the remaining diesel generator are OPERABLE, and verify compliance with specification 3.8.2.1,
 - 3) Demonstrate the OPERABILITY of the startup transformers and their associated circuits by performing surveillance requirement 4.8.1.1.1 within 1 hour, and at least once per 24 hours thereafter, and
 - 4) Restore the inoperable diesel generator to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 12 hours and in COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.
- c. With either diesel generator inoperable, for the performance of surveillance requirement 4.8.1.1.2.c,
 - 1) Demonstrate the OPERABILITY of the remaining diesel generator by performance of surveillance requirement 4.8.1.1.2.a.4 within 24 hours and once per 24 hours thereafter while the diesel generator is inoperable,
 - 2) Within 2 hours verify that the engineered safety features that depend on the remaining diesel generator are OPERABLE, and verify compliance with specification 3.8.2.1,
 - 3) Demonstrate the OPERABILITY of the startup transformers and their associated circuits by performing surveillance requirement 4.8.1.1.1 within 1 hour, and at least once per 24 hours thereafter, and
 - 4) Restore the inoperable diesel generator to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With one startup transformer and one diesel generator inoperable,
 - 1) Demonstrate the OPERABILITY of the remaining diesel generator by performance of surveillance requirement 4.8.1.1.2.a.4 within 8 hours and once per 24 hours thereafter while the diesel generator is inoperable,

- 2) Within 2 hours verify that the engineered safety features that depend on the remaining diesel generator are OPERABLE, and verify compliance with specification 3.8.2.1,
 - 3) Demonstrate the OPERABILITY of the remaining startup transformer and its associated circuits by performing surveillance requirement 4.8.1.1.1 within 1 hour, and at least once per 24 hours thereafter,
 - 4) Demonstrate the OPERABILITY of at least 2 cranking diesel generators by performing surveillance requirement 4.8.1.1.4 within 12 hours. The requirements of specification 3.0.3 do not apply to this ACTION statement,
 - 5) Comply with the requirements of specification 3.8.1.1 ACTION a.5; and ACTION b.4 or ACTION c.4 whichever is applicable, and
 - 6) Notify the NRC within 4 hours of declaring both a startup transformer and a diesel generator inoperable.
- e. With two diesel generators inoperable, demonstrate the OPERABILITY of both startup transformers and their associated circuits by performing surveillance requirement 4.8.1.1.1 within 1 hour and, at least once per 24 hours thereafter. Restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 12 hours and in COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.
- f. With two startup transformers inoperable,
- 1) Demonstrate the OPERABILITY of both diesel generators by performance of surveillance requirements 4.8.1.1.2.a.4 within 8 hours and once per 24 hours thereafter while the startup transformer(s) are inoperable, unless the diesel generators are already operating,
 - 2) Restore one of the inoperable startup transformers to OPERABLE status within 24 hours or place one unit in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Then place the other unit in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, and
 - 3) Notify the NRC within 4 hours of declaring both startup transformers inoperable.

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each required startup transformer and its associated circuits shall be determined OPERABLE at least once per 7 days by verifying correct breaker alignment and indicated power availability.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

- a. In accordance with the frequency specified in Table. 4.8-1, with diesel generator surveillances performed nonconcurrently by:

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- 1) Verifying the day and skid-mounted fuel tanks contain a minimum volume of 2,000 gallons of fuel.
 - 2) Verifying the minimum fuel volume of 38,000 gallons in the Diesel Oil Storage Tank.
 - 3) Verifying that a fuel transfer pump can be started and transfers fuel from the Diesel Oil Storage Tank to the Day Tank.
 - 4) Verifying that the diesel generator starts from normal conditions and accelerates to provide 60 ± 1.2 Hz frequency and 4160 ± 624 volts in ≤ 15 seconds*.
 - 5) Verifying that the generator is synchronized, loaded to ≥ 2500 kw within 10 minutes* and operates for ≥ 60 minutes, and the cooling system operates within design limits.
 - 6) Verifying that the diesel is aligned to provide standby power to the associated emergency buses.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the Diesel Oil Storage Tank is within acceptable limits when checked for viscosity, water, and sediment.
- c. During each Unit 4 refueling outage by:
- 1) Subjecting the diesel to an inspection in conjunction with its manufacturer's recommendations for this class of standby service.
- d. At least once per 18 months by:
- 1) Verifying the diesel generator's capability to:
 - a) Reject a load of greater than or equal to 380 kw without exceeding 4160 ± 624 volts and 60 ± 1.2 Hz.
 - b) Reject a load of greater than or equal to 2500 kw without tripping. The generator voltage shall return to less than or equal to 4784 volts within 2 seconds following the load rejection.

*The diesel generator start (15 sec) from normal conditions shall be performed at least once per 184 days in these surveillance tests. All other engine starts for the purpose of this surveillance testing may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized.

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- 2) Verifying that diesel generator trips that are made operable during the test mode of diesel operation are inoperable when the diesel is not in the test mode of operation.
- 3) Alternately initiating one of the following two diesel startup tests.
 - a) Simulate a safety injection signal, and allow the diesel generator to achieve nominal rated voltage and speed. Then simulate a loss of offsite power, and allow the diesel generator to load and stabilize.
 - b) Simulate a loss of offsite power, and allow the diesel generator to load and stabilize. Then simulate a safety injection signal, and allow the diesel generator to sequence safety loads and stabilize.
- 4) Monitoring the tests specified in 4.8.1.1.2.d.3 to:
 - a) Verify proper deenergization and load shedding from the 4160 volt busses.
 - b) Verify that the diesel generator starts from ambient conditions and accelerates to provide 60 ± 1.2 Hz frequency and 4160 ± 624 volts in ≤ 15 seconds.
- 5) Verifying that the diesel generator operates for at least 8 hours by performing the following tests:
 - a) Load the diesel generator to > 2750 kw during the first 2 hours of the 8 hour test. During this 2 hour period, increase the load to ≥ 2850 kw until the generator electrical load is stabilized and then decrease back to ≥ 2750 kw.
 - b) Load the diesel generator to ≥ 2500 kw during the last 6 hours of the 8 hour test.
 - c) Verify that voltage, frequency, and cooling system functions are within design limits during the 8 hour full-load test.
- 6) Demonstrating the ability to sequentially:
 - a) Synchronize the diesel generator with offsite power while the generator is supplying emergency loads:
 - b) Transfer the emergency load to offsite power;
 - c) Isolate the diesel generator; and
 - d) Return the diesel generator to standby status.
- 7) Verifying the auto-connected loads to each diesel generator do not exceed 2750 kw.



- e. At least once per 10 years or after any modification that could affect diesel generator independence, start both diesel generators simultaneously at a time when both reactors are shutdown and verify that both diesel generators provide 60 ± 1.2 Hz frequency and 4160 ± 624 volts in less than or equal to 15 seconds.

4.8.1.1.3 Reports - All valid diesel generator failures shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 30 days. Reports of diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

4.8.1.1.4 At least two cranking diesel generators shall be demonstrated OPERABLE as required by specification 3.8.1.1 ACTIONS a.3 and d.4 by verifying that the cranking diesel generators manually start from normal conditions and accelerate to provide 60 ± 1.2 (Hz) frequency and 4160 ± 624 volts and are capable of being aligned to either 4160-volt safety bus.

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TABLE 4.8-1

DIESEL GENERATOR TEST SCHEDULENUMBER OF FAILURES IN
LAST 20 VALID TESTS*TEST FREQUENCY≤1

Once per 31 days

≥2**

Once per 7 days

*Criteria for determining number of failures and number of valid tests shall be in accordance with Regulatory Position C.2.e of Regulatory Guide 1.108, Revision 1, August 1977, but determined on a per diesel generator basis.

For the purpose of determining the required valid test frequency, the previous valid test failure count may be reduced to zero if a complete diesel overhaul to like-new condition is completed, provided that the overhaul, including appropriate post-maintenance operation and testing, is specifically approved by the manufacturer and if acceptable reliability has been demonstrated. The reliability criterion shall be the successful completion of 14 consecutive valid tests in a single series. Ten of these valid tests shall be in accordance with the routine Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5; and four valid tests in accordance with the 184 day testing requirement of Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5. If this criterion is not satisfied during the first series of valid tests, any alternate criterion to be used to transvalue the failure count to zero requires prior NRC approval.

**The associated valid test frequency shall be maintained until seven consecutive failure free demands have been performed and the number of failures in the last 20 valid demands has been reduced to one.



ELECTRICAL POWER SYSTEM

AC SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following AC electrical power sources shall be OPERABLE:

- a. One startup transformer and associated circuits or one offsite circuit supplying at least one 4160 volt bus, A or B,
- b. ^{One} ~~Two~~ diesel generators ^{each} ~~each~~ with a day and skid-mounted fuel tank containing a minimum volume of 2,000 gallons of fuel, and
- c. A fuel storage system containing a minimum volume of 38,000 gallons of fuel and capable of transferring fuel to day tanks via a fuel transfer pump.

APPLICABILITY*: MODES 5 and 6

ACTION:

With less than the above minimum required AC electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, movement of irradiated fuel, or crane operation with loads over the fuel storage pool, and within 8 hours, depressurize and vent the Reactor Coolant System through a vent greater than or equal to 2.2 square inches. In addition, when in MODE 5 with the reactor coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the reactor vessel flange immediately initiate corrective action to restore the required sources to OPERABLE status and initiate corrective action to increase RCS inventory as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required AC electrical power sources shall be demonstrated OPERABLE by the performance of each of the requirements of Specifications 4.8.1.1.2 (except for Specification 4.8.1.1.2.a.5), and 4.8.1.1.3.

*(Caution - If the opposite unit is in MODES 1, 2, 3 or 4, see Specification 3.8.1.1)

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3/4 8.2 DC SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.1 As a minimum, the following DC electrical sources shall be OPERABLE:

- a. 125 volt DC batteries no. 3A, 3B, 4A and 4B, and
- b. Battery chargers 3B, 4A and 4S and any two of battery chargers 3A, 4B or 3S.

APPLICABILITY: MODES 1, 2, 3, 4

ACTION:

- a. With one of the required batteries inoperable:
 - 1) Within 2 hours verify the OPERABILITY of the opposite train diesel generator or be in at least HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.
 - 2) Restore the inoperable battery to OPERABLE status within 24 hours or be in at least HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.
- b. With one or more of the required battery chargers inoperable, restore one or more of the inoperable battery chargers to OPERABLE status within the time limits specified in Table 3.8-1; otherwise be in at least HOT STANDBY within the next 12 hours and COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.

SURVEILLANCE REQUIREMENTS

4.8.2.1 Each 125 volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 24 hours read and record the pilot cell specific gravity. The specific gravity shall be within limits of Table 4.8-2 Category A.
- b. At least once per 7 days by verifying that:
 - 1) The pilot cell parameters (except specific gravity) in Table 4.8-2 meet the Category A limits, and
 - 2) The total battery terminal voltage is greater than or equal to 129 volts on float charge.

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SURVEILLANCE REQUIREMENTS (Continued)

- c. At least once per 31 days by performing the following:
- 1) Rotate the pilot cell, and
 - 2) Check water level and restore as necessary recording amount of water added.

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TABLE 3.8-1

BATTERY CHARGER ALLOWABLE OUT-OF-SERVICE TIMES

| | | BATTERY CHARGERS (BC) 3B, 4A, and 4S | | | |
|---|--------------------------|--------------------------------------|----------------------|------------------------|--------------------------|
| | | No-BC's Inoperable | One-BC Inoperable | Two-BC's Inoperable | Three BC's Inoperable |
| Battery Chargers (BC) 3A, 4B, and 3S | No-BC's Inoperable | N/A | 72 hours | 24 hours* | 1 hour |
| | One-BC Inoperable | N/A | 72 hours* | 1 hour | 1 hour |
| | Two-BC's Inoperable | 24 hours* | 1 hour | 1 hour | 1 hour |
| | Three-BC's Inoperable | 1 hour | 1 hour | 1 hour | 1 hour |

*Within 2 hours verify the OPERABILITY of the two diesel generators.

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3/4 8.2 DC SOURCES

SURVEILLANCE REQUIREMENTS (Continued)

- d. At least once per 92 days and within 7 days after a battery discharge with battery terminal voltage below 105 volts, or battery overcharge with battery terminal voltage above 143 volts, verify that:
- 1) The parameters in Table 4.8-2 meet the Category B limits.
 - 2) There is no visible corrosion at either terminals or connectors, or the connection resistance of these items is less than 150×10^{-6} ohm, and
 - 3) The average electrolyte temperature of every sixth cell is above 60 F.
- e. At least once per 92 days perform a detailed visual inspection of the battery chargers.
- f. At least once per 18 months by verifying that:
- 1) The cells, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration,
 - 2) The cell-to-cell and terminal connections are clean, tight, and coated with anticorrosion material,
 - 3) The resistance of each cell-to-cell and terminal connection is less than or equal to 150×10^{-6} ohm, and
 - 4) Each 50 kw battery charger will supply at least 390 ± 10 amperes at 125 volts for at least 8 hours and each 37.5 kw battery charger will supply at least 290 ± 10 amperes at 125 volts for at least 8 hours.
- g. At least once per 18 months during shutdown by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual or simulated emergency loads for the design duty cycle when the battery is subjected to a battery service test.



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TABLE 4.8-2

BATTERY SURVEILLANCE REQUIREMENTS

| PARAMETER | CATEGORY A (1) | | CATEGORY B (2) |
|---------------------|--|--|--|
| | LIMITS FOR EACH designated pilot cell | LIMITS FOR EACH connected cell | ALLOWABLE (3) value for connected cell |
| Electrolyte | Greater than minimum level indication mark, and less than $\frac{1}{4}$ inch above maximum level indication mark | Greater than minimum level indication mark, and less than $\frac{1}{4}$ inch above maximum level indication mark | Above top of plates and not overflowing |
| Float Voltage | Greater than or equal to 2.13 volts | Greater than or equal to 2.13 volts (6) | Greater than or equal to 2.07 volts |
| Specific Gravity(4) | Greater than or equal to 1.200 (5) | Greater than or equal to 1.195 | Not more than 0.020 below the average of all connected cells |
| | | Average of all connected cells greater than 1.205 | Average of all connected cells greater than or equal to 1.195(5) |

TABLE NOTATIONS

- (1) For any Category A parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that within 24 hours all the Category B measurements are taken and found to be within their allowable values, and equalizing charge is started. All Category A and B parameter(s) must be restored to within limits within the next 6 days.
- (2) For any Category B parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that the Category B parameters are within their allowable values, and equalizing charge is started. All Category B parameter(s) must be restored to within limits within 7 days.
- (3) Any Category B parameter not within its allowable value indicates an inoperable battery.
- (4) Corrected ^{for} electrolyte temperature and level.
- (5) Or battery charging current is less than 2 amps when on charge.
- (6) Corrected for average electrolyte temperature.

TURKEY POINT - UNITS 3 & 4

3/4 8-13

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DC SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, three batteries and associated full-capacity chargers* shall be OPERABLE.

APPLICABILITY**: MODES 5 and 6

ACTION:

With one or more of the required 125 volt batteries inoperable and/or associated chargers inoperable, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel; initiate corrective action to restore the required batteries and associated chargers to OPERABLE status as soon as possible, and within 8 hours, depressurize and vent the Reactor Coolant System through a vent greater than or equal to 2.2 square inches.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The above required 125 volt battery banks and associated full capacity chargers shall be demonstrated OPERABLE in accordance with Specification 4.8.2.1.

*(defined as a designated charger or a spare charger)

** (Caution - If the opposite unit is in MODES 1, 2, 3, or 4, see Specification 3.8.2.1)

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3/4 8.3 ONSITE POWER DISTRIBUTION

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.3.1 The following electrical busses shall be energized in the specified manner with the 4160 volt and 480 volt Load Center tie breakers open between redundant busses within the unit and between the busses of Units 3 and 4:

- a. One train of AC Busses consisting of:
 - 1) 4160 Volt Bus A,
 - 2) 480 Volt Load Center Busses A and C, and
 - 3) 480 Volt Motor Control Center Busses A*** and C vital sections.
- b. One train of AC Busses consisting of:
 - 1) 4160 Volt Bus B ~~Bus~~
 - 2) 480 Volt Load Center Busses B and D, and
 - 3) 480 Volt Motor Control Center Bus B, vital section.
- c. 480 volt Motor Control Center Bus D, (vital section)*, ***.
- d. Opposite unit trains of AC Busses consisting of:
 - 1) 4160 Volt Busses, A and B,** and
 - 2) Motor Control Centers A, B, and C vital sections

APPLICABILITY: MODES 1, 2, 3, 4

ACTION:

- a. With one of the required trains of AC busses not energized, re-energize the train within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. This ACTION does not apply to the Limiting Condition for Operations sections 3.8.3.1.c or 3.8.3.1.d.
- b. With one of the required trains of AC busses of the opposite unit inoperable, for periodic refueling outage maintenance, re-energize the train within 7 days or be in at least HOT STANDBY within ^{the next} 6 hours and COLD SHUTDOWN within the following 30 hours.
- c. With one of the required trains of AC busses of the opposite unit inoperable, for reasons other than ACTION b above, re-energize the train within 72 hours or be in at least HOT STANDBY within the next 6 hours and COLD SHUT-DOWN within the following 30 hours.

*480 Volt Motor Control Center D is common to Unit 3 and 4.

**One 4160 Volt Bus may be de-energized while the 480 Volt Load Centers are crosstied with the associated unit in shutdown modes 5 or 6 and the opposite unit at power upon issuance of an engineering evaluation.

***Loss of the normal or backup sources of power to Motor Control Centers (MCC) 3A, or D necessitates the application of ACTION f, g, h, or i and does not imply the inoperability of any single MCC unless both sources of power are lost concurrently.



ONSITE POWER DISTRIBUTIONLIMITING CONDITION FOR OPERATION (Continued)

- d. With the 480 volt Motor Control Center D vital section not energized, for periodic refueling outage maintenance, verify the OPERABILITY of both diesel generators within 1 hour and re-energize it within 24 hours or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- e. With the 480 volt Motor Control Center D vital section not energized, for reasons other than ACTION d above, verify the OPERABILITY of both diesel generators within 1 hour and re-energize it within 8 hours or be in at least HOT STANDBY within the next 12 hours and COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.
- f. With the 480 volt Motor Control Center D vital section normal source of power or backup source of power inoperable, for periodic refueling outage maintenance, verify the OPERABILITY of both diesel generators within 1 hour and restore the inoperable power supply to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- g. With the 480 volt Motor Control Center D vital section normal source of power or backup source of power inoperable, for reasons other than ACTION f above, verify the OPERABILITY of both diesel generators within 1 hour and restore the inoperable power supply to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 12 hours and COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.
- h. With the 480 volt Motor Control Center 3A vital section normal source of power inoperable, for periodic refueling outage maintenance, verify the OPERABILITY of both diesel generators within 1 hour and restore the inoperable power supply to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- i. With the 480 volt Motor Control Center 3A vital section normal source of power inoperable, for reasons other than ACTION h, above, verify the OPERABILITY of both diesel generators within 1 hour and restore the inoperable power supply to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 12 hours and in COLD SHUTDOWN within the following 30 hours. This ACTION applies to both units simultaneously.

SURVEILLANCE REQUIREMENTS

4.8.3.1 The specific busses shall be determined energized and aligned in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

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ONSITE POWER DISTRIBUTIONSHUTDOWNLIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following electrical busses shall be energized:

- a. One train of AC emergency busses consisting of one 4160 volt and two associated 480 volt AC busses.

APPLICABILITY*: MODES 5 and 6

ACTION:

With any of the above required busses not energized, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel, initiate corrective action to energize the required electrical busses as soon as possible, and within 8 hours, depressurize and vent the RCS through a vent greater than or equal to 2.2 square inches.

SURVEILLANCE REQUIREMENTS

4.8.3.2 The specific busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

*(Caution - if the opposite unit is in MODES 1, 2, 3, or 4, see Specification 3.8.3.1)

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3/4.9 REFUELING OPERATIONS

3/4.9.1 BORON CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.9.1 The boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be maintained uniform and sufficient to ensure that the more restrictive of the following reactivity conditions is met; either:

- a. A K_{eff} of 0.95 or less, or
- b. A boron concentration of greater than or equal to 1950 ppm.

APPLICABILITY: MODE 6.*

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate and continue boration at greater than or equal to 4 gpm of a solution containing greater than or equal to 20,000 ppm boron or its equivalent until K_{eff} is reduced to less than or equal to 0.95 or the boron concentration is restored to greater than or equal to 1950 ppm, whichever is the more restrictive.

SURVEILLANCE REQUIREMENTS

4.9.1.1 The more restrictive of the above two reactivity conditions shall be determined prior to:

- a. Removing or unbolting the reactor vessel head, and
- b. Withdrawal of any full-length control rod in excess of 3 feet from its fully inserted position within the reactor vessel.

4.9.1.2 The boron concentration of the Reactor Coolant System and the refueling canal shall be determined by chemical analysis at least once per 72 hours.

4.9.1.3 Valves isolating unborated water sources** shall be verified closed and secured in position by mechanical stops or by removal of air or electrical power at least once per 31 days.

4.9.1.4 The spent fuel pit boron concentration shall be determined at least once per 31 days.

*The reactor shall be maintained in MODE 6 whenever fuel is in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed.

**The primary water supply to the boric acid blender may be opened under administrative controls for makeup.

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REFUELING OPERATIONS

3/4.9.2 INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.9.2 As a minimum, one primary Source Range Neutron Flux Monitor with continuous visual indication in the control room and audible indication in the containment and control room, and one of the remaining three Source Range Neutron Flux Monitors (one primary or one of the two backup monitors) with continuous visual indication in the control room shall be OPERABLE.

APPLICABILITY: MODE 6.

ACTION:

- a. With one of the above required monitors inoperable or not operating, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes.
- b. With both of the above required monitors inoperable or not operating, determine the boron concentration of the Reactor Coolant System at least once per 12 hours.

SURVEILLANCE REQUIREMENTS

4.9.2 Each required Source Range Neutron Flux Monitor shall be demonstrated OPERABLE by performance of:

- a. A CHANNEL CHECK at least once per 12 hours,
- b. An ANALOG CHANNEL OPERATIONAL TEST within 8 hours prior to the initial start of CORE ALTERATIONS, and
- c. An ANALOG CHANNEL OPERATIONAL TEST at least once per 7 days.

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REFUELING OPERATIONS

3/4.9.3 DECAY TIME

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for at least 100 hours.

APPLICABILITY: During movement of irradiated fuel in the reactor vessel.

ACTION:

With the reactor subcritical for less than 100 hours, suspend all operations involving movement of irradiated fuel in the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least 100 hours by verification of the date and time of subcriticality prior to movement of irradiated fuel in the reactor vessel.

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REFUELING OPERATIONS

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.9.4 The containment building penetrations shall be in the following status:

- a. The equipment door closed and held in place by a minimum of four bolts,
- b. A minimum of one door in each airlock is closed, and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:^{*}
 - 1) Closed by an isolation valve, blind flange, or manual valve, or
 - 2) Be capable of being closed by an OPERABLE automatic containment ventilation isolation valve.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or movement of irradiated fuel in the containment building.

SURVEILLANCE REQUIREMENTS

4.9.4 Each of the above required containment building penetrations shall be determined to be either in its closed/isolated condition or capable of being closed by an OPERABLE automatic containment ventilation isolation valve within 100 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS or movement of irradiated fuel in the containment building by:

- a. Verifying the penetrations are in their closed/isolated condition, or
- b. Testing the containment ventilation isolation valves per the applicable portions of Specification 4.6.4.2.

^{*}Exception may be taken under Administrative Controls for opening of certain valves and airlocks necessary to perform surveillance or testing requirements.

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REFUELING OPERATIONS

3/4.9.5 COMMUNICATIONS

LIMITING CONDITION FOR OPERATION

3.9.5 Direct communications shall be maintained between the control room and personnel at the refueling station.

APPLICABILITY: During CORE ALTERATIONS.

ACTION:

When direct communications between the control room and personnel at the refueling station cannot be maintained, suspend all CORE ALTERATIONS.

SURVEILLANCE REQUIREMENTS

4.9.5 Direct communications between the control room and personnel at the refueling station shall be demonstrated within 1 hour prior to the start of and at least once per 12 hours during CORE ALTERATIONS.

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REFUELING OPERATIONS3/4.9.6 MANIPULATOR CRANELIMITING CONDITION FOR OPERATION

3.9.6 The manipulator crane and auxiliary hoist shall be used for movement of drive rods or fuel assemblies and shall be OPERABLE with:

- a. The manipulator crane used for movement of fuel assemblies having:
 - 1) A minimum capacity of 2750 pounds, and
 - 2) An overload cutoff limit less than or equal to 2700 pounds.
- b. The auxiliary hoist used for latching and unlatching drive rods having:
 - 1) A minimum capacity of 610 pounds, and
 - 2) A load indicator which shall be used to prevent lifting loads in excess of 600 pounds.

APPLICABILITY: During movement of drive rods or fuel assemblies within the reactor vessel.

ACTION:

With the requirements for crane and/or hoist OPERABILITY not satisfied, suspend use of any inoperable manipulator crane and/or auxiliary hoist from operations involving the movement of drive rods and fuel assemblies within the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.9.6.1 At least once each refueling, each manipulator crane used for movement of fuel assemblies within the reactor vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 2750 pounds and demonstrating an automatic load cutoff when the crane load exceeds 2700 pounds.

4.9.6.2 At least once each refueling, each auxiliary hoist and associated load indicator used for movement of drive rods within the reactor vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 610 pounds.

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REFUELING OPERATIONS

3/4.9.7 CRANE TRAVEL - SPENT FUEL STORAGE AREAS

LIMITING CONDITION FOR OPERATION

3.9.7 Loads in excess of 2000 pounds shall be prohibited from travel over fuel assemblies in the storage pool.*

APPLICABILITY: With fuel assemblies in the storage pool.

ACTION:

- a. With the requirements of the above specification not satisfied, place the crane load in a safe condition.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.7 Prior to crane operation over fuel assemblies in the spent fuel storage pool, verify that each load is 2000 pounds or less.

*Exception may be taken for the temporary construction crane to be used for the re-rack operation which may be carried over irradiated fuel to facilitate installation of the crane. Lift rigs which meet the design and operational requirements of NUREG-0612 "Control of Heavy Loads at Nuclear Power Plants" will be used while performing this installation.

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REFUELING OPERATIONS

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

HIGH WATER LEVEL

LIMITING CONDITION FOR OPERATION

3.9.8.1 At least one residual heat removal (RHR) loop shall be OPERABLE and in operation.*

APPLICABILITY: MODE 6, when the water level above the top of the reactor vessel flange is greater than or equal to 23 feet.

ACTION:

With no RHR loop OPERABLE and in operation, suspend all operations involving an increase in the reactor decay heat load or a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required RHR loop to OPERABLE and operating status as soon as possible. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

SURVEILLANCE REQUIREMENTS

4.9.8.1.1 At least one RHR loop shall be verified in operation and circulating reactor coolant at a flow rate of greater than or equal to 3000 gpm at least once per 12 hours.

4.9.8.1.2 The RHR flow indicator shall be subjected to a CHANNEL CALIBRATION at least once per 18 months.

*The RHR loop may be removed from operation for up to 1 hour per 8-hour period during the performance of CORE ALTERATIONS in the vicinity of the reactor vessel hot legs.

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REFUELING OPERATIONS

LOW WATER LEVEL

LIMITING CONDITION FOR OPERATION

3.9.8.2 Two independent residual heat removal (RHR) loops shall be OPERABLE, and at least one RHR loop shall be in operation.

APPLICABILITY: MODE 6, when the water level above the top of the reactor vessel flange is less than 23 feet.

ACTION:

- a. With less than the required RHR loops OPERABLE, immediately initiate corrective action to return the required RHR loops to OPERABLE status, or to establish greater than or equal to 23 feet of water above the reactor vessel flange, as soon as possible.
- b. With no RHR loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required RHR loop to operation. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

SURVEILLANCE REQUIREMENTS

4.9.8.2 At least one RHR loop shall be verified in operation and circulating reactor coolant at a flow rate of greater than or equal to 3000 gpm at least once per 12 hours.

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REFUELING OPERATIONS

3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.9 The Containment Ventilation Isolation System shall be OPERABLE.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

- a. With the Containment Ventilation Isolation System inoperable, close each of the containment ventilation penetrations providing direct access from the containment atmosphere to the outside atmosphere.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.9 The Containment Ventilation Isolation System shall be demonstrated OPERABLE within 100 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS by verifying that Containment Ventilation Isolation occurs on a High Radiation test signal from each of the containment radiation monitoring instrumentation channels.



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REFUELING OPERATIONS

3/4.9.10 WATER LEVEL - REACTOR VESSEL

LIMITING CONDITION FOR OPERATION

3.9.10 At least 23 feet of water shall be maintained over the top of the reactor vessel flange.

APPLICABILITY: During movement of fuel assemblies or control rods within the containment when either the fuel assemblies being moved or the fuel assemblies seated within the reactor vessel are irradiated while in MODE 6.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel assemblies or control rods within the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.9.10 The water level shall be determined to be at least its minimum required depth within 2 hours prior to the start of and at least once per 24 hours thereafter during movement of fuel assemblies or control rods.



REFUELING OPERATIONS3/4.9.11 WATER LEVEL - STORAGE POOLLIMITING CONDITION FOR OPERATION

3.9.11 The water level shall be maintained greater than or equal to elevation 56' - 10" the spent fuel storage pool.**

APPLICABILITY: Whenever irradiated fuel assemblies are in the storage pool.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all movement of fuel assemblies and crane operations with loads in the fuel storage areas and restore the water level to within its limit within 4 hours.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.11 The water level in the storage pool shall be determined to be at least its minimum required depth at least once per 7 days when irradiated fuel assemblies are in the fuel storage pool.

may be lowered to a level justified by an engineering safety evaluation.

~~*During spent fuel rerack operation, the water level shall be maintained at least at 49'0" elevation. There will be no movement of fuel assemblies with water level lower than 56' - 10" elevation during rerack operation.~~

**The requirements of this specification may be suspended for more than 4 hours to perform maintenance provided a safety evaluation is prepared prior to suspension of the above requirement and all movement of fuel assemblies and crane operation with loads in the fuel storage areas are suspended. If the level is not restored within 7 days, the NRC shall be notified within the next 24 hours.

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REFUELING OPERATIONS

3/4.9.12 HANDLING OF SPENT FUEL CASK

LIMITING CONDITION FOR OPERATION

3.9.12 The handling of spent fuel cask shall be limited to the following conditions:

- 1) The spent fuel cask shall not be moved into the spent fuel pit until all the spent fuel in the pit has decayed for a minimum of one thousand five hundred twenty-five (1,525) hours.*
- 2) Only a single element cask may be moved into the spent fuel pit.
- 3) A fuel assembly shall not be removed from the spent fuel pit in a shipping cask until it has decayed for a minimum of one hundred twenty (120) days.

APPLICABILITY: During movement of spent fuel cask in the spent fuel storage area.

ACTION:

With the requirement of the above specification not satisfied, suspend all movement of the spent fuel cask within the spent fuel storage area.

SURVEILLANCE REQUIREMENTS

4.9.12.1 The following required decay times of the spent fuel assemblies shall be determined prior to the movement of a spent fuel cask by verification of date and time the spent fuel assemblies were placed into the spent fuel pit:

- a. 1525 hours of decay of all spent fuel assemblies in the spent fuel pit for movement of a spent fuel cask into the spent fuel pit.
- b. 120 days of decay of the spent fuel assembly in the spent fuel cask prior to removal of the spent fuel cask from the spent fuel pit.

4.9.12.2 Prior to any operations involving spent fuel cask movement into the spent fuel pit, verify only a single element cask will be moved into the spent fuel pit.

4.8.12.3 The spent fuel cask crane interlock shall be demonstrated OPERABLE within 7 days of crane operation and at least once per 7 days (7 days is maximum time between tests; specification 4.0.2 does not apply here) when the crane is being used to maneuver the spent fuel cask.

*The spent fuel cask can be moved into the Unit 4 spent fuel pit after a minimum decay of 1000 hours until the new two-region high density spent fuel racks are installed.

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REFUELING OPERATIONS

3/4.9.13 RADIATION MONITORING

LIMITING CONDITION FOR OPERATION

3.9.13 The Containment Radiation monitors which initiate containment and control room ventilation isolation shall be OPERABLE.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

- a) With one or both radiation monitors inoperable, operation may continue provided the containment ventilation isolation valves are maintained closed.
- b) With one or both radiation monitors inoperable, within 1 hour isolate the Control Room Emergency Ventilation System and initiate operation of the Control Room Emergency Ventilation System in the recirculation mode.

SURVEILLANCE REQUIREMENTS

4.9.13 Each Containment Radiation monitor shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and ANALOG CHANNEL OPERATIONAL TEST at the frequencies shown in Table 4.3-3.

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REFUELING OPERATIONS

3/4.9.14 SPENT FUEL STORAGE

LIMITING CONDITION FOR OPERATION

3.9.14 The following conditions shall apply to spent fuel storage:

- a. Fuel assemblies containing more than 4.1 weight percent of U-235 shall not be placed in the single region spent fuel storage racks. After installation of the two-region high density spent fuel racks, the maximum enrichment loading for the fuel assemblies in the spent fuel racks shall be 4.5 weight percent of U-235.
- b. The minimum boron concentration in the Spent Fuel Pit shall be 1950 ppm.
- c.* Storage in Region II of the Spent Fuel Pit shall be further restricted by burnup and enrichment limits specified in Table 3.9-1.
- d.* During the re-racking operation only, fuel that does not meet the burnup requirement for normal storage in Region II may be stored in Region II in a checkerboard arrangement (i.e., no fuel stored in adjacent spaces).

APPLICABILITY: At all times when fuel is stored in the Spent Fuel Pit.

ACTION:

- a. With any of conditions a, c or d not satisfied, suspend movement of additional fuel assemblies into the Spent Fuel Pit and restore the spent fuel storage configuration to within the specified conditions.
- b. With boron concentration in the Spent Fuel Pit less than 1950 ppm, suspend movement of spent fuel in the Spent Fuel Pit and initiate action to restore boron concentration to 1950 ppm or greater.

SURVEILLANCE REQUIREMENTS

4.9.14 The boron concentration of the Spent Fuel Pit shall be verified to be 1950 ppm or greater at least once per month.

*These requirements are applicable only after installation of the new two-region high density spent fuel racks.



TABLE 3.9-1

SPENT FUEL BURNUP REQUIREMENTS FOR STORAGE
IN REGION II OF THE SPENT FUEL PIT

| <u>Initial w/o</u> | <u>Discharge Burnup GWD/MT</u> |
|------------------------|------------------------------------|
| 1.5 | 0. |
| 1.75 | 5.0 |
| 2.0 | 9.0 |
| 2.2 | 12.0 |
| 2.4 | 14.8 |
| 2.6 | 17.6 |
| 2.8 | 20.1 |
| 3.0 | 22.6 |
| 3.2 | 25.0 |
| 3.4 | 27.4 |
| 3.6 | 29.6 |
| 3.8 | 31.8 |
| 4.0 | 34.0 |
| 4.2 | 36.1 |
| 4.5 | 39.0 |

Linear interpolation between two
consecutive points will yield
conservative results.



3/4.10 SPECIAL TEST EXCEPTIONS

3/4.10.1 SHUTDOWN MARGIN

LIMITING CONDITION FOR OPERATION

3.10.1 The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 may be suspended for measurement of control rod worth and SHUTDOWN MARGIN provided reactivity equivalent to at least the highest estimated control rod worth is available for trip insertion from OPERABLE control rod(s).

APPLICABILITY: MODE 2.

ACTION:

- a. With any full-length control rod not fully inserted and with less than the above reactivity equivalent available for trip insertion, immediately initiate and continue boration at greater than or equal to 4 gpm of a solution containing greater than or equal to 20,000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.
- b. With all full-length control rods fully inserted and the reactor subcritical by less than the above reactivity equivalent, immediately initiate and continue boration at greater than or equal to 4 gpm of a solution containing greater than or equal to 20,000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.

SURVEILLANCE REQUIREMENTS

4.10.1.1 The position of each full-length control rod either partially or fully withdrawn shall be determined at least once per 2 hours.

4.10.1.2 Each full-length control rod not fully inserted shall be demonstrated capable of full insertion when tripped from at least the 50% withdrawn position within 24 hours prior to reducing the SHUTDOWN MARGIN to less than the limits of Specification 3.1.1.1.

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SPECIAL TEST EXCEPTIONS3/4.10.2 GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITSLIMITING CONDITION FOR OPERATION

3.10.2 The group height, insertion, and power distribution limits of Specifications 3.1.3.1, 3.1.3.5, 3.1.3.6, 3.2.1, and 3.2.4 may be suspended during the performance of PHYSICS TESTS provided:

- a. The THERMAL POWER is maintained less than or equal to 85% of RATED THERMAL POWER, and
- b. The limits of Specifications 3.2.2 and 3.2.3 are maintained and determined at the frequencies specified in Specification 4.10.2.2 below.

APPLICABILITY: MODE 1.

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ACTION:

With any of the limits of Specification 3.2.2 or 3.2.3 being exceeded while the requirements of Specifications 3.1.3.1, 3.1.3.5, 3.1.3.6, 3.2.1, and 3.2.4 are suspended, either:

- a. Reduce THERMAL POWER sufficient to satisfy the ACTION requirements of Specifications 3.2.2 and 3.2.3, or
- b. Be in HOT STANDBY within 6 hours.

SURVEILLANCE REQUIREMENTS

4.10.2.1 The THERMAL POWER shall be determined to be less than or equal to 85% of RATED THERMAL POWER at least once per hour during PHYSICS TESTS.

4.10.2.2 The requirements of the below listed specifications shall be performed at least once per 12 hours during PHYSICS TESTS:

- a. Specifications 4.2.2.1 and 4.2.2.5, and
- b. Specification 4.2.3.3.

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SPECIAL TEST EXCEPTIONS3/4.10.3 PHYSICS TESTSLIMITING CONDITION FOR OPERATION

3.10.3 The limitations of Specifications 3.1.1.3, 3.1.1.4, 3.1.3.1, 3.1.3.5, and 3.1.3.6 may be suspended during the performance of PHYSICS TESTS provided:

- a. The THERMAL POWER does not exceed 5% of RATED THERMAL POWER,
- b. The Reactor Trip Setpoints on the OPERABLE Intermediate and Power Range channels are set at less than or equal to 25% of RATED THERMAL POWER, and
- c. The Reactor Coolant System lowest operating loop temperature (T_{avg}) is greater than or equal to 531°F.

APPLICABILITY: MODE 2.

ACTION:

- a. With the THERMAL POWER greater than 5% of RATED THERMAL POWER, immediately open the Reactor trip breakers.
- b. With a Reactor Coolant System operating loop temperature (T_{avg}) less than 531°F, restore T_{avg} to within its limit within 15 minutes or be in at least HOT STANDBY within the next 15 minutes.

SURVEILLANCE REQUIREMENTS

4.10.3.1 The THERMAL POWER shall be determined to be less than or equal to 5% of RATED THERMAL POWER at least once per hour during PHYSICS TESTS.

4.10.3.2 Each Intermediate and Power Range channel shall be subjected to an ANALOG CHANNEL OPERATIONAL TEST within 12 hours prior to initiating PHYSICS TESTS.

4.10.3.3 The Reactor Coolant System temperature (T_{avg}) shall be determined to be greater than or equal to 531°F at least once per 30 minutes during PHYSICS TESTS.

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SPECIAL TEST EXCEPTIONS

3/4.10.4 (This specification number is not used)

TURKEY POINT - UNITS 3 & 4

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SPECIAL TEST EXCEPTIONS3/4.10.5 POSITION INDICATION SYSTEM - SHUTDOWNLIMITING CONDITION FOR OPERATION

3.10.5 The limitations of Specification 3.1.3.3 may be suspended during the performance of individual full-length shutdown and control rod drop time measurements provided;

- a. Only one shutdown or control bank is withdrawn from the fully inserted position at a time, and
- b. The rod position indicator is OPERABLE during the withdrawal of the rods.

APPLICABILITY: MODES 3, 4, and 5 during performance of rod drop time measurements.

ACTION:

With the Position Indication Systems inoperable or with more than one bank of rods withdrawn, immediately open the Reactor trip breakers.

SURVEILLANCE REQUIREMENTS

4.10.5 The above required Position Indication Systems shall be determined to be OPERABLE within 24 hours prior to the start of and at least once per 24 hours thereafter during rod drop time measurements by verifying the Demand Position Indication System and the Analog Rod Position Indication System agree:

- a. Within 12 steps when the rods are stationary, and
- b. Within 24 steps during rod motion.

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3/4.11 RADIOACTIVE EFFLUENTS

3/4.11.1 LIQUID EFFLUENTS

CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.11.1.1 The concentration of radioactive material released in liquid effluents to UNRESTRICTED AREAS (see Figure 5.1-1) shall be limited to the concentrations specified in 10 CFR Part 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2×10^{-4} microCurie/ml total activity.

APPLICABILITY: At all times.

ACTION:

With the concentration of radioactive material released in liquid effluents to UNRESTRICTED AREAS exceeding the above limits, immediately restore the concentration to within the above limits.

SURVEILLANCE REQUIREMENTS

4.11.1.1.1 Radioactive liquid wastes shall be sampled and analyzed according to the sampling and analysis program of Table 4.11-1.

4.11.1.1.2 The results of the radioactivity analyses shall be used in accordance with the methodology and parameters in the ODCM to assure that the concentrations at the point of release are maintained within the limits of Specification 3.11.1.1.

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TABLE 4.11-1

RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM

| LIQUID RELEASE TYPE | SAMPLING FREQUENCY | MINIMUM ANALYSIS FREQUENCY | TYPE OF ACTIVITY ANALYSIS | LOWER LIMIT OF DETECTION (LLD) ⁽¹⁾ ($\mu\text{Ci/ml}$) |
|---|--------------------|--|--|---|
| 1. Batch Waste Release Tanks ⁽²⁾ | P Each Batch | P Each Batch | Principal Gamma Emitters ⁽³⁾ | 5×10^{-7} |
| | | | I-131 | 1×10^{-6} |
| | P One Batch/M | M | Dissolved and Entrained Gases (Gamma Emitters) | 1×10^{-5} |
| | P Each Batch | M Composite ⁽⁴⁾ | H-3 | 1×10^{-5} |
| | | | Gross Alpha | 1×10^{-7} |
| | P Each Batch | Q Composite ⁽⁴⁾ | Sr-89, Sr-90 | 5×10^{-8} |
| | | | Fe-55 | 1×10^{-6} |
| | | | | |
| 2. Continuous Releases ⁽⁵⁾ | W. | W | Principal Gamma Emitters ⁽³⁾ | 5×10^{-7} |
| | | | I-131 | 1×10^{-6} |
| | M ⁽⁸⁾ | M ⁽⁸⁾ | Dissolved and Entrained Gases (Gamma Emitters) | 1×10^{-5} |
| | | | | |
| | W ⁽⁸⁾ | M ⁽⁸⁾ Composite ⁽⁶⁾ | H-3 | 1×10^{-5} |
| | | | Gross Alpha | 1×10^{-7} |
| | W ⁽⁸⁾ | Q ⁽⁸⁾ Composite ⁽⁶⁾ | Sr-89, Sr-90 | 5×10^{-8} |
| | | | Fe-55 | 1×10^{-6} |
| | | | | |
| | | | | |
| b. Storm Drain | M | M | Principal Gamma Emitters ⁽³⁾ | 5×10^{-7} |
| | | | I-131 | 1×10^{-6} |

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TABLE 4.11-1 (continued)

TABLE NOTATIONS

- (1) The LLD is the smallest concentration of radioactive material in a sample that will be detected with 95% probability with only 5% probability of falsely concluding that a blank observation represents a "real" signal.

For a particular measurement system, which may include radiochemical separation:

$$LLD = \frac{4.66 s_b}{E \cdot V \cdot (2.22 \times 10^6) \cdot Y \cdot [\exp(-\lambda \Delta t)]}$$

Where:

- LLD = the "a priori" lower limit of detection as defined above for a blank sample (microCurie per unit mass or volume),
- s_b = the standard deviation of the background counting rate or of the counting rate of a blank sample as appropriate (counts per minute),
- E = the counting efficiency (counts per disintegration),
- V = the sample size (units of mass or volume),
- 2.22×10^6 = the number of disintegrations per minute per microCurie,
- Y = the fractional radiochemical yield, when applicable,
- λ = the radioactive decay constant for the particular radionuclide, and
- Δt = the elapsed time between the midpoint of sample collection and the time of counting (for plant effluents, not environmental samples).

The value of s_b used in the calculation of the LLD for a detection system shall be based on the actual observed variance of the background counting rate or of the counting rate of the blank samples (as appropriate) rather than on an unverified theoretically predicted variance. Typical values of E, V, Y, and Δt should be used in the calculation.

- (2) A batch release is the discharge of liquid wastes of a discrete volume. Prior to sampling for analyses, each batch shall be isolated, and then thoroughly mixed by a method described in the ODCM to assure representative sampling.

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TABLE 4.11-1 (Continued)

TABLE NOTATIONS (Continued)

- (3) The principal gamma emitters for which the LLD specification exclusively applies are the following radionuclides: Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144. This list does not mean that only these nuclides are to be considered. Other gamma peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Semiannual Radioactive Effluent Release Report pursuant to Specification 6.9.1.4.
- (4) A composite sample is one in which the quantity of liquid sampled is proportional to the quantity of liquid waste discharged and in which the method of sampling employed results in a specimen that is representative of the liquids released.
- (5) A continuous release is the discharge of liquid wastes of a nondiscrete volume, e.g., from a volume of a system that has an input flow during the continuous release.
- (6) Prior to analyses, all samples taken for the composite shall be thoroughly mixed in order for the composite sample to be representative of the effluent release.
- (7) Sampling and analysis of steam generator blowdown is not required during Mode 5 or 6.
- (8) Sampling and analysis of steam generator blowdown on the applicable unit is only necessary for these species when primary to secondary leakage is occurring as indicated by the condenser air ejector noble gas activity monitor. (See Specification 3.3.3.7 in Table 3.3-8, Item 3a).

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RADIOACTIVE EFFLUENTS

DOSE

LIMITING CONDITION FOR OPERATION

3.11.1.2 The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released, from each unit, to UNRESTRICTED AREAS (see Figure 5.1-1) shall be limited:

- a. During any calendar quarter to less than or equal to 1.5 mrem to the whole body and to less than or equal to 5 mrem to any organ, and
- b. During any calendar year to less than or equal to 3 mrem to the whole body and to less than or equal to 10 mrem to any organ.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated dose from the release of radioactive materials in liquid effluents exceeding any of the above limits, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.2 Cumulative dose contributions from liquid effluents for the current calendar quarter and the current calendar year shall be determined in accordance with the methodology and parameters in the ODCM at least once per 31 days.



RADIOACTIVE EFFLUENTS

LIQUID RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

3.11.1.3 The Liquid Radwaste Treatment System shall be OPERABLE and appropriate portions of the system shall be used to reduce releases of radioactivity when the projected doses due to the liquid effluent, from each unit, to UNRESTRICTED AREAS (see Figure 5.1-1) would exceed 0.06 mrem to the whole body or 0.2 mrem to any organ in a 31-day period.

APPLICABILITY: At all times.

ACTION:

- a. With radioactive liquid waste being discharged without treatment and in excess of the above limits and any portion of the Liquid Radwaste Treatment System not in operation, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
 - 1. Explanation of why liquid radwaste was being discharged without treatment, identification of any inoperable equipment or subsystems, and the reason for the inoperability,
 - 2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
 - 3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.3.1 Doses due to liquid releases from each unit to UNRESTRICTED AREAS shall be projected at least once per 31 days in accordance with the methodology and parameters in the ODCM when Liquid Radwaste Treatment Systems are not being fully utilized.

4.11.1.3.2 The installed Liquid Radwaste Treatment System shall be considered OPERABLE by meeting Specifications 3.11.1.1 and 3.11.1.2.



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RADIOACTIVE EFFLUENTS

3/4.11.2 GASEOUS EFFLUENTS

DOSE RATE

LIMITING CONDITION FOR OPERATION

3.11.2.1 The dose rate due to radioactive materials released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1-1) shall be limited to the following:

- a. For noble gases: Less than or equal to 500 mrem/yr to the whole body and less than or equal to 3000 mrem/yr to the skin, and
- b. For Iodine-131, for Iodine-133, for tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to 1500 mrem/yr to any organ.

APPLICABILITY: At all times.

ACTION:

With the dose rate(s) exceeding the above limits, immediately restore the release rate to within the above limit(s).

SURVEILLANCE REQUIREMENTS

4.11.2.1.1 The dose rate due to noble gases in gaseous effluents shall be determined to be within the above limits in accordance with the methodology and parameters in the ODCM.

4.11.2.1.2 The dose rate due to Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents shall be determined to be within the above limits in accordance with the methodology and parameters in the ODCM by obtaining representative samples and performing analyses in accordance with the sampling and analysis program specified in Table 4.11-2.



INDEX 4.11-2
RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM

TURKEY POINT - UNITS 3 & 4

3/4 11-8

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| GASEOUS RELEASE TYPE | SAMPLING FREQUENCY | MINIMUM ANALYSIS FREQUENCY | TYPE OF ACTIVITY ANALYSIS | LOWER LIMIT OF DETECTION (LLD) ⁽¹⁾ ($\mu\text{Ci/cc}$) |
|---|-------------------------------------|--|---|--|
| 1. Gas Decay Tank (Batch) | P Each Tank Grab Sample | P Each Tank | Principal Gamma Emitters ⁽²⁾ | 1×10^{-4} |
| 2. Containment Purge or Venting (Batch) | p ⁽⁶⁾ Grab Sample | P Each PURGE ⁽⁶⁾ | Principal Gamma Emitters ⁽²⁾ | 1×10^{-4} |
| | | | H-3 | 1×10^{-6} |
| 3. Condenser Air Ejectors | M ⁽⁶⁾ Grab Sample | M ⁽⁶⁾ Gas Sample | Principal Gamma Emitters ⁽²⁾ | 1×10^{-4} |
| | | | H-3 | 1×10^{-6} |
| 4. Plant Vent (Includes Unit 4 Spent Fuel Pit Building Vent.) | M ⁽⁶⁾ Grab Sample | M ⁽⁶⁾ Gas Sample | Principal Gamma Emitters ⁽²⁾ | 1×10^{-4} |
| | M ^{(4),(5)} Grab Sample | M | H-3 | 1×10^{-6} |
| 5. Unit 3 Spent Fuel Pit Building Vent | M ⁽⁵⁾ Grab Sample | M Gas Sample | Principal Gamma Emitters ⁽²⁾ | 1×10^{-4} |
| | M ^{(4),(5)} Grab Sample | M | H-3 | 1×10^{-6} |
| 6. All Release Types as listed in 3., 4., and 5. above | Continuous ⁽³⁾ | W ⁽⁷⁾ Charcoal Sample | I-131 | 1×10^{-12} |
| | Continuous ⁽³⁾ | W ⁽⁷⁾ Particulate Sample | Principal Gamma Emitters ⁽²⁾ | 1×10^{-11} |
| | Continuous ⁽³⁾ | M Composite Particulate Sample | Gross Alpha | 1×10^{-11} |
| | Continuous ⁽³⁾ | Q Composite Particulate Sample | Sr-89, Sr-90 | 1×10^{-11} |
| | Continuous ⁽³⁾ | Noble Gas Monitor | Noble Gas Gross Beta or Gamma | 1×10^{-6} |

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TABLE 4.11-2 (Continued)

TABLE NOTATIONS

- (1) The LLD is the smallest concentration of radioactive material in a sample that will be detected with 95% probability with only 5% probability of falsely concluding that a blank observation represents a "real" signal.

For a particular measurement system, which may include radiochemical separation:

$$LLD = \frac{4.66 s_b}{E \cdot V \cdot (2.22 \times 10^6) \cdot Y \cdot [\exp(-\lambda \Delta t)]}$$

Where:

-
- LLD = the "a priori" lower limit of detection as defined above as a blank sample (microCurie per unit mass or volume),
- s_b = the standard deviation of the background counting rate or of the counting rate of a blank sample as appropriate (counts per minute),
- E = the counting efficiency (counts per disintegration)
- V = the sample size (units of mass or volume),
- 2.22×10^6 = the number of disintegrations per minute per microCurie,
- Y = the fractional radiochemical yield, when applicable,
- λ = the radioactive decay constant for the particular radionuclide, and
- Δt = the elapsed time between the midpoint of sample collection and the time of counting (for plant effluents, not environmental samples)

The value of s_b used in the calculation of the LLD for a detection system shall be based on the actual observed variance of the background counting rate or of the counting rate of the blank samples (as appropriate) rather than on an unverified theoretically predicted variance. Typical values of E, V, Y and Δt shall be used in the calculation.

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TABLE 4.11-2 (Continued)

TABLE NOTATIONS (Continued)

- (2) The principal gamma emitters for which the LLD specification will apply are exclusively the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 in noble gas emissions and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, I-131, Cs-134, Cs-137, Ce-141 and Ce-144 for particulate emissions. This list does not mean that only these nuclides are to be detected and reported. Other gamma peaks that are measurable and identifiable, together with the above nuclides, shall also be identified and reported pursuant to Specification 6.9.1.4.

Nuclides which are below the LLD for the analyses should not be reported as being present at the LLD for that nuclide. When a radionuclide's calculated LLD is greater than its listed LLD limit, the calculated LLD should be assigned as the activity of the radionuclide; or, the activity of the radionuclide should be calculated using measured ratios with those radionuclides which are routinely identified and measured.

- (3) The ratio of the sample flow rate to the sampled stream flow rate shall be known for the time period covered by each dose or dose rate calculation made in accordance with Specifications 3.11.2.1, 3.11.2.2, and 3.11.2.3.

- (4) When a Unit's refueling canal is flooded Tritium grab samples shall be taken on that Unit only from the following respective area(s) at least once per 24 hours:

For Unit 3 sample the plant vent and the Unit 3 spent fuel pool area ventilation exhaust.

For Unit 4 sample the plant vent only.

- (5) When spent fuel is in the spent fuel pool, tritium grab samples shall be taken from the following respective area at least once per 7 days:

For Unit 3, sample the Unit 3 spent fuel pool area ventilation exhaust

For Unit 4, sample the plant vent.

- (6) Sampling and analysis shall also be performed following shutdown, startup, or a THERMAL POWER change exceeding 15% of RATED THERMAL POWER within a 1-hour period if (1) analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant has increased by more than a factor of 3; and (2) the noble gas activity monitor shows that effluent activity has increased by more than a factor of 3.

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TABLE 4.11-2 (Continued)

TABLE NOTATIONS (Continued)

- (7) Sample collection media on the applicable Unit shall be changed at least once per 7 days and analyses shall be completed within 48 hours after changing, or after removal from sampler. Sample collection media on the applicable Unit shall also be changed at least once per 24 hours for at least 7 days following each shutdown, startup, or THERMAL POWER change exceeding 15% of RATED THERMAL POWER within a 1-hour period and analyses shall be completed within 48 hours of changing if: (1) analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant has ~~not~~ increased more than a factor of 3; and (2) the noble gas monitor shows that effluent activity has ~~not~~ increased more than a factor of 3. When samples collected for 24 hours are analyzed, the corresponding LLDs may be increased by a factor of 10.

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RADIOACTIVE EFFLUENTS

DOSE - NOBLE GASES

LIMITING CONDITION FOR OPERATION

3.11.2.2 The air dose due to noble gases released in gaseous effluents, from each unit, to areas at and beyond the SITE BOUNDARY (see Figure 5.1-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation, and
- b. During any calendar year: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation.

APPLICABILITY: At all times.

ACTION

- a. With the calculated air dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.2 Cumulative dose contributions for the current calendar quarter and current calendar year for noble gases shall be determined in accordance with the methodology and parameters in the ODCM at least once per 31 days.

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RADIOACTIVE EFFLUENTS

DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIOACTIVE MATERIAL IN PARTICULATE FORM

LIMITING CONDITION FOR OPERATION

3.11.2.3 The dose to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released, from each unit, to areas at and beyond the SITE BOUNDARY (see Figure 5.1-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 7.5 mrem to any organ and,
- b. During any calendar year: Less than or equal to 15 mrem to any organ.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated dose from the release of Iodine-131, Iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents exceeding any of the above limits, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.3 Cumulative dose contributions for the current calendar quarter and current calendar year for Iodine-131, Iodine-133, tritium and radionuclides in particulate form with half-lives greater than 8 days shall be determined in accordance with the methodology and parameters in the ODCM at least once per 31 days.

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RADIOACTIVE EFFLUENTS

GASEOUS RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

3.11.2.4 The VENTILATION EXHAUST TREATMENT SYSTEM and the GAS DECAY TANK SYSTEM shall be OPERABLE and appropriate portions of these systems shall be used to reduce releases of radioactivity when the projected doses in 31 days due to gaseous effluent releases, from each unit, to areas at and beyond the SITE BOUNDARY (see Figure 5.1-1) would exceed:

- a. 0.2 mrad to air from gamma radiation, or
- b. 0.4 mrad to air from beta radiation, or
- c. 0.3 mrem to any organ of a MEMBER OF THE PUBLIC.

APPLICABILITY: At all times.

ACTION:

- a. With radioactive gaseous waste being discharged without treatment and in excess of the above limits, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
 1. Identification of any inoperable equipment or subsystems, and the reason for the inoperability,
 2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
 3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

3.11.2.4.1 Doses due to gaseous releases from each unit to areas at and beyond the SITE BOUNDARY shall be projected at least once per 31 days in accordance with the methodology and parameters in the ODCM when Gaseous Radwaste Treatment Systems are not being fully utilized.

4.11.2.4.2 The installed VENTILATION EXHAUST TREATMENT SYSTEM and GAS DECAY TANK SYSTEM shall be considered OPERABLE by meeting Specifications 3.11.2.1 and either 3.11.2.2 or 3.11.2.3.



RADIOACTIVE EFFLUENTSEXPLOSIVE GAS MIXTURELIMITING CONDITION FOR OPERATION

3.11.2.5 The concentration of oxygen in the GAS DECAY TANK SYSTEM (as measured in the inservice gas decay tank) shall be limited to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume.

APPLICABILITY: At all times.

ACTION:

- a. With the concentration of oxygen in the inservice gas decay tank greater than 2% by volume but less than or equal to 4% by volume, reduce the oxygen concentration to the above limits within 48 hours.
- b. With the concentration of oxygen in the inservice gas decay tank greater than 4% by volume and the hydrogen concentration greater than 4% by volume, immediately suspend all additions of waste gases to the gas decay tanks and reduce the concentration of oxygen to less than or equal to 4% by volume, then take ACTION a., above.
- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.5 The concentrations of hydrogen and oxygen in the inservice gas decay tanks shall be determined to be within the above limits by continuously* monitoring the waste gases in the inservice gas decay tank with the hydrogen and oxygen monitors required OPERABLE by Table 3.3-8 of Specification 3.3.3.7.

*When continuous monitoring capability is inoperable, Table 3.3-9 allows the use of grab samples.

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RADIOACTIVE EFFLUENTS

GAS DECAY TANKS

LIMITING CONDITION FOR OPERATION

3.11.2.6 The quantity of radioactivity contained in each gas decay tank shall be limited to less than or equal to 70,000 Curies of noble gases (considered as Xe-133 equivalent).

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any gas decay tank exceeding the above limit, immediately suspend all additions of radioactive material to the tank, within 48 hours reduce the tank contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.4.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.6 The quantity of radioactive material contained in each gas decay tank shall be determined to be within the above limit at least once per 24 hours when radioactive materials are being added to the tank and the Reactor Coolant System total activity exceeds the limit of Specification 3.4.8.

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RADIOACTIVE EFFLUENTS

3/4.11.3 SOLID RADIOACTIVE WASTES

LIMITING CONDITION FOR OPERATION

3.11.3 SOLIDIFICATION or dewatering of radioactive wastes shall be performed in accordance with the PROCESS CONTROL PROGRAM to meet shipping and transportation requirements during transit, and the applicable licensing requirements of the consignee when received at the shipping destination.

APPLICABILITY: At all times.

ACTION:

- a. With SOLIDIFICATION or dewatering not meeting the applicable licensing requirements of the consignee and shipping and transportation requirements, suspend shipment of the inadequately processed wastes and correct the PROCESS CONTROL PROGRAM, the procedures, and/or the Solid Waste System as necessary to prevent recurrence.
- b. With SOLIDIFICATION or dewatering not performed in accordance with the PROCESS CONTROL PROGRAM, test the improperly processed waste in each container to ensure that it meets the applicable licensing requirements of the consignee and shipping requirements and take appropriate administrative action to prevent recurrence.
- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.3.1 Dewatering shall be performed in accordance with the PCP.

4.11.3.2 SOLIDIFICATION (excluding dewatering) of at least one representative test specimen from at least every tenth batch of each type of wet radioactive wastes (e.g., filter sludges, spent resins, evaporator bottoms, boric acid solutions, and sodium sulfate solutions) shall be verified in accordance with the PROCESS CONTROL PROGRAM:

- a. If any test specimen fails to verify SOLIDIFICATION, the SOLIDIFICATION of the batch under test shall be suspended until such time as additional test specimens can be obtained, alternative SOLIDIFICATION parameters can be determined in accordance with the PROCESS CONTROL PROGRAM, and a subsequent test verifies SOLIDIFICATION. SOLIDIFICATION of the batch may then be resumed using the alternative SOLIDIFICATION parameters determined by the PROCESS CONTROL PROGRAM;
- b. If the initial test specimen from a batch of waste fails to verify SOLIDIFICATION, the PROCESS CONTROL PROGRAM shall provide for the collection and testing of representative test specimens from each consecutive batch of the same type of wet waste until at least three consecutive initial test specimens demonstrate SOLIDIFICATION. The PROCESS CONTROL PROGRAM shall be modified as required, as provided in Specification 6.13, to assure SOLIDIFICATION of subsequent batches of waste; and
- c. With the installed equipment incapable of meeting Specification 3.11.3 or declared inoperable, restore the equipment to OPERABLE status or provide for contract capability to process wastes as necessary to satisfy all applicable transportation and disposal requirements.

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RADIOACTIVE EFFLUENTS

3/4.11.4 TOTAL DOSE

LIMITING CONDITION FOR OPERATION

3.11.4 The annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources shall be limited to less than or equal to 25 mrem to the whole body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid or gaseous effluents exceeding twice the limits of Specification 3.11.1.2a., 3.11.1.2b., 3.11.2.2a., 3.11.2.2b., 3.11.2.3a., or 3.11.2.3b., calculations shall be made including direct radiation contributions from the units to determine whether the above limits of Specification 3.11.4 have been exceeded. If such is the case, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that defines the corrective action to be taken to reduce subsequent releases to prevent recurrence of exceeding the above limits and includes the schedule for achieving conformance with the above limits. This Special Report, as defined in 10 CFR 20.405(c), shall include an analysis that estimates the radiation exposure (dose) to a MEMBER OF THE PUBLIC from uranium fuel cycle sources, including all effluent pathways and direct radiation, for the calendar year that includes the release(s) covered by this report. It shall also describe levels of radiation and concentrations of radioactive material involved, and the cause of the exposure levels or concentrations. If the estimated dose(s) exceeds the above limits, and if the release condition resulting in violation of 40 CFR Part 190 has not already been corrected, the Special Report shall include a request for a variance in accordance with the provisions of 40 CFR Part 190. Submittal of the report is considered a timely request, and a variance is granted until staff action on the request is complete.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.4.1 Cumulative dose contributions from liquid and gaseous effluents shall be determined in accordance with Specifications 4.11.1.2, 4.11.2.2, and 4.11.2.3, and in accordance with the methodology and parameters in the ODCM.

4.11.4.2 Cumulative dose contributions from direct radiation from the units and the methodology used shall be indicated in the Semiannual Radioactive Effluent Release Report. This requirement is applicable only under conditions set forth in ACTION a. of Specification 3.11.4.

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3/4.12 RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.1 MONITORING PROGRAM

LIMITING CONDITION FOR OPERATION

3.12.1 The Radiological Environmental Monitoring Program shall be conducted as specified in Table 3.12-1.

APPLICABILITY: At all times.

ACTION:

- a. With the Radiological Environmental Monitoring Program not being conducted as specified in Table 3.12-1, prepare and submit to the Commission, in the Annual Radiological Environmental Operating Report required by Specification 6.9.1.3, a description of the reasons for not conducting the program as required and the plans for preventing a recurrence.
- b. With the level of confirmed** radioactivity as the result of plant effluents in an environmental sampling medium at a specified location exceeding the reporting levels of Table 3.12-2 when averaged over any calendar quarter, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions to be taken to reduce radioactive effluents so that the potential annual dose* to a MEMBER OF THE PUBLIC is less than the calendar year limits of Specifications 3.11.1.2, 3.11.2.2, or 3.11.2.3. When more than one of the radionuclides in Table 3.12-2 are detected in the sampling medium, this report shall be submitted if:

$$\frac{\text{concentration (1)}}{\text{reporting level (1)}} + \frac{\text{concentration (2)}}{\text{reporting level (2)}} + \dots \geq 1.0$$

When radionuclides other than those in Table 3.12-2 are detected and are the result of plant effluents, this report shall be submitted if the potential annual dose* to a MEMBER OF THE PUBLIC from all radionuclides is equal to or greater than the calendar year limits of Specification 3.11.1.2, 3.11.2.2, or 3.11.2.3. This report is not required if the measured level of radioactivity was not the result of plant effluents; however, in such an event, the condition shall be reported and described in the Annual Radiological Environmental Operating Report required by Specification 6.9.1.3.

*The methodology and parameters used to estimate the potential annual dose to a MEMBER OF THE PUBLIC shall be indicated in this report.

**A confirmatory reanalysis of the original, a duplicate, or a new sample may be desirable, as appropriate. The results of the confirmatory analysis shall be completed at the earliest time consistent with the analysis, but in any case within 30 days.



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RADIOLOGICAL ENVIRONMENTAL MONITORING

LIMITING CONDITION FOR OPERATION

ACTION (Continued)

- c. With milk or fresh leafy vegetation samples unavailable from one or more of the sample locations required by Table 3.12-1, identify specific locations for obtaining replacement samples and add them within 30 days to the Radiological Environmental Monitoring Program given in the ODCM. The specific locations from which samples were unavailable may then be deleted from the monitoring program. Pursuant to Specification 6.14, submit in the next Semiannual Radioactive Effluent Release Report documentation for a change in the ODCM including a revised figure(s) and table for the ODCM reflecting the new location(s) with supporting information identifying the cause of the unavailability of samples and justifying the selection of the new location(s) for obtaining samples.
- d. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.12.1 The radiological environmental monitoring samples shall be collected pursuant to Table 3.12-1 from the specific locations given in the table and figure(s) in the ODCM, and shall be analyzed pursuant to the requirements of Table 3.12-1 and the detection capabilities required by Table 4.12-1.



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RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM⁽¹⁾

| <u>EXPOSURE PATHWAY AND/OR SAMPLE</u> | <u>NUMBER OF REPRESENTATIVE SAMPLES AND SAMPLE LOCATIONS</u> ⁽²⁾⁽³⁾ | <u>SAMPLING AND COLLECTION FREQUENCY</u> ⁽⁴⁾ | <u>TYPE AND FREQUENCY OF ANALYSIS</u> ⁽⁴⁾ |
|--|--|---|--|
| 1. Direct Radiation ⁽⁵⁾ | 21 monitoring locations | Continuous monitoring with sample collection quarterly ⁽⁶⁾ | Gamma exposure rate quarterly |
| 2. Airborne Radioiodine and Particulates | Five locations | Continuous sampler oper- ation with sample collec- tion weekly, or more frequently if required by dust loading. | <u>Radioiodine Filter</u> I-131 analysis weekly. <u>Particulate Filter</u> Gross beta radioactivity analysis \geq 24 hours following filter change; ⁽⁷⁾ Gamma isotopic analysis ⁽⁸⁾ of composite ⁽⁷⁾ (by location) quarterly. |
| 3. Waterborne ⁽¹⁰⁾ a. Surface ⁽⁸⁾ | Three locations ⁽⁹⁾ | Monthly | Gamma isotopic ⁽⁸⁾ and tritium analyses monthly. |



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3/4.0 APPLICABILITY

ASES

applies. However, if a lower MODE of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other applicable MODE, is not reduced. For example, if HOT STANDBY is reached in 2 hours, the time allowed to reach HOT SHUTDOWN is the next 11 hours because the total time to reach HOT SHUTDOWN is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to POWER operation, a penalty is not incurred by having to reach a lower MODE of operation in less than the total time allowed.

The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into a MODE or condition of operation for another specification in which the requirements of the Limiting Condition for Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher MODE of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower MODE of operation.

The shutdown requirements of Specification 3.0.3 do not apply in MODES 5 and 6, because the ACTION requirements of individual specifications define the remedial measures to be taken.

Specification 3.0.4 establishes limitations on MODE changes when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher MODE of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in a shutdown to comply with the ACTION requirements if a change in MODES were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher MODES of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits. Compliance with ACTION requirements that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a MODE change. Therefore, in this case, entry into an OPERATIONAL MODE or other specified condition may be made in accordance with the provisions of the ACTION requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to OPERABLE status before plant startup.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.4 do not apply because they would delay placing the facility in a lower MODE of operation.



3/4.0 APPLICABILITY

ASES

Specification 3.0.5 delineates the applicability of each specification to Unit 3 and Unit 4 operation.

Specification 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that surveillances must be performed during the OPERATIONAL MODES or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in a MODE or other specified condition for which the associated Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL MODE for which the requirements of the associated Limiting Condition for operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.2 establishes the conditions under which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. The limits of Specification 4.0.2 are based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. These provisions are sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

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3/4.0 APPLICABILITY

BASES

Specification 4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.3. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, was a violation of the OPERABILITY requirements of a Limiting Condition for Operation that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of Specification 4.0.2 is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements, e.g., Specification 3.0.3, a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown is required to comply with ACTION requirements or before other remedial measures would be required that may preclude completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. The provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of MODE changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.4 is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.



3/4.0 APPLICABILITY

BASES

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.4 establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into a MODE or condition for which these systems and components ensure safe operation of the facility. This provision applies to changes in OPERATIONAL MODES or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to ensure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.5 establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. These requirements apply except when relief has been provided in writing by the Commission.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.4 to perform surveillance activities before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure



3/4.0 APPLICABILITYBASES

Vessel Code provision which allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, that is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

Specification 4.0.6 delineates the applicability of the surveillance activities to Unit 3 and Unit 4 operations.

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3/4.1 REACTIVITY CONTROL SYSTEMS

BASES

3/4.1.1 BORATION CONTROL

3/4.1.1.1 and 3/4.1.1.2 SHUTDOWN MARGIN

A sufficient SHUTDOWN MARGIN ensures that: (1) the reactor can be made subcritical from all operating conditions, (2) the reactivity transients associated with postulated accident conditions are controllable within acceptable limits, and (3) the reactor will be maintained sufficiently subcritical to preclude inadvertent criticality in the shutdown condition.

SHUTDOWN MARGIN requirements vary throughout core life as a function of fuel depletion, RCS boron concentration, and RCS T_{avg} . The most restrictive condition occurs at EOL, with T_{avg} at no load operating temperature, and is associated with a postulated steam line break accident and resulting uncontrolled RCS cooldown. Figure 3.1-1 shows the SHUTDOWN MARGIN equivalent to 1.77% $\Delta k/k$ at the end-of-core-life with respect to an uncontrolled cooldown. Accordingly, the SHUTDOWN MARGIN requirement is based upon this limiting condition and is consistent with FSAR safety analysis assumptions. With T_{avg} less than 200°F, the reactivity transients resulting from an inadvertent cooldown of the RCS or an inadvertent dilution of RCS boron are minimal and a 1% $\Delta k/k$ SHUTDOWN MARGIN provides adequate protection.

The boron rate requirement of 4 gpm of 20,000 ppm boron or equivalent ~~in~~ ~~MODE 5~~ ensures the capability to restore the shutdown margin with one OPERABLE charging pump.

3/4.1.1.3 MODERATOR TEMPERATURE COEFFICIENT

The limitations on moderator temperature coefficient (MTC) are provided to ensure that the value of this coefficient remains within the limiting condition assumed in the FSAR accident and transient analyses.

The MTC values of this specification are applicable to a specific set of plant conditions; accordingly, verification of MTC values at conditions other than those explicitly stated will require extrapolation to those conditions in order to permit an accurate comparison.

The most negative MTC, value equivalent to the most positive moderator density coefficient (MDC), was obtained by incrementally correcting the MDC used in the FSAR analyses to nominal operating conditions. These corrections



REACTIVITY CONTROL SYSTEMS

ASES

MODERATOR TEMPERATURE COEFFICIENT (Continued)

involved subtracting the incremental change in the MDC associated with a core condition of all rods inserted (most positive MDC) to an all rods withdrawn condition and, a conversion for the rate of change of moderator density with temperature at RATED THERMAL POWER conditions. This value of the MDC was then transformed into the limiting MTC value $-3.5 \times 10^{-4} \Delta k/k/^{\circ}F$. The MTC value of $-3.0 \times 10^{-4} \Delta k/k/^{\circ}F$ represents a conservative value (with corrections for burnup and soluble boron) at a core condition of 300 ppm equilibrium boron concentration and is obtained by making these corrections to the limiting MTC value of $-3.5 \times 10^{-4} \Delta k/k/^{\circ}F$.

The Surveillance Requirements for measurement of the MTC at the beginning and near the end of the fuel cycle are adequate to confirm that the MTC remains within its limits since this coefficient changes slowly due principally to the reduction in RCS boron concentration associated with fuel burnup.

3/4.1.1.4 MINIMUM TEMPERATURE FOR CRITICALITY

This specification ensures that the reactor will not be made critical with the Reactor Coolant System average temperature less than 541°F. This limitation is required to ensure: (1) the moderator temperature coefficient is within its analyzed temperature range, (2) the trip instrumentation is within its normal operating range, (3) the pressurizer is capable of being in an OPERABLE status with a steam bubble, and (4) the reactor vessel is above its minimum RT_{NDT} temperature.

3/4.1.2 BORATION SYSTEMS

The Boron Injection System ensures that negative reactivity control is available during each mode of facility operation. The components required to perform this function include: (1) borated water sources, (2) charging pumps, (3) separate flow paths, (4) boric acid transfer pumps, (5) associated Heat Tracing Systems, and (6) an emergency power supply from OPERABLE diesel generators.

With the RCS average temperature above 200°F, a minimum of two boron injection flow paths are required to ensure single functional capability in the event an assumed failure renders one of the flow paths inoperable. One flow path from the charging pump discharge is acceptable since the flow path components subject to an active failure are upstream of the charging pumps.

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REACTIVITY CONTROL SYSTEMS

BASES

BORATION SYSTEMS (Continued)

The boration flow path specification allows the RWST and the boric acid storage tank to be the boron sources. Due to the lower boron concentration in the RWST, borating the RCS from this source is less effective than borating from the boric acid tank and additional time may be required to achieve the desired SHUTDOWN MARGIN required by ACTION statement restrictions.

The ACTION statement restrictions for the boration flow paths allow continued operation in mode 1 for a limited time period with either boration source flow path or the normal flow path to the RCS (via the regenerative heat exchanger) inoperable. In this case, the plant capability to borate and charge into the RCS is limited and the potential operational impact of this limitation on mode 1 operation must be addressed. With both the flow path from the boric acid tanks and the regenerative heat exchanger flow path inoperable, immediate initiation of action to go to COLD SHUTDOWN is required but no time is specified for the mode reduction due to the reduced plant capability with these flow paths inoperable.

Two charging pumps with independent power supplies are required to be OPERABLE to ensure single functional capability in the event an assumed failure renders one of the pumps or power supplies inoperable. However, the ACTION statement restrictions allow 7 days to restore an inoperable pump provided that two charging pumps are available. This restriction is acceptable based on the low probability of losing the power source common to both charging pumps. The bus supplying the pumps can be fed from either the Emergency Diesel Generator or the offsite grid through the startup transformer.

The boration capability of either flow path is sufficient to provide the required SHUTDOWN MARGIN in accordance with Figure 3.1-1 from expected operating conditions after xenon decay and cooldown to 200°F. The maximum expected boration capability requirement occurs at BOL from full power equilibrium xenon conditions and requires 3080 gallons of 20,000 PPM borated water from the boric acid storage tanks or 320,000 gallons of 1950 PPM borated water from the refueling water storage tank (RWST).

With the RCS temperature below 200°F, one boron injection source flow path is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the additional restrictions prohibiting CORE ALTERATIONS and positive reactivity changes in the event the single boron injection system source flow path becomes inoperable.

The boron capability required below 200°F is sufficient to provide a SHUTDOWN MARGIN of 1% $\Delta k/k$ after xenon decay and cooldown from 200°F to 140°F. This condition requires either 500 gallons of 20,000 ppm borated water from the boric acid storage tanks or 20,000 gallons of 1950 ppm borated water from the RWST.



REACTIVITY CONTROL SYSTEMS

BASES

BORATION SYSTEMS (Continued)

The charging pumps are demonstrated to be OPERABLE by testing as required by Section XI of the ASME code or by specific surveillance requirements in the specification. These requirements are adequate to determine OPERABILITY because no safety analysis assumption relating to the charging pump performance is more restrictive than these acceptance criteria for the pumps.

The boron concentration of the RWST in conjunction with manual addition of borax ensures that the solution recirculated within containment after a LOCA will be basic. The basic solution minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components. The temperature requirements for the RWST are based on the containment integrity and large break LOCA analysis assumptions.

The OPERABILITY of one Boron Injection System during REFUELING ensures that this system is available for reactivity control while in MODE 6.

The OPERABILITY of the redundant heat tracing channels associated with the boric acid tank system ensures that the solubility of the boron solution will be maintained.

One channel of heat tracing is sufficient to maintain the specified temperature limit. Since one channel of heat tracing is sufficient to maintain the specified temperature, operation with one channel out-of-service is permitted for a period of 30 days provided additional temperature surveillance is performed.

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

The specifications of this section ensure that: (1) acceptable power distribution limits are maintained, (2) the minimum SHUTDOWN MARGIN is maintained, and (3) the potential effects of rod misalignment on associated accident analyses are limited. OPERABILITY of the control rod position indicators is required to determine control rod positions and thereby ensure compliance with the control rod alignment and insertion limits continue. OPERABLE condition for the analog rod position indicators is defined as being capable of indicating rod position to within ± 12 steps of the demand counter position. For the Shutdown Banks and Control Banks A and B, the Position Indication requirement is defined as the group demand counter indicated position between 0 and 30 steps withdrawn inclusive, and between 200 and 228 steps withdrawn inclusive. This permits the operator to verify that the control rods in these banks are either fully withdrawn or fully inserted, the normal operating modes for these banks. Knowledge of these bank positions in these two areas satisfies all accident analysis assumptions concerning their position. For Control Banks C and D, the Position Indication requirement is defined as the group demand counter indicated position between 0 and 228 steps withdrawn inclusive.

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REACTIVITY CONTROL SYSTEMSJASESMOVABLE CONTROL ASSEMBLIES (Continued)

Comparison of the group demand counters to the bank insertion limits with verification of rod position with the analog rod position indicators (after thermal soak after rod motion) is sufficient verification that the control rods are above the insertion limits.

Rod position indication is provided by two methods: a digital count of actuating pulses which shows demand position of the banks and a linear position indicator Linear Variable Differential Transformer which indicates the actual rod position. The relative accuracy of the linear position indicator Linear Variable Differential Transformer is such that, with the most adverse error, an alarm will be actuated if any two rods within a bank deviate by more than 24 steps for rods in motion and 12 steps for rods at rest. Complete rod misalignment (12 feet out of alignment with its bank) does not result in exceeding core limits in steady-state operation at RATED THERMAL POWER. If the condition cannot be readily corrected, the specified reduction in power to 75% will insure that design margins to core limits will be maintained under both steady-state and anticipated transient conditions. The 8-hour permissible limit on rod misalignment is short with respect to the probability of an independent accident.

The ACTION statements which permit limited variations from the basic requirements are accompanied by additional restrictions which ensure that the original design criteria are met. Misalignment of a rod requires measurement of peaking factors and a restriction in THERMAL POWER. These restrictions provide assurance of fuel rod integrity during continued operation. In addition, those safety analyses affected by a misaligned rod are reevaluated to confirm that the results remain valid during future operation.

The maximum rod drop time restriction is consistent with the assumed rod drop time used in the safety analyses. Measurement with T_{avg} greater than or equal to 541°F and with all reactor coolant pumps operating ensures that the measured drop times will be representative of insertion times experienced during a Reactor trip at operating conditions.

Control rod positions and OPERABILITY of the rod position indicators are required to be verified on a nominal basis of once per 12 hours with more frequent verifications required if an automatic monitoring channel is inoperable. These verification frequencies are adequate for assuring that the applicable LCOs are satisfied.



1. The first part of the document is a list of names and addresses of the members of the committee.

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3/4.2 POWER DISTRIBUTION LIMITS

BASES

The specifications of this section provide assurance of fuel integrity during Condition I (Normal Operation) and II (Incidents of Moderate Frequency) events by: (1) maintaining the minimum DNBR in the core greater than or equal to the applicable design limit during normal operation and in short-term transients, and (2) limiting the fission gas release, fuel pellet temperature, and cladding mechanical properties to within assumed design criteria. In addition, limiting the peak linear power density during Condition I events provides assurance that the initial conditions assumed for the LOCA analyses are met and the ECCS acceptance criteria limit of 2200°F is not exceeded.

The definitions of certain hot channel and peaking factors as used in these specifications are as follows:

- $F_Q(Z)$ Heat Flux Hot Channel Factor, is defined as the maximum local heat flux on the surface of a fuel rod at core elevation Z divided by the average fuel rod heat flux, allowing for manufacturing tolerances on fuel pellets and rods;
- $F_{\Delta H}^N$ Nuclear Enthalpy Rise Hot Channel Factor, is defined as the ratio of the integral of linear power along the rod with the highest integrated power to the average rod power; and
- $F_{xy}(Z)$ Radial Peaking Factor, is defined as the ratio of peak power density to average power density in the horizontal plane at core elevation Z .

3/4.2.1 AXIAL FLUX DIFFERENCE

The limits on AXIAL FLUX DIFFERENCE (AFD) assure that the $F_Q(Z)$ upper bound envelope of 2.32 times the normalized axial peaking factor is not exceeded during either normal operation or in the event of xenon redistribution following power changes.

Target flux difference is determined at equilibrium xenon conditions. The full-length rods may be positioned within the core in accordance with their respective insertion limits and should be inserted near their normal position for steady-state operation at high power levels. The value of the target flux difference obtained under these conditions divided by the fraction of RATED THERMAL POWER is the target flux difference at RATED THERMAL POWER for the associated core burnup conditions. Target flux differences for other THERMAL POWER levels are obtained by multiplying the RATED THERMAL POWER value by the appropriate fractional THERMAL POWER level. The periodic updating of the target flux difference value is necessary to reflect core burnup considerations.



POWER DISTRIBUTION LIMITSBASESAXIAL FLUX DIFFERENCE (Continued)

Although it is intended that the plant will be operated with the AFD within the target band required by Specification 3.2.1 about the target flux difference, during rapid plant THERMAL POWER reductions, control rod motion will cause the AFD to deviate outside of the target band at reduced THERMAL POWER levels. This deviation will not affect the xenon redistribution sufficiently to change the envelope of peaking factors which may be reached on a subsequent return to RATED THERMAL POWER (with the AFD within the target band) provided the time duration of the deviation is limited. Accordingly, a 1-hour penalty deviation limit cumulative during the previous 24 hours is provided for operation outside of the target band but within the limits of Figure 3.2-1 while at THERMAL POWER levels between 50% and 90% of RATED THERMAL POWER. For THERMAL POWER levels between 15% and 50% of RATED THERMAL POWER, deviations of the AFD outside of the target band are less significant. The penalty of 2 hours actual time reflects this reduced significance.

Provisions for monitoring the AFD on an automatic basis are derived from the plant process computer through the AFD Monitor Alarm. The computer monitors the OPERABLE excore detector outputs and provides an alarm message immediately if the AFD for two or more OPERABLE excore channels are outside the target band. During operation at THERMAL POWER levels between 50% and 90% and between 15% and 50% RATED THERMAL POWER, the computer outputs an alarm message when the penalty deviation accumulates beyond the limits of 1 hour and 2 hours, respectively.

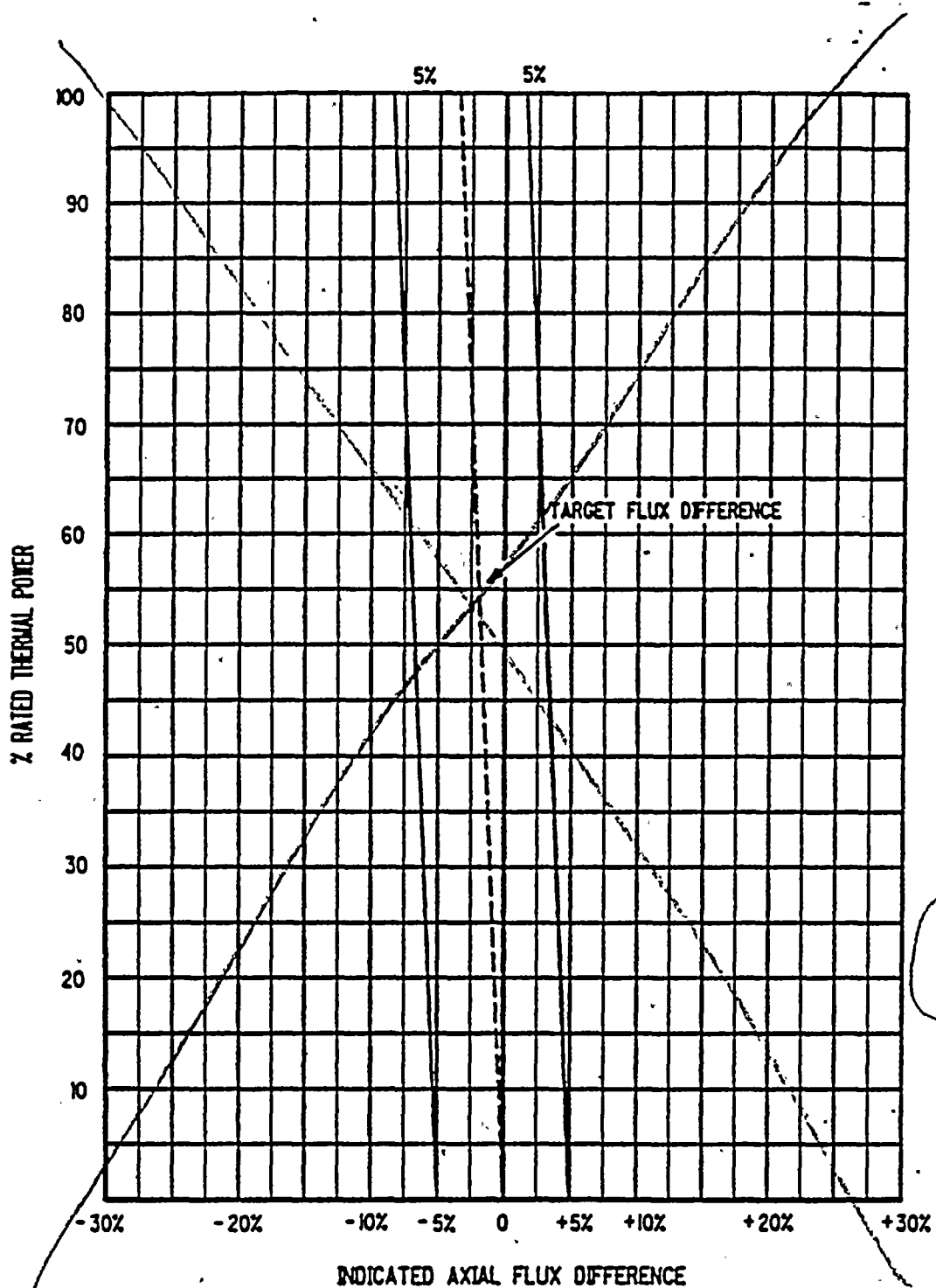
Figure B 3/4 2-1 shows a typical monthly target band.



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POWER DISTRIBUTION LIMITS

USES



See next
page

FIGURE B 3/4 2-1

TYPICAL INDICATED AXIAL FLUX DIFFERENCE VERSUS THERMAL POWER

Plate 1: A vertical column of 20 small, black and white illustrations of various insects, including beetles, flies, and bees, arranged in a single column.

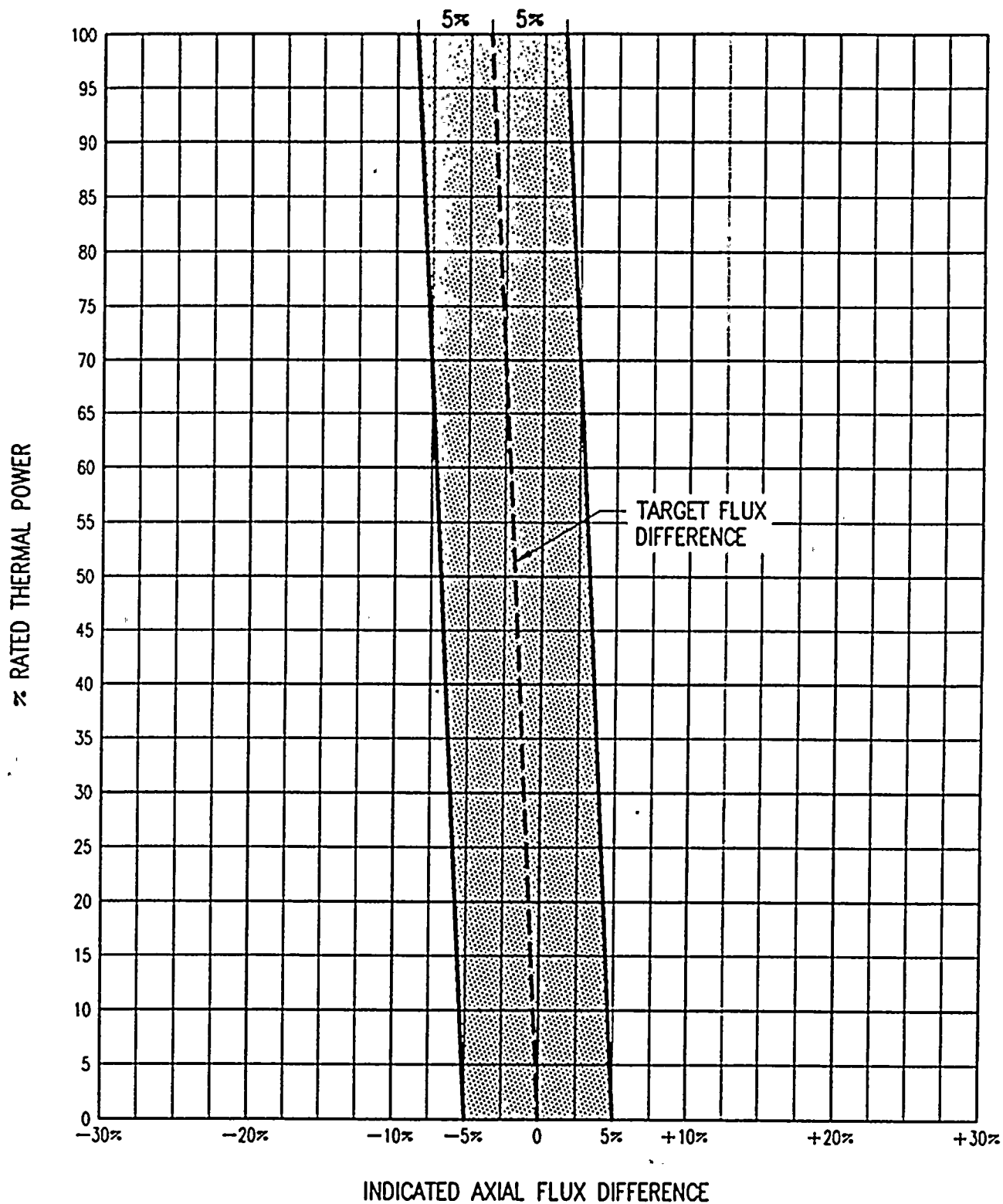


FIGURE B3/4.2—1 TYPICAL INDICATED AXIAL FLUX DIFFERENCE vs % THERMAL POWER

TURKEY POINT — UNITS 3 & 4

POWER DISTRIBUTION LIMITSBASES3/4.2.2 and 3/4.2.3 HEAT FLUX HOT CHANNEL FACTOR AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR

The limits on heat flux hot channel factor and nuclear enthalpy rise hot channel factor ensure that: (1) the design limits on peak local power density and minimum DNBR are not exceeded and (2) in the event of a LOCA the peak fuel clad temperature will not exceed the 2200°F ECCS acceptance criteria limit. The LOCA peak fuel clad temperature limit may be sensitive to the number of steam generator tubes plugged. The current limit is valid for tube plugging levels up to 5%.

$F_Q(Z)$, Heat Flux Hot Channel Factor, is defined as the maximum local heat flux on the surface of a fuel rod at core elevation Z divided by the average fuel rod heat flux.

$F_{\Delta H}^N$ Nuclear Enthalpy Rise Hot Channel Factor, is defined as the ratio of the integral of linear power along the rod with the highest integrated power to the average rod power.

Each of these is measurable but will normally only be determined periodically as specified in Specifications 4.2.2 and 4.2.3. This periodic surveillance is sufficient to ensure that the limits are maintained provided:

- Control rods in a single group move together with no individual rod insertion differing by more than ± 12 steps, indicated, from the group demand position;
- Control rod groups are sequenced with overlapping groups as described in Specification 3.1.3.6;
- The control rod insertion limits of Specifications 3.1.3.5 and 3.1.3.6 are maintained; and
- The axial power distribution, expressed in terms of AXIAL FLUX DIFFERENCE, is maintained within the limits.

When an F_Q measurement is taken, both experimental error and manufacturing tolerance must be allowed for. Five percent is the appropriate allowance for a full core map taken with the movable incore detector flux mapping system and three percent is the appropriate allowance for manufacturing tolerance. These uncertainties only apply if the map is taken for purposes other than the determination of P_{BL} and P_{RB} .

$F_{\Delta H}^N$ will be maintained within its limits provided Conditions a. through d. above are maintained.

In the specified limit of $F_{\Delta H}^N$, there is an 8 percent allowance for uncertainties which means that normal operation of the core is expected to result in $F_{\Delta H}^N \leq 1.62/1.08$. The logic behind the larger uncertainty in this



POWER DISTRIBUTION LIMITSASESHEAT FLUX HOT CHANNEL FACTOR AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR
(Continued)

case is that (a) normal perturbations in the radial power shape (e.g., rod misalignment) affect $F_{\Delta H}^N$, in most cases without necessarily affecting F_Q , (b) although the operator has a direct influence on F_Q through movement of rods, and can limit it to the desired influence on F_Q through movement of rods, and can limit it to the desired value, he has no direct control over $F_{\Delta H}^N$ and (c) an error in the prediction for radial power shape, which may be detected during startup physics tests can be compensated for in F_Q by tighter axial control, but compensation for $F_{\Delta H}^N$ is less readily available. When a measurement of $F_{\Delta H}^N$ is taken, experimental error must be allowed for and 4% is the appropriate allowance for a full core map taken with the movable incore detector flux mapping system.

The following are independent augmented surveillance methods used to ensure peaking factors are acceptable for continued operation above Threshold Power, P_T :

Base Load - This method uses the following equation to determine peaking factors:

$$F_{QBL} = F_Q(Z) \text{ measured} \times 1.09 \times W(Z)_{BL}$$

where: $W(Z)_{BL}$ = accounts for power shapes;

1.09 = accounts for uncertainty;

$F_Q(Z)$ = measured data;

F_{QBL} = Base load peaking factor.

The analytically determined $[F_Q]^P$ is formulated to generate limiting shapes for all load follow maneuvers consistent with control to a $\pm 5\%$ band about the target flux difference. For Base Load operation the severity of the shapes that need to be considered is significantly reduced relative to load follow operation.

The severity of possible shapes is small due to the restrictions imposed by Sections 4.2.2.3. To quantify the effect of the limiting transients which could occur during Base Load operation, the function $W(Z)_{BL}$ is calculated from the following relationship:

$$W(Z)_{BL} = \text{Max} \left[\frac{F_Q(Z) \text{ (Base Load Case(s), 150 MWD/T)}}{F_Q(Z) \text{ (ARO, 150 MWD/T)}}, \frac{F_Q(Z) \text{ (Base Case(s), 85\% EOL BU)}}{F_Q(Z) \text{ (ARO, 85\% BOL BU)}} \right]$$

Radial Burndown - This method uses the following equation to determine peaking factors....

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POWER DISTRIBUTION LIMITSCASESHEAT FLUX HOT CHANNEL FACTOR AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR
(Continued)

$$F_Q(Z)_{R.B.} = F_{xy}(Z)_{\text{measured}} \times F_Z(Z) \times 1.09$$

where: 1.09 = accounts for uncertainty

$F_Z(Z)$ = accounts for axial power shapes

$F_{xy}(Z)_{\text{measured}}$ = ratio of peak power density to average power density at elevation(Z)

$F_Q(Z)_{R.B.}$ = Radial Burndown Peaking Factor.

For Radial Burndown operation the full spectrum of possible shapes consistent with control to a $\pm 5\%$ Delta-I band needs to be considered in determining power capability. Accordingly, to quantify the effect of the limiting transients which could occur during Radial Burndown operation, the function $F_Z(Z)$ is calculated from the following relationship:

$$F_Z(Z) = [F_Q(Z)] \text{ FAC Analysis} / [F_{xy}(Z)] \text{ ARO}$$

The essence of the procedure is to maintain the xenon distribution in the core as close to the equilibrium full power condition as possible. This can be accomplished by using the boron system to position the full length control rods to produce the require indicated flux difference.

Above the power level of P_T , additional flux shape monitoring is required.

In order to assure that the total power peaking factor, F_Q , is maintained at or below the limiting value, the movable incore instrumentation will be utilized. Thimbles are selected initially during startup physics tests so that the measurements are representative of the peak core power density. By limiting the core average axial power distribution, the total power peaking factor F_Q can be limited since all other components remain relatively; fixed. The remaining part of the total power peaking factor can be derived from incore measurements, i.e., an effective radial peaking factor \bar{R}_j can be determined as the ratio of the total peaking factor resulting from a full core flux map and the axial peaking factor in a selected thimble.

The limiting value of $[F_j(Z)]_s$ is derived as follows:

$$[F_j(Z)]_s = \frac{[F_Q]^L \times [K(Z)]}{P_L \bar{R}_j (1 + \sigma_j) (1.03)(1.07)}$$

Where:

a) $F_j(Z)$ is the normalized axial power distribution from thimble j at elevation Z.

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POWER DISTRIBUTION LIMITS

BASES

HEAT FLUX HOT CHANNEL FACTOR AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR (Continued)

- b) P_L is reactor thermal power expressed as a fraction of 1.
- c) $K(Z)$ is the reduction in the F_Q limit as a function of core elevation (Z) as determined from Figure 3.2-2.
- d) $[F_j(Z)]_s$ is the alarm setpoint for MIDS.
- e) R_j , for thimble j , is determined from $n=6$ incore flux maps covering the full configuration of permissible rod patterns at the thermal power limit of P_T .

$$\bar{R}_j = \frac{\sum_{i=1}^n R_{ij}}{n}$$

where

$$R_{ij} = \frac{F_{Q_i \text{ meas.}}}{[F_{ij}(Z)]_{\text{max}}}$$

and $F_{ij}(Z)$ is the normalized axial distribution at elevation Z from thimble j in map i which has a measure peaking factor without uncertainties or densification allowance of $F_{Q_i \text{ meas.}}$

- f) σ_j is the standard deviation, expressed as a fraction or percentage of \bar{R}_j , and is derived from n flux maps and the relationship below, or 0.02 (2%), whichever is greater.

$$\sigma_j = \left[\frac{\frac{1}{n-1} \sum_{i=1}^n (R_{ij} - \bar{R}_j)^2}{\bar{R}_j} \right]^{1/2}$$

- g) The factor 1.03 reduction in the kw/ft limit is the engineering uncertainty factor.
- h) The factors $(1 + \sigma_j)$ and 1.07 represent the margin between $(F_j(Z))_L$ limit and the MIDS alarm setpoint $[F_j(Z)]_s$. Since $(1 + \sigma_j)$ is bounded by a lower limit of 1.02, there is at least a 9% reduction of the alarm setpoint. Operations are permitted in excess of the operational limit $\leq 4\%$ while making power adjustment on a percent for percent basis.

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POWER DISTRIBUTION LIMITS

BASES

3/4.2.4 QUADRANT POWER TILT RATIO

The QUADRANT POWER TILT RATIO limit assures that the radial power distribution satisfies the design values used in the power capability analysis. Radial power distribution measurements are made during STARTUP testing and periodically during power operation.

The limit of 1.02, at which corrective action is required, provides DNB and linear heat generation rate protection with x-y plane power tilts. A limit of 1.02 was selected to provide an allowance for the uncertainty associated with the indicated power tilt.

The 2-hour time allowance for operation with a tilt condition greater than 1.02 but less than 1.09 is provided to allow identification and correction of a dropped or misaligned control rod. In the event such action does not correct the tilt, the margin for uncertainty on $F_Q(Z)$ is reinstated by reducing the maximum allowed power by 3% for each percent of tilt in excess of 1.

For purposes of monitoring QUADRANT POWER TILT RATIO when one excore detector is inoperable, the movable incore detectors or incore thermocouple map are used to confirm that the normalized symmetric power distribution is consistent with the QUADRANT POWER TILT RATIO. The incore detector monitoring is done with a full incore flux map or two sets of four symmetric thimbles. The two sets of four symmetric thimbles is a unique set of eight detector locations. These locations are C-8, E-5, E-11, H-3, H-13, L-5, L-11, N-8.

3/4.2.5 DNB PARAMETERS

The limits on the DNB-related parameters assure that each of the parameters are maintained within the normal steady-state envelope of operation assumed in the transient and accident analyses. The limits are consistent with the initial FSAR assumptions and have been analytically demonstrated adequate to maintain a minimum DNBR above the applicable design limits throughout each analyzed transient. The indicated T_{avg} value of 576.6°F and the indicated pressurizer pressure value of 2209 psig correspond to analytical limits of 578.2°F and 2185 psig respectively, with allowance for measurement uncertainty.

The indicated RCS flow value of 277,900 gpm corresponds to an analytical limit of 268,500 gpm which is assumed to have a 3.5% measurement uncertainty. The above measurement uncertainty estimates assume that these instrument channel outputs are averaged to minimize the uncertainty.

The 12-hour periodic surveillance of these parameters through instrument readout is sufficient to ensure that the parameters are restored within their limits following load changes and other expected transient operation.

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INSTRUMENTATION

BASES

REACTOR TRIP SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

those Engineered Safety Features components whose aggregate function best serves the requirements of the condition. As an example, the following actions may be initiated by the Engineered Safety Features Actuation System to mitigate the consequences of a steam line break or loss-of-coolant accident: (1) Safety Injection pumps start and automatic valves position, (2) Reactor trip, (3) feed water isolation, (4) startup of the emergency diesel generators, (5) containment spray pumps start and automatic valves position (6) containment ventilation isolation, (7) steam line isolation, (8) turbine trip, (9) auxiliary feedwater pumps start and automatic valves position, (10) containment cooling fans start and automatic valves position, (11) intake cooling water and component cooling water pumps start and automatic valves position, and (12) Control Room Isolation and Ventilation Systems start.

The Engineered Safety Features Actuation System interlocks perform the following functions:

HIGH STEAM FLOW SAFETY INJECTION BLOCK - This permissive is used to block the safety injection (SI) signal generated by High Steam Line Flow coincident with Low Steam Line Pressure or Low T_{avg} . The permissive is generated when two out of three Low T_{avg} channels drop below their setpoints and the manual SI Block/Unblock switch is momentarily placed in the block position. This switch is a spring return to the normal position type. The permissive will automatically be defeated if two out of three Low T_{avg} channels rise above their setpoints. The permissive may be manually defeated when two out of three Low T_{avg} channels are below their setpoints and the manual SI Block/Unblock switch is momentarily placed in the unblock position.

LOW PRESSURIZER PRESSURE SAFETY INJECTION BLOCK - This permissive is used to block the safety injection signals generated by Low Pressurizer Pressure and High Differential Pressure between the Steam Line Header and any Steam Line. The permissive is generated when two out of three pressurizer pressure permissive channels drop below their setpoints and the manual SI Block/Unblock switch is momentarily placed in the block position. This is the same switch that is used to manually block the High Steam Flow Safety Injection signals mentioned above. This permissive will automatically be defeated if two out of three pressurizer pressure permissive channels rise above their setpoints. The permissive may be manually defeated when two out of three pressurizer pressure permissive channels are below their setpoints and the manual SI Block/Unblock switch momentarily placed in the Unblock position.



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INSTRUMENTATION

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REACTOR TRIP SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

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INSTRUMENTATION

BASES

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING FOR PLANT OPERATIONS

The OPERABILITY of the radiation monitoring instrumentation for plant operations ensures that conditions indicative of potential uncontrolled radioactive releases are monitored and that appropriate actions will be automatically or manually initiated when the radiation level monitored by each channel reaches its alarm or trip setpoint.

3/4.3.3.2 MOVABLE INCORE DETECTORS

The OPERABILITY of the movable incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the core. The OPERABILITY of this system is demonstrated by irradiating each detector used and determining the acceptability of its voltage curve.

For the purpose of measuring $F_Q(Z)$ or $F_{\Delta H}^N$ a full incore flux map is used. Quarter-core flux maps, as defined in WCAP-8648, June 1976, may be used in recalibration of the Excore Neutron Flux Detection System, and full incore flux maps or symmetric incore thimbles may be used for monitoring the QUADRANT POWER TILT RATIO when one Power Range channel is inoperable.

3/4.3.3.3 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, Revision 3, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," May 1983, and NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

3/4.3.3.4 FIRE DETECTION INSTRUMENTATION

The OPERABILITY of the fire detection instrumentation ensures that both adequate warning capability is available for prompt detection of fires and that Fire Suppression Systems, that are actuated by fire detectors, will discharge extinguishing agents in a timely manner. Prompt detection and suppression of fires will reduce the potential for damage to safety-related equipment and is an integral element in the overall facility Fire Protection Program.

Fire detectors that are used to actuate Fire Suppression Systems represent a more critically important component of a plant Fire Protection Program than detectors that are installed solely for early fire warning and notification. Consequently, the minimum number of OPERABLE fire detectors must be greater.

The loss of detection capability for Fire Suppression Systems, actuated by fire detectors, represents a significant degradation of fire protection for

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INSTRUMENTATION

BASES

FIRE DETECTION INSTRUMENTATION (Continued)

any area. As a result, the establishment of a fire watch patrol must be initiated at an earlier stage than would be warranted for the loss of detectors that provide only early fire warning. The establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

3/4.3.3.5 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50.

3/4.3.3.6 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. This instrumentation also includes provisions for monitoring (and controlling) the concentrations of potentially explosive gas mixtures in the GAS DECAY TANK SYSTEM. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The sensitivity of any noble gas activity monitors used to show compliance with the gaseous effluent release requirements of Specification 3.11.2.2 shall be such that concentrations as low as 1×10^{-6} $\mu\text{Ci/ml}$ are measurable.

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3/4.3.4 TURBINE OVERSPEED PROTECTION

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment or structures.

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3/4.4 REACTOR COOLANT SYSTEM

BASES

3/4.4.1 REACTOR COOLANT LOOPS AND COOLANT CIRCULATION

The plant is designed to operate with all reactor coolant loops in operation and maintain DNBR above the applicable design limit during all normal operations and anticipated transients. In MODES 1 and 2 with one reactor coolant loop not in operation this specification requires that the plant be in at least HOT STANDBY within 6 hours.

In MODE 3, three reactor coolant loops provide sufficient heat removal capability for removing core decay heat in the event of a bank withdrawal accident; however, a single reactor coolant loop provides sufficient heat removal capacity if a bank withdrawal accident can be prevented, i.e., by opening the Reactor Trip System breakers. Single active failure considerations require that at least two loops be OPERABLE at all times.

-- In MODE 4, and in MODE 5 with reactor coolant loops filled, a single reactor coolant loop or RHR loop provides sufficient heat removal capability for removing decay heat, but all combinations of two loops, except two RHR loops, provide single active failure protection.

In MODE 5 with reactor coolant loops not filled, a single RHR loop provides sufficient heat removal capability for removing decay heat; but the unavailability of the steam generators as a heat removing component, requires that at least two RHR loops be OPERABLE.

The operation of one reactor coolant pump (RCP) or one RHR pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.

The restrictions on starting an RCP with one or more RCS cold legs less than or equal to 275°F are provided to prevent RCS pressure transients, caused by energy additions from the Secondary Coolant System, which could exceed the limits of Appendix G to 10 CFR Part 50. The RCS will be protected against overpressure transients and will not exceed the limits of Appendix G by either: (1) restricting the water volume in the pressurizer and thereby providing a volume for the reactor coolant to expand into, or (2) by restricting starting of the RCPs to when the secondary water temperature of each steam generator is less than 50°F above each of the RCS cold leg temperatures. The 50°F limit includes instrument error.

The Technical Specifications for ~~and Cold~~ Shutdown allow an inoperable RHR pump to be the operating RHR pump for up to 2 hours for surveillance testing to establish operability. This is required because of the piping arrangement when the RHR system is being used for Decay Heat Removal.

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REACTOR COOLANT SYSTEM

BASES

3/4.4.2 SAFETY VALVES

The pressurizer Code safety valves operate to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. Each safety valve is designed to relieve 293,330 lbs per hour of saturated steam at the valve Setpoint. The relief capacity of a single safety valve is adequate to relieve any overpressure condition which could occur during shutdown. In the event that no safety valves are OPERABLE, an RCS vent opening of at least 2.50 square inches will provide overpressure relief capability and will prevent RCS overpressurization. In addition, the Overpressure Mitigating System provides a diverse means of protection against RCS overpressurization at low temperatures.

During operation, all pressurizer Code safety valves must be OPERABLE to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. The combined relief capacity of all of these valves is greater than the maximum surge rate resulting from a complete loss-of-load assuming no Reactor trip until the first Reactor Trip System Trip Setpoint is reached (i.e., no credit is taken for a direct Reactor trip on the loss-of-load) and also assuming no operation of the power-operated relief valves or steam dump valves.

In Mode 5 only one pressurizer code safety is required for overpressure protection. In lieu of an actual operable code safety valve, an unisolated and unsealed vent pathway (i.e., a direct, unimpaired opening, a vent pathway with valves locked open and/or power removed and locked on an open valve) of equivalent size can be taken credit for as synonymous with an OPERABLE code safety.

Demonstration of the safety valves' lift settings will occur only during shutdown and will be performed in accordance with the provisions of Section XI of the ASME Boiler and Pressure Code.

3/4.4.3 PRESSURIZER

The 12-hour periodic surveillance is sufficient to ensure that the maximum water volume parameter is restored to within its limit following expected transient operation. The maximum water volume (1133 cubic feet) ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that both backup pressurizer heater groups be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

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REACTOR COOLANT SYSTEM

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3/4.4.4 RELIEF VALVES

The opening of the power-operated relief valves (PORVs) fulfills no safety-related function and no credit is taken for their operation in the safety analysis for MODE 1, 2 or 3. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a relief valve become inoperable.

3/4.4.5 STEAM GENERATORS

The Surveillance Requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83, Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes in the event that there is evidence of mechanical damage or progressive degradation due to design, manufacturing errors, or inservice conditions that lead to corrosion. Inservice inspection of steam generator tubing also provides a means of characterizing the nature and cause of any tube degradation so that corrective measures can be taken.

The plant is expected to be operated in a manner such that the secondary coolant will be maintained within those chemistry limits found to result in negligible corrosion of the steam generator tubes. If the secondary coolant chemistry is not maintained within these limits, localized corrosion may likely result in stress corrosion cracking. The extent of cracking during plant operation would be limited by the limitation of steam generator tube leakage between the Reactor Coolant System and the Secondary Coolant System (reactor-to-secondary leakage = 500 gallons per day per steam generator). Cracks having a reactor-to-secondary leakage less than this limit during operation will have an adequate margin of safety to withstand the loads imposed during normal operation and by postulated accidents. Operating plants have demonstrated that reactor-to-secondary leakage of 500 gallons per day per steam generator can readily be detected by radiation monitors of steam generator blowdown. Leakage in excess of this limit will require plant shutdown and an unscheduled inspection, during which the leaking tubes will be located and plugged.

Wastage-type defects are unlikely with the all volatile treatment (AVT) of the secondary coolant. However, even if a defect should develop in service, it will be found during scheduled inservice steam generator tube examinations. Plugging will be required for all tubes with imperfections exceeding the plugging limit of 40% of the tube nominal wall thickness. Steam generator tube inspections of operating plants have demonstrated the capability to reliably detect degradation that has penetrated 20% of the original tube wall thickness.

1. The first part of the document is a list of names and addresses of the members of the committee. The names are listed in alphabetical order, and the addresses are given in full. The list is as follows:

2. The second part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the Secretary. The names are listed in alphabetical order, and the addresses are given in full. The list is as follows:

3. The third part of the document is a list of the names and addresses of the members of the committee who have been elected to the office of the Treasurer. The names are listed in alphabetical order, and the addresses are given in full. The list is as follows:

REACTOR COOLANT SYSTEMBASESSTEAM GENERATORS (Continued)

Whenever the results of any steam generator tubing inservice inspection fall into Category C-3, these results will be promptly reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 30 days and prior to resumption of plant operation. Such cases will be considered by the Commission on a case-by-case basis and may result in a requirement for analysis, laboratory examinations, tests, additional eddy-current inspection, and revision of the Technical Specifications, if necessary.

3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE3/4.4.6.1 LEAKAGE DETECTION SYSTEMS

-- The RCS Leakage Detection Systems required by this specification are provided to monitor and detect leakage from the reactor coolant pressure boundary to the containment. The containment sump level system is the normal sump level instrumentation. The Post Accident Containment Water Level Monitor - Narrow range instrumentation also functions as a sump level monitoring system. In addition, gross leakage will be detected by changes in makeup water requirements, visual inspection, and audible detection. Leakage to other systems will be detected by activity changes (e.g., within the component cooling system) or water inventory changes (e.g., tank levels).

3/4.4.6.2 OPERATIONAL LEAKAGE

PRESSURE BOUNDARY LEAKAGE of any magnitude is unacceptable since it may be indicative of an impending gross failure of the pressure boundary. Therefore, the presence of any PRESSURE BOUNDARY LEAKAGE requires the unit to be promptly placed in COLD SHUTDOWN.

Industry experience has shown that while a limited amount of leakage is expected from the RCS, the unidentified portion of this leakage can be reduced to a threshold value of less than 1 gpm. This threshold value is sufficiently low to ensure early detection of additional leakage.

The total steam generator tube leakage limit of 1 gpm for all steam generators ensures that the dosage contribution from the tube leakage will be limited to a small fraction of 10 CFR Part 100 dose guideline values in the event of either a steam generator tube rupture or steam line break. The 500 gpd leakage limit per steam generator ensures that steam generator tube integrity is maintained in the event of a main steam line rupture or under LOCA conditions.

The 10 gpm IDENTIFIED LEAKAGE limitation provides allowance for a limited amount of leakage from known sources whose presence will not interfere with the detection of UNIDENTIFIED LEAKAGE by the Leakage Detection Systems.

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REACTOR COOLANT SYSTEM

BASES

OPERATIONAL LEAKAGE (Continued)

The leakage from any RCS pressure isolation valve is sufficiently low to ensure early detection of possible in-series valve failure. It is apparent that when pressure isolation is provided by two in-series valves and when failure of one valve in the pair can go undetected for a substantial length of time, verification of valve integrity is required. Since these valves are important in preventing overpressurization and rupture of the ECCS low pressure piping which could result in a LOCA, these valves should be tested periodically to ensure low probability of gross failure.

The Surveillance Requirements for RCS pressure isolation valves provide added assurance of valve integrity thereby reducing the probability of gross valve failure and consequent intersystem LOCA. Leakage from the RCS pressure isolation valve is IDENTIFIED LEAKAGE and will be considered as a portion of the allowed limit.

3/4.4.7 CHEMISTRY

The limitations on Reactor Coolant System chemistry ensure that corrosion of the Reactor Coolant System is minimized and reduces the potential for Reactor Coolant System leakage or failure due to stress corrosion. Maintaining the chemistry within the Steady-State Limits provides adequate corrosion protection to ensure the structural integrity of the Reactor Coolant System over the life of the plant. The associated effects of exceeding the oxygen, chloride, and fluoride limits are time and temperature dependent. Corrosion studies show that operation may be continued with contaminant concentration levels in excess of the Steady-State Limits, up to the Transient Limits, for the specified limited time intervals without having a significant effect on the structural integrity of the Reactor Coolant System. The time interval permitting continued operation within the restrictions of the Transient Limits provides time for taking corrective actions to restore the contaminant concentrations to within the Steady-State Limits.

The Surveillance Requirements provide adequate assurance that concentrations in excess of the limits will be detected in sufficient time to take corrective action.

3/4.4.8 SPECIFIC ACTIVITY

The limitations on the specific activity of the reactor coolant ensure that the resulting 2-hour doses at the SITE BOUNDARY will not exceed an

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REACTOR COOLANT SYSTEM

BASES

SPECIFIC ACTIVITY (Continued)

appropriately small fraction of 10 CFR Part 100 dose guideline values following a steam generator tube rupture accident in conjunction with an assumed steady-state reactor-to-secondary steam generator leakage rate of 1 gpm. The values for the limits on specific activity represent limits based upon a parametric evaluation by the NRC of typical site locations. These values are conservative in that specific site parameters of the Turkey Point site, Units 3 and 4 site, such as SITE BOUNDARY location and meteorological conditions, were not considered in this evaluation.

The ACTION statement permitting POWER OPERATION to continue for limited time periods with the reactor coolant's specific activity greater than 1 microCurie/gram DOSE EQUIVALENT I-131, but within the allowable limit shown on Figure 3.4-1, accommodates possible iodine spiking phenomenon which may occur following changes in THERMAL POWER.

The sample analysis for determining the gross specific activity and \bar{E} can exclude the radioiodines because of the low reactor coolant limit of 1 microCurie/gram DOSE EQUIVALENT I-131, and because, if the limit is exceeded, the radioiodine level is to be determined every 4 hours. If the gross specific activity level and radioiodine level in the reactor coolant were at their limits, the radioiodine contribution would be approximately 1%. In a release of reactor coolant with a typical mixture of radioactivity, the actual radioiodine contribution would probably be about 20%. The exclusion of radionuclides with half-lives less than 30 minutes from these determinations has been made for several reasons. The first consideration is the difficulty to identify short-lived radionuclides in a sample that requires a significant time to collect, transport, and analyze. The second consideration is the predictable delay time between the postulated release of radioactivity from the reactor coolant to its release to the environment and transport to the SITE BOUNDARY, which is relatable to at least 30 minutes decay time. The choice of 30 minutes for the half-life cutoff was made because of the nuclear characteristics of the typical reactor coolant radioactivity.

Based upon the above considerations for excluding certain radionuclides from the sample analysis, the allowable time of 2 hours between sample taking and completing the initial analysis is based upon a typical time necessary to perform the sampling, transport the sample, and perform the analysis of about 90 minutes. After 90 minutes, the gross count should be made in a reproducible geometry of sample and counter having reproducible beta or gamma self-shielding properties. The counter should be reset to a reproducible efficiency versus energy. It is not necessary to identify specific nuclides. The radiochemical determination of nuclides should be based on multiple counting of the sample within typical counting basis following sampling of less than 1 hour, about 2 hours, about 1 day, about 1 week, and about 1 month.



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REACTOR COOLANT SYSTEMBASES

SPECIFIC ACTIVITY (Continued)

Reducing T_{avg} to less than 500°F prevents the release of activity should a steam generator tube rupture since the saturation pressure of the reactor coolant is below the lift pressure of the atmospheric steam relief valves. The Surveillance Requirements provide adequate assurance that excessive specific activity levels in the reactor coolant will be detected in sufficient time to take corrective action. A reduction in frequency of isotopic analyses following power changes may be permissible if justified by the data obtained.

3/4.4.9 PRESSURE/TEMPERATURE LIMITS

REACTOR COOLANT SYSTEM

BASES

SPECIFIC ACTIVITY (Continued)

Reducing T_{avg} to less than 500°F prevents the release of activity should a steam generator tube rupture since the saturation pressure of the reactor coolant is below the lift pressure of the atmospheric steam relief valves. The Surveillance Requirements provide adequate assurance that excessive specific activity levels in the reactor coolant will be detected in sufficient time to take corrective action. A reduction in frequency of isotopic analyses following power changes may be permissible if justified by the data obtained.

3/4.4.9 PRESSURE/TEMPERATURE LIMITS

All components in the RCS are designed to withstand the effects of cyclic loads due to system temperature and pressure changes. These cyclic loads are induced by normal load transients, reactor trips and startup and shutdown operations. During RCS heatup and cooldown, the temperature and pressure changes must be limited to be consistent with design assumptions and to satisfy stress limits for brittle fracture.

During heatup, the thermal gradients through the reactor vessel wall produce thermal stresses which are compressive at the reactor vessel inside surface and which are tensile at the reactor vessel outside surface. Since reactor vessel internal pressure always produces tensile stresses at both the inside and outside surface locations, the total applied stress is greatest at the outside surface location. However, since neutron irradiation damage is larger at the inside surface location when compared to the outside surface, the inside surface flaw may be more limiting. Consequently for the heatup analysis both the inside and outside surface flaw locations must be analyzed for the specific pressure and thermal loadings to determine which is more limiting.

During cooldown, the thermal gradients through the reactor vessel wall produce thermal stresses which are tensile at the reactor vessel inside surface and which are compressive at the reactor vessel outside surface. Since reactor vessel internal pressure always produces tensile stresses at both the inside and outside surface locations, the total applied stress is greatest at the inside surface location. Since the neutron irradiation damage is also greatest at the inside surface location, the inside surface flaw is the limiting location. Consequently, only the inside surface flaw must be evaluated for the cooldown analysis.

The temperature and pressure changes during heatup and cooldown are limited to be consistent with the requirements given in the ASME Boiler and Pressure Vessel Code, Section III, Appendix G:

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REACTOR COOLANT SYSTEMBASESPRESSURE/TEMPERATURE LIMITS (Continued)

1. The reactor coolant temperature and pressure and system heatup and cooldown rates (with the exception of the pressurizer) shall be limited in accordance with Figures 3.4-2 to 3.4-4 for the service period specified thereon:
 - a. Allowable combinations of pressure and temperature for specific temperature change rates are below and to the right of the limit lines shown. Limit lines for cooldown rates between those presented may be obtained by interpolation; and
 - b. Figures 3.4-2 to 3.4-4 define limits to assure prevention of non-ductile failure only. For normal operation, other inherent plant characteristics, e.g., pump heat addition and pressurizer heater capacity, may limit the heatup and cooldown rates that can be achieved over certain pressure-temperature ranges.
2. These limit lines shall be calculated periodically using methods provided below,
3. The secondary side of the steam generator must not be pressurized above 200 psig if the temperature of the steam generator is below 70°F,
4. The pressurizer heatup and cooldown rates shall not exceed 100°F/h and 200°F/h, respectively. The spray shall not be used if the temperature difference between the pressurizer and the spray fluid is greater than 320°F, and
5. System preservice hydrotests and inservice leak and hydrotests shall be performed at pressures in accordance with the requirements of ASME Boiler and Pressure Vessel Code, Section XI.

The fracture toughness properties of the ferritic materials in the reactor vessel are determined in accordance with the NRC Standard Review Plan, ASTM E185-73, and in accordance with additional reactor vessel requirements.

The properties are then evaluated in accordance with Appendix G of the 1983 Edition of Section III of the ASME Boiler and Pressure Vessel Code and the additional requirements of 10 CFR 50, Appendix G and the calculation methods described in Westinghouse Report GTSD-A-1.12, "Procedure for Developing Heatup and Cooldown Curves."

Heatup and cooldown limit curves are calculated using the most limiting value of the nil-ductility reference temperature, RT_{NDT} , at the end of 20 effective full power years (EFPY) of service life. The 20 EFPY service life period is chosen such that the limiting RT_{NDT} at the 1/4T location in



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BASES

PRESSURE/TEMPERATURE LIMITS (Continued)

the core region is greater than the RT_{NDT} of the limiting unirradiated material. The selection of such a limiting RT_{NDT} assures that all components in the Reactor Coolant System will be operated conservatively in accordance with applicable Code requirements.

The heatup and cooldown limit curves, Figures 3.4-2, 3.4-3 and 3.4-4 are composite curves prepared by determining the most conservative case with either the inside or outside wall controlling, for any heatup rate up to 100 degrees F per hour and cooldown rates of up to 100 degrees F per hour. The heatup and cooldown curves were prepared based upon the most limiting value of predicted adjusted reference temperature at the end of the applicable service period (20 EFPY).

The reactor vessel materials have been tested to determine their initial RT_{NDT} ; the results of these tests are shown in Tables B 3/4.4-1 and B 3/4.4-2. Reactor operation and resultant fast neutron (E greater than 1 MeV) irradiation can cause an increase in the RT_{NDT} . Therefore, an adjusted reference temperature, based upon the fluence and chemistry factors of the material has been predicted using Regulatory Guide 1.99, Revision 2, dated May 1988, "Radiation Embrittlement of Reactor Vessel Materials." The heatup and cooldown limit curves of Figures 3.4-2, 3.4-3, and 3.4-4 include predicted adjustments for this shift in RT_{NDT} at the end of the applicable service period.

The actual shifts in RT_{NDT} of the vessel materials will be established periodically during operation by removing and evaluating, in accordance with ASTM E185-73 and 10 CFR Appendix H, reactor vessel material irradiation surveillance specimens installed near the inside wall of the reactor vessel in the core area. The surveillance specimen withdrawal schedule is shown in Table 4.4-5. Since the neutron spectra at the irradiation samples and vessel inside radius are essentially identical, the measured transition shift for a sample can be applied with confidence to the adjacent section of the reactor vessel.

Since the limiting beltline materials (Intermediate to Lower Shell Circumferential Weld) in Units 3 and 4 are identical, the RV surveillance program was integrated and the results from capsule testing is applied to both Units. The surveillance capsule "T" results from Unit 3 (WCAP 8631) and Unit 4 (SWRI 02-4221) and the capsule "V" results from Unit 3 (SWRI 06-8576) were used with the methodology in Regulatory Guide 1.99, Revision 2, to provide

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TABLE B 3/4.4-1
REACTOR VESSEL TOUGHNESS DATA
TURKEY POINT - UNIT 3

| Component | Material Type | Cu (%) | Ni (%) | P (%) | NDTT (°F) | 50 ft lb/35 mils Lateral Expansion Temp (°F) | | RT _{NDT} (°F) | Minimum Upper Shelf (ft lb) | |
|----------------------------------|---------------|--------|--------|-------|--------------------|--|--------------------|------------------------|-----------------------------|-----------------------|
| | | | | | | Long | Trans | | Long | Trans |
| Cl. Hd. Dome | A302 Gr. B | - | - | 0.010 | 0 | - | 36 ^(a) | 0 | > 70 | > 45.5 ^(a) |
| Cl. Hd. Flange | A508 Cl. 2 | - | 0.72 | 0.010 | 44 ^(a) | - | 31 ^(a) | 44 | >118 | > 76.5 ^(a) |
| Ves. Sh. Flange | A508 Cl. 2 | - | 0.65 | 0.010 | -23 ^(a) | - | -41 ^(a) | -23 | >120 | > 78 ^(a) |
| Inlet Nozzle | A508 Cl. 2 | - | 0.76 | 0.019 | 60 ^(a) | - | NA | 60 | NA | NA |
| Inlet Nozzle | A508 Cl. 2 | - | 0.74 | 0.019 | 60 ^(a) | - | NA | 60 | NA | NA |
| Inlet Nozzle | A508 Cl. 2 | - | 0.80 | 0.019 | 60 ^(a) | - | NA | 60 | NA | NA |
| Outlet Nozzle | A508 Cl. 2 | - | 0.79 | 0.010 | 27 ^(a) | - | 9 ^(a) | 27 | >110 | >71.5 ^(a) |
| Outlet Nozzle | A508 Cl. 2 | - | 0.72 | 0.010 | 7 ^(a) | - | -22 ^(a) | 7 | >111 | >72 ^(a) |
| Outlet Nozzle | A508 Cl. 2 | - | 0.72 | 0.010 | 42 ^(a) | - | 23 ^(a) | 42 | >140 | >91 ^(a) |
| Upper Shell | A508 Cl. 2 | - | 0.68 | 0.010 | 50 | - | 44 ^(a) | 50 | >129 | >83.5 ^(a) |
| Inter. Shell | A508 Cl. 2 | 0.058 | 0.70 | 0.010 | 40 | - | 25 ^(a) | 40 | >122 | >79 ^(a) |
| Lower Shell | A508 Cl. 2 | 0.079 | 0.67 | 0.010 | 30 | - | 2 ^(a) | 30 | 163 | 106 ^(a) |
| Trans. Ring | A508 Cl. 2 | - | 0.69 | 0.013 | 60 ^(a) | - | 58 ^(a) | 60 | >109 | >70.5 ^(a) |
| Bot. Hd. Dome | A302 Gr. B | - | - | 0.010 | -10 | - | NA | 30 | NA | NA |
| Inter. to Lower Shell Girth Weld | SAW | 0.26 | 0.60 | 0.011 | 10 ^(b) | - | 63 | 10 ^(b) | - | 63 |
| HAZ | HAZ | - | - | - | 0 ^(a) | - | 0 | 0 | - | 168 |

(a) Estimated values based on NUREG-0800, Branch Technical Position - MTEB 52

(b) Actual Value

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TABLE B 3/4.4-2
REACTOR VESSEL TOUGHNESS DATA
TURKEY POINT - UNIT 4

| Component | Material Type | Cu (%) | Ni (%) | P (%) | NDTT (°F) | 50 ft 1b/35 mils Lateral Expansion Temp (°F) | | RT _{NDT} (°F) | Minimum Upper Shelf (ft 1b) | |
|----------------------------------|---------------|--------|--------|-------|-------------------|--|--------------------|------------------------|-----------------------------|--------------------|
| | | | | | | Long | Trans | | Long | Trans |
| Cl. Hd. Dome | A302 Gr. B | - | - | 0.008 | -20 | - | NA | 30 | NA | NA |
| Cl. Hd. Flange | A508 Cl. 2 | - | 0.72 | 0.010 | -4 ^(a) | - | 27 ^(a) | -4 | 199 | 129 ^(a) |
| Ves. Sh. Flange | A508 Cl. 2 | - | 0.68 | 0.010 | -1 ^(a) | - | -11 ^(a) | -1 | 176 | 114 ^(a) |
| Inlet Nozzle | A508 Cl. 2 | 0.08 | 0.71 | 0.009 | 60 ^(a) | - | NA | 60 | NA | NA |
| Inlet Nozzle | A508 Cl. 2 | - | 0.84 | 0.019 | 60 ^(a) | - | NA | 60 | NA | NA |
| Inlet Nozzle | A508 Cl. 2 | - | 0.75 | 0.008 | 16 ^(a) | - | 13 ^(a) | 16 | 162 | 105 ^(a) |
| Outlet Nozzle | A508 Cl. 2 | - | 0.78 | 0.010 | 7 ^(a) | - | -25 ^(a) | 7 | 165 | 107 ^(a) |
| Outlet Nozzle | A508 Cl. 2 | - | 0.68 | 0.010 | 38 ^(a) | - | 16 ^(a) | 38 | 160 | 104 ^(a) |
| Outlet Nozzle | A508 Cl. 2 | - | 0.70 | 0.010 | 60 ^(a) | - | 42 ^(a) | 60 | 143 | 93 ^(a) |
| Upper Shell | A508 Cl. 2 | - | 0.70 | 0.010 | 40 | - | 32 ^(a) | 40 | 156 | 101 ^(a) |
| Inter. Shell | A508 Cl. 2 | 0.054 | 0.69 | 0.010 | 50 | - | 90 ^(a) | 50 | 143 | 93 ^(a) |
| Lower Shell | A508 Cl. 2 | 0.056 | 0.74 | 0.010 | 40 ^(a) | - | 38 ^(a) | 40 | 149 147 | 97 ^(a) |
| Trans. Ring | A508 Cl. 2 | - | 0.69 | 0.011 | 60 ^(a) | - | 30 ^(a) | 60 | NA | NA |
| Bot. Hd. Dome | A302 Gr. B | - | - | 0.010 | 10 | - | 30 ^(a) | 10 | NA | NA |
| Inter. to Lower Shell Girth Weld | SAW | 0.26 | 0.60 | 0.011 | 10 ^(b) | - | 63 | 10 ^(b) | NA | 63 |
| HAZ | HAZ | - | - | - | 0 | - | NA | 0 | NA | 140 |

(a) Estimated values based on NUREG-0800, Branch Technical Position - MTEB 52

(b) Actual Value

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REACTOR COOLANT SYSTEM

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PRESSURE/TEMPERATURE LIMITS (Continued)

limiting material properties information for generating the heatup and cooldown curves in Figures 3.4-2, 3.4-3, and 3.4-4. The integrated surveillance program along with similar identical reactor vessel design and operating characteristics allows the same heatup and cooldown limit curves to be applicable at both Unit 3 and Unit 4.

Allowable pressure-temperature relationships for various heatup and cooldown rates are calculated using methods derived from Appendix G in Section III of the ASME Boiler and Pressure Vessel Code as required by Appendix G to 10 CFR Part 50 and Westinghouse Report GTSD-A-1.12, "Procedure for Developing Heatup and Cooldown Curves."

The general method for calculating heatup and cooldown limit curves is based upon the principles of the linear elastic fracture mechanics (LEFM) technology. In the calculation procedures a semielliptical surface defect with a depth of one-quarter of the wall thickness, T , and a length of $3/2T$ is assumed to exist at the inside of the vessel wall as well as at the outside of the vessel wall. The dimensions of this postulated crack, referred to in Appendix G of ASME Section III as the reference flaw, amply exceed the current capabilities of inservice inspection techniques. Therefore, the reactor operation limit curves developed for this reference crack are conservative and provide sufficient safety margins for protection against nonductile failure. To assure that the radiation embrittlement effects are accounted for in the calculation of the limit curves, the most limiting value of the nil-ductility reference temperature, RT_{NDT} , is used and this includes the radiation-induced shift, ΔRT_{NDT} , corresponding to the end of the period for which heatup and cooldown curves are generated.

The ASME approach for calculating the allowable limit curves for various heatup and cooldown rates specifies that the total stress intensity factor, K_I , for the combined thermal and pressure stresses at any time during heatup or cooldown cannot be greater than the reference stress intensity factor, K_{IR} , for the metal temperature at that time. K_{IR} is obtained from the reference fracture toughness curve, defined in Appendix G to the ASME Code. The K_{IR} curve is given by the equation:

$$K_{IR} = 26.78 + 1.223 \exp [0.0145(T - RT_{NDT} + 160)] \quad (1)$$

Where: K_{IR} is the reference stress intensity factor as a function of the metal temperature T and the metal nil-ductility reference temperature RT_{NDT} . Thus, the governing equation for the heatup-cooldown analysis is defined in Appendix G of the ASME Code as follows:

$$C K_{IM} + K_{IT} \leq K_{IR} \quad (2)$$



REACTOR COOLANT SYSTEM

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PRESSURE/TEMPERATURE LIMITS (Continued)

Where: K_{IM} = the stress intensity factor caused by membrane (pressure) stress,

K_{IT} = the stress intensity factor caused by the thermal gradients,

K_{IR} = constant provided by the Code as a function of temperature relative to the RT_{NDT} of the material,

$C = 2.0$ for level A and B service limits, and

$C = 1.5$ for inservice hydrostatic and leak test operations.

At any time during the heatup or cooldown transient, K_{IR} is determined by the metal temperature at the tip of the postulated flaw, the appropriate value for RT_{NDT} , and the reference fracture toughness curve. The thermal stresses resulting from temperature gradients through the vessel wall are calculated and then the corresponding thermal stress intensity factor, K_{IT} , for the reference flaw is computed. From Equation (2) the pressure stress intensity factors are obtained and, from these, the allowable pressures are calculated.

COOLDOWN

For the calculation of the allowable pressure versus coolant temperature during cooldown, the Code reference flaw is assumed to exist at the inside of the vessel wall. During cooldown, the controlling location of the flaw is always at the inside of the wall because the thermal gradients produce tensile stresses at the inside, which increase with increasing cooldown rates. Allowable pressure-temperature relations are generated for both steady-state and finite cooldown rate situations. From these relations, composite limit curves are constructed for each cooldown rate of interest.

The use of the composite curve in the cooldown analysis is necessary because control of the cooldown procedure is based on measurement of reactor coolant temperature, whereas the limiting pressure is actually dependent on the material temperature at the tip of the assumed flaw. During cooldown, the 1/4T vessel location is at a higher temperature than the fluid adjacent to the vessel ID. This condition, of course, is not true for the steady-state situation. It follows that at any given reactor coolant temperature, the ΔT developed during cooldown results in a higher value of K_{IR} at the 1/4T location for finite cooldown rates than for steady-state operation. Furthermore, if conditions exist such that the increase in K_{IR} exceeds K_{IT} , the calculated allowable pressure during cooldown will be greater than the steady-state value.

The above procedures are needed because there is no direct control on temperature at the 1/4T location; therefore, allowable pressures may unknowingly be violated if the rate of cooling is decreased at various intervals along a

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REACTOR COOLANT SYSTEM

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PRESSURE/TEMPERATURE LIMITS (Continued)

cooldown ramp. The use of the composite curve eliminates this problem and assures conservative operation of the system for the entire cooldown period.

HEATUP

Three separate calculations are required to determine the limit curves for finite heatup rates. As is done in the cooldown analysis, allowable pressure-temperature relationships are developed for steady-state conditions as well as finite heatup rate conditions assuming the presence of a 1/4T defect at the inside of the vessel wall. The thermal gradients during heatup produce compressive stresses at the inside of the wall that alleviate the tensile stresses produced by internal pressure. The metal temperature at the crack tip lags the coolant temperature; therefore, the K_{IR} for the 1/4T crack during heatup is lower than the K_{IR} for the 1/4T crack during steady-state conditions at the same coolant temperature. During heatup, especially at the end of the transient, conditions may exist such that the effects of compressive thermal stresses and different K_{IR} 's for steady-state and finite heatup rates do not offset each other and the pressure-temperature curve based on steady-state conditions no longer represents a lower bound of all similar curves for finite heatup rates when the 1/4T flaw is considered. Therefore, both cases have to be analyzed in order to assure that at any coolant temperature the lower value of the allowable pressure calculated for steady-state and finite heatup rates is obtained.

The second portion of the heatup analysis concerns the calculation of pressure-temperature limitations for the case in which a 1/4T deep outside surface flaw is assumed. Unlike the situation at the vessel inside surface, the thermal gradients established at the outside surface during heatup produce stresses which are tensile in nature and thus tend to reinforce any pressure stresses present. These thermal stresses, of course, are dependent on both the rate of heatup and the time (or coolant temperature) along the heatup ramp. Furthermore, since the thermal stresses at the outside are tensile and increase with increasing heatup rate, a lower bound curve cannot be defined. Rather, each heatup rate of interest must be analyzed on an individual basis.

Following the generation of pressure-temperature curves for both the steady-state and finite heatup rate situations, the final limit curves are produced as follows. A composite curve is constructed based on a point-by-point comparison of the steady-state and finite heatup rate data. At any given temperature, the allowable pressure is taken to be the lesser of the three values taken from the curves under consideration.

The use of the composite curve is necessary to set conservative heatup limitations because it is possible for conditions to exist such that over the course of the heatup ramp the controlling condition switches from the inside to the outside and the pressure limit must at all times be based on analysis of the most critical criterion.



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PRESSURE/TEMPERATURE LIMITS (Continued)

Finally, the 10 CFR 50 Appendix G rule which addresses the metal temperature of the closure head flange and vessel flange regions is considered. The rule states that the minimum metal temperature for the flange regions should be at least 120 F higher than the limiting RT_{NDT} for these regions when the pressure exceeds 20 percent of the preservice hydrostatic test pressure (621 psig). Since the limiting RT_{NDT} for the flange regions for Turkey Point Units 3 and 4 is 44 F, the minimum temperature required for pressure of 621 psig and greater based on the Appendix G rule is 164 F. The heatup and cooldown curves as shown in Figures 3.4-2 to 3.4-5 clearly satisfy the above requirement by ample margins.

Finally, the composite curves for the heatup rate data and the cooldown rate data are adjusted for possible errors in the pressure and temperature sensing instruments by the values indicated on the respective curves.

The limitations imposed on the pressurizer heatup and cooldown rates and spray water temperature differential are provided to assure that the pressurizer is operated within the design criteria assumed for the fatigue analysis performed in accordance with the ASME Code requirements.

OVERPRESSURE MITIGATING SYSTEM

The Technical Specifications provide requirements to isolate High Pressure Safety Injection from the RCS and to prevent the start of an idle RCP if secondary temperature is more than 50 F above the RCS cold leg temperatures. These requirements are designed to ensure that mass and heat input transients more severe than those assumed in the low temperature overpressurization protection analysis cannot occur.

The OPERABILITY of two PORVs or an RCS vent opening of at least 2.20 square inches ensures that the RCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the RCS cold legs are less than or equal to 275°F. Either PORV has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either: (1) the start of an idle RCP with the secondary water temperature of the steam generator less than or equal to 50°F above the RCS cold leg temperatures including margin for instrument error, or (2) the start of a HPSI pump and its injection into a water-solid RCS. When the PORVs or 2.2 square inch area vent is used to mitigate a plant transient, a special report is submitted. However, minor increases in pressure resulting from planned plant actions, which are relieved by designated openings in the system, need not be reported.

REACTOR MATERIAL SURVEILLANCE PROGRAM

Each Type I capsule contains 28 V-notch specimens, ten Charpy specimens machined from each of the two shell forgings. The remaining eight Charpy specimens are machined from correlated monitor material. In addition, each Type I capsule contains four tensile specimens (two specimens from each of the

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REACTOR COOLANT SYSTEMBASESPRESSURE/TEMPERATURE LIMITS (Continued)REACTOR MATERIAL SURVEILLANCE PROGRAM

two shell forgings) and six WOL specimens (three specimens from each of the two shell forgings). Dosimeters of copper, nickel, aluminum-cobalt, and cadmium-shielded aluminum-cobalt wire are secured in holes drilled in spacers at the top, middle and bottom of each Type I capsule.

Each Type II capsule contains 32 Charpy V-notch specimens: eight specimens machined from one of the shell forgings, eight specimens of weld metal and eight specimens of HAZ metal, the remaining eight specimens are correlation monitors. In addition, each Type II capsule contains four tensile specimens and four WOL specimens: two tensile specimens and two WOL specimens from one of the shell forgings and the weld metal. Each Type II capsule contains a dosimeter block at the center of the capsule. Two cadmium-oxide-shielded capsules, containing the two isotopes uranium-238 and neptunium-237, are contained in the dosimeter block. The double containment afforded by the dosimeter assembly prevents loss and contamination by the neptunium-237 and uranium-238 and their activation products. Each dosimeter block contains approximately 20 milligrams of neptunium-237 and 13 milligrams of uranium-238 contained in a 3/8-inch OD sealed brass tube. Each tube is placed in a 1/2-inch diameter hole in the dosimeter block (one neptunium-237 and one uranium-238 tube per block), and the space around the tube is filled with cadmium oxide. After placement of this material, each hole is blocked with two 1/16-inch aluminum spacer discs and an outer 1/8-inch steel cover disc, which is welded in place. Dosimeters of copper, nickel, aluminum-cobalt and cadmium-shielded aluminum-cobalt are also secured in holes drilled in spacers located at the top, middle and bottom of each Type II capsule.

| <u>Capsule Type</u> | <u>Capsule Identification</u> |
|---------------------|-------------------------------|
| I | S |
| II | V |
| II | T |
| I | U |
| II | X |
| I | W |
| I | Y |
| I | Z |

This program combines the Reactor Surveillance Program into a single integrated program which conforms to the requirements of 10 CFR 50 Appendices G and H.

3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity and operational readiness



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3/4.4.10 STRUCTURAL INTEGRITY (Continued)

of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

Components of the Reactor Coolant System were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1970 Edition and Addenda through winter 1970.

3/4.4.11 REACTOR COOLANT SYSTEM VENTS

Reactor Coolant System vents are provided to exhaust noncondensable gases and/or steam from the Reactor Coolant System that could inhibit natural circulation core cooling. The OPERABILITY of ^{at} least one Reactor Coolant System vent path from the reactor vessel head and the pressurizer steam space ensures that the capability exists to perform this function.

The valve redundancy of the Reactor Coolant System vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply, or control system does not prevent isolation of the vent path. The performances of the specified surveillances will verify the operability of the system.

The function, capabilities, and testing requirements of the Reactor Coolant System vents are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plant Requirements," November 1980.

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3/4 5 EMERGENCY CORE COOLING SYSTEMS

BASES

3/4.5.1 ACCUMULATORS

The OPERABILITY of each Reactor Coolant System (RCS) accumulator ensures that a sufficient volume of borated water will be immediately forced into the reactor core through each of the cold legs in the event the RCS pressure falls below the pressure of the accumulators. This initial surge of water into the core provides the initial cooling mechanism during large RCS pipe ruptures.

The limits on accumulator volume, boron concentration and pressure ensure that the assumptions used for accumulator injection in the safety analysis are met.

The accumulator isolation valves fail to meet single failure criteria, therefore, removal of power to the valves is required.

The limits for operation with an accumulator inoperable for any reason except an isolation valve closed minimizes the time exposure of the plant to a LOCA event occurring concurrent with failure of an additional accumulator which may result in unacceptable peak cladding temperatures. If a closed isolation valve cannot be immediately opened, the full capability of one accumulator is not available and prompt action is required to place the reactor in a mode where this capability is not required.

3/4.5.2 and 3/4.5.3 ECCS SUBSYSTEMS

The OPERABILITY of ECCS components and flowpaths required in Modes 1, 2 and 3 ensures that sufficient emergency core cooling capability will be available in the event of a LOCA assuming any single active failure consideration. Two SI pumps and one RHR pump operating in conjunction with two accumulators are capable of supplying sufficient core cooling to limit the peak cladding temperatures within acceptable limits for all pipe break sizes up to and including the maximum hypothetical accident of a circumferential rupture of a reactor coolant loop. In addition, the RHR subsystem provides long-term core cooling capability in the recirculation mode during the accident recovery period.

With the RCS temperature below 350°F, operation with less than full redundant equipment is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the limited core cooling requirements.



EMERGENCY CORE COOLING SYSTEMS

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ECCS SUBSYSTEMS (Continued)

The Surveillance Requirements provided for each component ensures that ECCS OPERABILITY is maintained and verified periodically. Surveillance Requirements for throttle valve position stops prevent total pump flow from exceeding runout conditions when the system is in its minimum resistance configuration.

Pump performance requirements are obtained from accident analysis assumptions. Varying flowrates are provided to accommodate testing during modes and alignments. In the case of the ~~3600 gpm (normal cooldown mode)~~ RHR test, differential head is specified in "feet". This criteria will allow for compensation of test data with water density due to varying temperature.

374.5.4 REFUELING WATER STORAGE TANK

The OPERABILITY of the refueling water storage tank (RWST) as part of the ECCS ensures that a sufficient supply of borated water is available for injection by the ECCS in the event of a LOCA. The limits on RWST minimum volume and boron concentration ensure that: (1) sufficient water is available within containment to permit recirculation cooling flow to the core, and (2) the reactor will remain subcritical in the cold condition following mixing of the RWST and the RCS water volumes with all control rods inserted except for the most reactive control assembly. These assumptions are consistent with the LOCA analyses.

The indicated water volume limit includes an allowance for water not usable because of tank discharge line location or other physical characteristics.

The temperature limits on the RWST solution ensure that: 1) the solubility of the borated water will be maintained, and 2) the temperature of the RWST solution is consistent with the LOCA analysis. Portable instrumentation may be used to monitor the RWST temperature.



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3/4.6 CONTAINMENT SYSTEMS

BASES

3/4.6.1 PRIMARY CONTAINMENT

3/4.6.1.1 CONTAINMENT INTEGRITY

Primary CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the safety analyses. This restriction, in conjunction with the leakage rate limitation, will limit the SITE BOUNDARY radiation doses to within the dose guideline values of 10 CFR Part 100 during accident conditions.

3/4.6.1.2 CONTAINMENT LEAKAGE

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the safety analyses at the peak accident pressure, P_a . As an added conservatism, the measured overall integrated leakage rate is further limited to less than or equal to $0.75 L_a$ during performance of the periodic test to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates is consistent with the requirements of Appendix J of 10 CFR Part 50.

3/4.6.1.3 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to meet the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provides assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests. In order to meet the ACTION requirement to lock the OPERABLE air lock door closed, the air lock door interlock may provide the required locking. In addition, the outer air lock door is secured under administrative controls.

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that: (1) the containment structure is prevented from exceeding its design negative pressure differential of 2.5 psig with respect to the outside atmosphere, and (2) the containment peak pressure does not exceed the design pressure of 59 psig during LOCA conditions.

The maximum peak pressure expected to be obtained from a LOCA event is 49.9 psig assuming an initial containment pressure of 0.3 psig. An initial positive pressure of as much as 5 psi would result in a maximum containment pressure that is less than design pressure and is consistent with the safety analyses.

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CONTAINMENT SYSTEMS

BASES

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the design limits for a LOCA are not exceeded, and that the environmental qualification of equipment is not impacted. If temperatures exceed 120°F, but remain below 125°F for up to 336 hours during a calendar year, no action is required. If the 336-hour limit is approached, an evaluation may be performed to extend the limit if some of the hours have been spent at less than 125°F. Measurements shall be made at all listed locations, whether by fixed or portable instruments, prior to determining the average air temperature.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the maximum pressure of 49.9 psig in the event of a LOCA. The measurement of containment tendon lift-off force, the tensile tests of the tendon wires or strands, the visual examination of tendons, anchorages and exposed interior and exterior surfaces of the containment, and the Type A leakage test are sufficient to demonstrate this capability.

Some containment tendons are inaccessible at one end due to interferences and safety considerations. These tendons, if selected for examination, will be exempted from the full surveillance requirements, and will be subjected only to lift-off testing at the accessible end. Due to tendon configuration, lift-off values may differ considerably at the two ends. Therefore, when only one end is accessible, it is considered that up to a 4% tolerance from the predicted lower limit is acceptable.

The required Special Reports from any engineering evaluation of containment abnormalities shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, the results of the engineering evaluation, and the corrective actions taken.

3/4.6.1.7 CONTAINMENT VENTILATION SYSTEM

The containment purge supply and exhaust isolation valves are required to be closed during a LOCA. When not purging, power to the purge valve actuators will be removed (sealed closed) to prevent inadvertent opening of these valves. Maintaining these valves sealed closed during plant operation ensures that excessive quantities of radioactive materials will not be released via the Containment Purge System.

Leakage integrity tests with a maximum allowable leakage rate for containment purge supply and exhaust supply valves will provide early indication of

1. The first part of the document is a list of names and addresses of the members of the committee. The names are listed in alphabetical order, and the addresses are listed below each name. The list is as follows:

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CONTAINMENT SYSTEMS

BASES

CONTAINMENT VENTILATION SYSTEM (Continued)

resilient material seal degradation and will allow opportunity for repair before gross leakage failures could develop. The 0.60 L_a leakage limit of Specification 3.6.1.2b. shall not be exceeded when the leakage rates determined by the leakage integrity tests of these valves are added to the previously determined total for all valves and penetrations subject to Type B and C tests.

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the Containment Spray System ensures that containment depressurization capability will be available in the event of a LOCA. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the safety analyses.

The allowable out-of-service time requirements for the Containment Spray System have been maintained consistent with that assigned other inoperable ESF equipment and do not reflect the additional redundancy in cooling capability provided by the Emergency Containment Cooling System. Pump performance requirements are obtained from the accidents analysis assumptions.

3/4.6.2.2 EMERGENCY CONTAINMENT COOLING SYSTEM

The OPERABILITY of the Emergency Containment Cooling System ensures that adequate heat removal capacity is available during post-LOCA conditions. The emergency containment coolers are a full capacity system and are redundant to the spray system in terms of heat removal function for design basis accident.

The allowable out-of-service time requirements for the Containment Cooling System have been maintained consistent with that assigned other inoperable ESF equipment and do not reflect the additional redundancy in cooling capability provided by the Containment Spray System.

3/4.6.3 EMERGENCY CONTAINMENT FILTERING SYSTEM

The OPERABILITY of the Emergency Containment Filtering System ensures that sufficient iodine removal capability will be available in the event of a LOCA. The reduction in containment iodine inventory reduces the resulting SITE BOUNDARY radiation doses associated with containment leakage. The operation of this system and resultant iodine removal capacity are consistent with the assumptions used in the LOCA analyses. System components are not subject to rapid deterioration. Visual inspection and operating/performance tests after maintenance, prolonged operation, and at the required frequencies provide assurances of system reliability and will prevent system failure. Filter performance tests are conducted in accordance with the methodology and intent of ANSI N510- 1975.

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CONTAINMENT SYSTEMS

BASES

3/4.6.4 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified in the In-Service Testing Program is consistent with the assumed isolation times of those valves with specific isolation times in the LOCA analysis.

3/4.6.5 HYDROGEN MONITORS

The OPERABILITY of the Hydrogen Monitors ensures the detection of hydrogen buildup within containment following a LOCA to allow operator action to reduce the hydrogen concentration below its flammable limit.

3/4.6.6 POST ACCIDENT CONTAINMENT VENT SYSTEM

The OPERABILITY of the Post Accident Containment Vent System ensures the capability for emergency venting of containment following a LOCA to reduce the hydrogen concentration to below its flammable limit.

PACVS systems 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 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 tests are performed in accordance with the methodology and intent of ANSI N510-1975 and provide assurance that filter performance has not deteriorated below required specification values due to aging, contamination or other effects.

3/4.7 PLANT SYSTEMS

BASES

3/4.7.1 TURBINE CYCLE

3/4.7.1.1 SAFETY VALVES

The OPERABILITY of the main steam line Code safety valves ensures that the Secondary System pressure will be limited to within 110% (1193.5 psig) of its design pressure of 1085 psig during the most severe anticipated system operational transient. The maximum relieving capacity is associated with a Turbine trip from 100% RATED THERMAL POWER coincident with an assumed loss of condenser heat sink (i.e., no steam bypass to the condenser).

The specified valve lift settings and relieving capacities are in accordance with the requirements of Section VIII of the ASME Boiler and Pressure Code, 1971 Edition. The total relieving capacity for all valves on all of the steam lines is 10,670,000 lbs/h which is 111% of the total secondary steam flow of 9,600,000 lbs/h at 100% RATED THERMAL POWER. A minimum of one OPERABLE safety valves per steam generator ensures that sufficient relieving capacity is available for the allowable THERMAL POWER restriction in Table 3.7-2.

STARTUP and/or POWER OPERATION is allowable with safety valves inoperable within the limitations of the ACTION requirements on the basis of the reduction in Secondary Coolant System steam flow and THERMAL POWER required by the reduced Reactor trip settings of the Power Range Neutron Flux channels. The Reactor Trip Setpoint reductions are derived on the following bases:

$$SP = \frac{(X) - (Y)(V)}{X} \times (109)$$

Where:

SP = Reduced Reactor Trip Setpoint in percent of RATED THERMAL POWER,

V = Maximum number of inoperable safety valves per steam line,

109 = Power Range Neutron Flux-High Trip Setpoint,

X = Total relieving capacity of all safety valves per steam line in lbs/hour, and

Y = Maximum relieving capacity of any one safety valve in lbs/hour

3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM

The OPERABILITY of the Auxiliary Feedwater System ensures that the Reactor Coolant System can be cooled down to less than 350°F from normal operating conditions in the event of a total loss-of-offsite power. Steam can be



supplied to the pump turbines from either or both units through redundant steam headers. Two D.C. motor operated valves and one A.C. motor operated valve on each unit isolate the three main steam lines from these headers. Both the D.C. and A.C. motor operated valves are powered from safety-related sources. Auxiliary feedwater can be supplied through redundant lines to the safety-related portions of the main feedwater lines to each of the steam generators. Air operated fail closed flow control valves are provided to modulate the flow to each steam generator. Each steam driven auxiliary feedwater pump has sufficient capacity for single and two unit operation to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 350°F when the Residual Heat Removal System may be placed into operation.

ACTION statement 2 describes the actions to be taken when both auxiliary feedwater trains are inoperable. The requirement to verify the availability of both standby feedwater pumps is to be accomplished by verifying that both pumps have successfully passed their monthly surveillance tests within the last surveillance interval. The requirement to complete this action before beginning a unit shutdown is to ensure that an alternate feedwater train is available before putting the affected unit through a transient. If no alternate feedwater trains are available, the affected unit is to stay at the same condition until an auxiliary feedwater train is returned to service, and then invoke ACTION statement 1 for the other train. If both standby feedwater pumps are made available before one auxiliary feedwater train is returned to an OPERABLE status, then the affected unit(s) shall be placed in at least HOT STANDBY within 6 hours and HOT SHUTDOWN within the following 6 hours.

ACTION statement 3 describes the actions to be taken when a single auxiliary feedwater pump is inoperable. The requirement to verify that two independent auxiliary feedwater trains are OPERABLE is to be accomplished by verifying that the requirements for Table 3.7-3 have been successfully met for each train within the last surveillance interval. The provisions of Specification 3.0.4 are not applicable to the third auxiliary feedwater pump provided it has not been inoperable for longer than 30 days. This means that a unit(s) can change OPERATIONAL MODES during a unit(s) heatup with a single auxiliary feedwater pump inoperable as long as the requirements of ACTION statement 3 are satisfied.

The monthly testing of the auxiliary feedwater pumps will verify their operability. Proper functioning of the turbine admission valve and the operation of the pumps will demonstrate the integrity of the system. Verification of correct operation will be made both from instrumentation within the control room and direct visual observation of the pumps.

3/4.7.1.3 CONDENSATE STORAGE TANK

There are two (2) seismically designed 250,000 gallons condensate storage tanks. A minimum of 185,000 gallons is maintained for each unit in MODES 1, 2 or 3. The OPERABILITY of the condensate storage tank with the minimum water

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CONDENSATE STORAGE TANK (Continued)

volume ensures that sufficient water is available to maintain the Reactor Coolant System at HOT STANDBY conditions for approximately 23 hours or maintain the Reactor Coolant System at HOT STANDBY conditions for 15 hours and then cool down the Reactor Coolant System to below 350°F at which point the Residual Heat Removal System may be placed in operation.

3/4.7.1.4 SPECIFIC ACTIVITY

The limit on secondary coolant specific activity is based on a postulated release of secondary coolant equivalent to the contents of three steam generators to the atmosphere due to a net load rejection. The limiting dose for this case would result from radioactive iodine in the secondary coolant. One tenth of the iodine in the secondary coolant is assumed to reach the site boundary making allowance for plate-out and retention in water droplets. The inhalation thyroid dose at the site boundary is then;

$$\text{Dose (Rem)} = C * V * B * \text{DFC} * X/Q * 0.1.$$

Where: C = secondary coolant dose equivalent I-131 specific activity
= 0.2 curies/m³ (μCi/cc) or 0.1 Ci/m³, each unit
 V = equivalent secondary coolant volume released = 214 m³
 B = breathing rate = 3.47×10^{-4} m³/sec.
 X/Q = atmospheric dispersion parameter = 1.54×10^{-4} sec/m³
0.1 = equivalent fraction of activity released
 DCF = dose conversion factor, Rem/Ci

The resultant thyroid dose is less than 1.5 Rem.

3/4.7.1.5 MAIN STEAM LINE ISOLATION VALVES

The OPERABILITY of the main steam line isolation valves ensures that no more than one steam generator will blow down in the event of a steam line rupture. This restriction is required to: (1) minimize the positive reactivity effects of the Reactor Coolant System cooldown associated with the blowdown, and (2) limit the pressure rise within containment in the event the steam line rupture occurs within containment. The OPERABILITY of the main steam isolation valves within the closure times of the Surveillance Requirements are consistent with the assumptions used in the safety analyses. The 24-hour action time provides a reasonable amount of time to troubleshoot and repair the backup air and/or nitrogen system.



PLANT SYSTEMS

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3/4.7.1.6 STANDBY FEEDWATER SYSTEM

The purpose of this specification and the supporting surveillance requirements is to assure operability of the non-safety grade Standby Feedwater System. The Standby Feedwater System consists of commercial grade components designed and constructed to industry and FPL standards of this class of equipment located in the outdoor plant environment typical of FPL facilities system wide. The system is expected to perform with high reliability, i.e., comparable to that typically achieved with this class of equipment. FPL intends to maintain the system in good operating condition with regard to appearance, structures, supports, component maintenance, calibrations, etc.

The function of the Standby Feedwater System for OPERABILITY determinations is that it can be used as a backup to the Auxiliary Feedwater (AFW) System in the event the AFW System does not function properly. The system would be manually started, aligned and controlled by the operator when needed. In the event of a loss of offsite power the pumps can be powered via the non-safety grade diesel generators connected to the non-safety related 4160 volt bus.

A supply of 60,000 gallons from the Demineralized Water Storage Tank for the Standby Feedwater Pumps is sufficient water to remove decay heat from the reactor for six (6) hours for a single unit or two (2) hours for two units. This was the basis used for requiring 60,000 gallons of water in the non-safety grade Demineralized Water Storage Tank and is judged to provide sufficient time for restoring the AFW System or establishing make-up to the Demineralized Water Storage Tank.

The motor driven Standby Feedwater Pumps are not designed to NRC requirements applicable to Auxiliary Feedwater Systems and not required to satisfy design basis events requirements. These pumps may be out of service for up to 24 hours before initiating formal notification because of the extremely low probability of a demand for their operation.

The guidelines for NRC notification in case of both pumps being out of service for longer than 24 hours are provided in applicable plant procedures, as a voluntary 4-hour notification.

Adequate demineralized water for the standby feedwater system will be verified once per 24 hours. The Demineralized Water Storage Tank provides a source of water to several systems and therefore, requires daily verification.

The standby feedwater pumps will be verified OPERABLE monthly on a STAGGERED TEST BASIS by starting and operating them in the recirculation mode typically from their normal power supply. Also, during each unit's refueling outage, the respective standby feedwater pump will be powered from the unit's C bus utilizing Units 1 and 2 non-safety grade diesel generators and flow



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STANDBY FEEDWATER SYSTEM (Continued)

tested to the nuclear unit's steam generators. Prior to this test, the refueling unit's C bus will be de-energized and the necessary loads will be transferred to the other unit's C bus.

This surveillance regimen will thus demonstrate operability of the entire flow path, backup non-safety grade power supply and pump associated with a unit at least each refueling outage. The pump, motor driver, and normal power supply availability would typically be demonstrated by operation of the pumps in the recirculation mode monthly on a staggered test basis.

3/4.7.2 COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the Component Cooling Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single active failure, is consistent with the assumptions used in the safety analyses. One pump and two heat exchangers provide the heat removal capability for accidents that have been analyzed.

3/4.7.3 INTAKE COOLING WATER SYSTEM

The OPERABILITY of the Intake Cooling Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The design and operation of this system, assuming a single active failure, ensures cooling capacity consistent with the assumptions used in the safety analyses.

3/4.7.4 ULTIMATE HEAT SINK

The limitations on the ultimate heat sink temperature ensure that sufficient cooling capacity is available either: (1) to provide normal cooldown of the facility or (2) to mitigate the effects of accident conditions within acceptable limits.



PLANT SYSTEMSASES3/4.7.5 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

The OPERABILITY of the Control Room Emergency Ventilation System ensures that: (1) the ambient air temperature does not exceed the allowable temperature for continuous-duty rating for the equipment and instrumentation cooled by this system, and (2) the control room will remain habitable for operations personnel during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rems or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix A, 10 CFR Part 50.

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 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.

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.

When the cause of the rejection of a snubber is visual inspection is clearly established and remedied for the snubber and for any other snubbers that may be generically susceptible, and verified operable by inservice functional testing, that snubber may be exempted from being counted as inoperable for the purposes of establishing the next visual inspection interval. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration.

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BASES

SNUBBERS (Continued)

When a snubber is found inoperable, an evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any Safety Related System or component has been adversely affected by the inoperability of the snubber. The evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested during plant refueling SHUTDOWNS. Observed failure of these sample snubbers shall require functional testing of additional units.

-- In cases where the cause of the functional failure has been identified additional testing shall be based on manufacturer's or engineering recommendations. As applicable, this additional testing increases the probability of locating possible inoperable snubbers without testing 100% of the safety-related snubbers.

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubbers, seal replaced, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

3/4.7.7 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(a)(3) limits for plutonium. This limitation will ensure that leakage from Byproduct, Source, and Special Nuclear Material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.



PLANT SYSTEMS

CASES

3/4.7.8 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, fire hose stations, and yard fire hydrants. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

The Surveillance Requirements provide assurance that the minimum OPERABILITY requirements of the Fire Suppression Systems are met.

In the event the Fire Suppression Water System becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

3/4.7.9 FIRE RATED ASSEMBLIES

The functional integrity of the fire rated assemblies and barrier penetrations ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. These design features minimize the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishing of the fire. The fire barrier penetrations are a passive element in the facility Fire Protection Program and are subject to periodic inspections.

Fire barrier penetrations, including cable penetration barriers, fire doors and dampers are considered functional when the visually observed condition is the same as the as-designed condition.

During periods of time when a barrier is not functional, either: (1) a continuous fire watch is required to be maintained in the vicinity of the affected barrier, or (2) the fire detectors on at least one side of the affected barrier must be verified OPERABLE and an hourly fire watch patrol established until the barrier is restored to functional status.



3/4.8 ELECTRICAL POWER SYSTEMS

BASES

3/4.8.1, 3/4.8.2, and 3/4.8.3 A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety-related equipment required for: (1) the safe shutdown of the facility, and (2) the mitigation and control of accident conditions within the facility.

The ACTION requirements specified for the levels of degradation of the power sources provide restrictions upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources is consistent with the initial condition assumptions of the safety analyses and is based upon maintaining adequate onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss-of-offsite power and single failure of one onsite A.C. source. Two physically independent A.C. circuits exist between the offsite transmission network and the onsite Class 1E Distribution System by utilizing the following: (1) a total of eight transmission lines which lead to five separate transmission substations tie the Turkey Point Switchyard to the offsite power grid. (2) Two dual-winding startup transformers each provide 100% of the A and B train 4160 volt power from the switchyard to its associated unit. In addition, each startup transformer has the capability to supply backup power of the equivalent of one emergency diesel generator (approximately 2500 kW) to the opposite unit's A-train 4160 volt bus. Two emergency diesel generators (EDG) provide onsite emergency A.C. power for both units. EDG A provides A-train power for both units 3 & 4 and EDG B in turn provides B-train power for both units.

Due to the shared nature of numerous electrical components between Turkey Point Units 3 and 4, the inoperability of a component on an associated unit will often affect the operation of the opposite unit. These electrical components consist primarily of both emergency diesel generators (EDG's), both startup transformers, four 4160 volt busses, most 480 volt motor control centers, a particular five out of six battery chargers, and all four battery banks. Depending on the component(s) which is (are) determined inoperable, the resulting ACTION can range from the eventual shutdown of the opposite unit long after the associated unit has been shutdown (30 days) to an immediate shutdown of both units. Therefore, ACTION times allow for an orderly sequential shutdown of both units when the inoperability of a component(s) affects both units with equal severity. When an ACTION statement requires a dual unit shutdown, the time to be in HOT STANDBY is 12 hours. This is to allow the orderly shutdown of one unit at a time and not jeopardize the stability of the electrical grid by imposing a dual unit shutdown.



ELECTRICAL POWER SYSTEMSBASESA.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

As each startup transformer only provides the limited equivalent power of one EDG to the opposite Units A-train 4160 volt bus, the allowable out-of-service time of 30 days has been applied before the opposite unit is required to be shutdown. After 24 hours, a unit with an inoperable startup transformer must reduce THERMAL POWER TO less than or equal to 30% RATED THERMAL POWER within the next 6 hours. The 30% RATED THERMAL POWER limit was chosen because at this power level the decay heat and fission product production has been reduced and the operators are still able to maintain automatic control of the feedwater trains and other unit equipment. At lower power levels the operators must use manual control with the feedwater bypass lines. By not requiring a complete unit shutdown, the plant avoids a condition requiring natural circulation and avoids intentionally relying on engineered safety features for non-accident conditions. If the startup transformer is not restored to OPERABLE status, a shutdown is required. The opposite unit must also shutdown if this backup power supply is not available.

The notification of a loss of startup transformer(s) to the NRC is to be performed through the resident NRC inspector.

When one diesel generator is inoperable, there is an additional ACTION requirement to verify that all required engineered safety features, that depend on the remaining OPERABLE diesel generator as a source of emergency power, are also OPERABLE. This requirement is intended to provide assurance that a loss-of-offsite power event will not result in a complete loss of safety function of critical systems during the period one of the diesel generators is inoperable.



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ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

The term verify means to administratively check by examining logs or other information to determine if certain components are out-of-service for maintenance or other reasons. It does not mean to perform the surveillance requirements needed to demonstrate the OPERABILITY of the component.

With an EDG out of service, an ACTION statement and a Surveillance Requirement are provided to demonstrate the required startup transformers and their associated circuits are OPERABLE. Additional ACTION statements are included in Specifications 3.8.1.1 and 3.8.2.1 to ensure that both EDGs are OPERABLE if two battery chargers are inoperable and that an EDG and a battery on opposite trains are not inoperable. These ACTIONS will maintain the minimum number of battery chargers available and the train independence of batteries and EDGs.

In the event one emergency diesel generator and one startup transformer are out of service at the same time, the more restrictive of the ACTION times for the individual components is used. The allowable out-of-service time elapsed on the first component approaching its time limit is not reset if the second component becomes inoperable during the first component allowable out-of-service time.

With both startup transformers inoperable, the unit(s) are required to be shutdown consecutively, after 24 hours. A consecutive shutdown is used because a unit without its associated transformer must perform a natural circulation cooldown. By placing one unit in COLD SHUTDOWN before starting shutdown of the second unit, a dual unit natural circulation cooldown is avoided. With two EDGs out of service, a prompt shutdown is required.

With one startup transformer inoperable, or one startup transformer and one EDG inoperable, or two startup transformers inoperable, ACTION and Surveillance Requirements are provided to demonstrate the operability of at least two of the five Units 1 and 2 cranking diesels. This requirement is intended to provide an additional non-safety grade source of power to assist in the safe shutdown of the unit without its associated startup transformer if required.

The EDG Surveillance testing requires that each EDG be started from normal conditions only once per 184 days with no additional warmup procedures. Normal conditions in this instance are defined as the pre-start temperature and lube oil conditions each EDG normally experiences with the continuous use of prelube systems and immersion heaters.



ELECTRICAL POWER SYSTEMSBASESA.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

The SURVEILLANCE REQUIREMENTS to demonstrate each Emergency Diesel Generator (EDG) OPERABLE requires that the auto-connected loads to each EDG do not exceed 2750 kW. This requirement can be demonstrated by following the ESF testing method where each unit is individually tested for two loading conditions (i.e., loads due to loss of offsite power (LOOP) and loads due to LOOP coincident with a Safety Injection (SI)). The results of the test on one unit are then added arithmetically to the test on the other unit with a LOOP coincident with a Safety Injection (SI) for each EDG respectively. The sum of the difference between these loads operated in the test mode and the actual expected loads (i.e., load differences due to pumps run in recirculation mode) are added to the test values for each EDG. The sum of the two test condition loads on opposite units will be representative of the actual design basis auto-connect loads on each EDG. The EDG 8-hour Surveillance test demonstrates each EDG's capability to power the maximum of all auto-connected and required manually loaded emergency shut-down load (2850 kW) following a design basis accident, loss of offsite power (LOOP) and a single failure of one EDG.

The surveillance requirement for the full load rejection test requires the steady state voltage reading to be less than or equal to 4784 volts within 2 seconds following the load rejection. The purpose of the subject surveillance is to verify the proper operation of the voltage regulator and overspeed circuits during a full load rejection. Since the ability to measure instantaneous maximum transient voltage is dependent on the mechanical response of the measurement devices and not necessarily reflective of actual regulator performance, the ability of the diesel generator to return to a steady state condition in a defined time period is a more accurate and useful measurement of the diesel generator's ability to properly regulate voltage during the performance of a full load rejection test.

The specified fuel supply will ensure power requirements for at least a week.



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ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that (1) the facility can be maintained in the shutdown or refueling condition for extended time periods, and (2) sufficient instrumentation and control capability is available for monitoring and maintaining the unit status. During a unit shutdown the one required circuit between the offsite transmission network and the onsite Class 1E Distribution System can consist of at least the associated unit startup transformer feeding one 4160 volt Bus A or B, the opposite unit's startup transformer feeding the associated unit's 4160 volt Bus A, or the associated unit's 4160 volt Bus A or B backfed through its main and auxiliary transformers with the main generator isolated. As inoperability of numerous electrical components often affect the operation of the opposite unit, the applicability for the shutdown LIMITING CONDITION FOR OPERATION (LCO) for A.C. Sources, D.C. Sources and Onsite Power Distribution all contain statements to ensure the LCO's of the opposite unit are considered.

The allowable out-of-service times for the battery chargers depicted in Table 3.8-1 are based on the following criteria:

1. Battery chargers 3B, 4A and 4S are all required for the operation of both units. EDG's A and B field flashing are powered by batteries 3A and 4B respectively. With one of battery chargers 3B, 4A or 4S inoperable, a single failure of Battery 3A or 4B could result in less than the minimum required number of battery chargers being OPERABLE. Therefore, an allowable out-of-service time of 72 hours is applied due to the reliance on a particular EDG.
2. With any two of battery chargers 3B, 4A and 4S inoperable, or with any two of battery chargers 3A, 4B and 3S inoperable, one D.C. bus is inoperable and the corresponding allowable out-of-service time of 24 hours is applied.
3. With a total of three or more battery chargers inoperable, shutdown of both units is required after 1 hour based on the loss of greater than or equal to one-half of the available battery chargers and one D.C. bus.

The allowable out-of-service time for each of the four batteries D.C. busses is 24 hours in order to allow for required battery maintenance without requiring both units to be shutdown.

Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage on float charge, connection resistance values, and the performance of battery service and discharge tests ensure the effectiveness of the charging system, the ability to handle high discharge rates, and verifies the battery capability to supply its required load.

1. The first part of the document is a list of names and addresses of the members of the committee.

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ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

Table 4.8-2 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage, and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and not more than 0.015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than 0.020 below the manufacturer's full charge specific gravity with an average specific gravity of all connected cells not more than 0.010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cells parameter outside the normal limit but within the allowable value specified in Table 4.8-2 is permitted for up to 7 days. During this period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than 0.020 below the manufacturer's recommended full charge specific gravity, ensures that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cells specific gravity, ensures that an individual cell's specific gravity will not be more than 0.040 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit; and (4) the allowable value for an individual cells float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

The ACTION requirements which concern the inoperability of certain Motor Control Centers (MCC's) and 4160 volt Busses are limited by the action requirements of certain equipment which receive power from them. As MCC D is common between both Units 3 and 4, it has been given an allowable out of service time of 24 hours to allow the performance of periodic refueling outage maintenance. For all reasons other than the performance of periodic refueling outage maintenance, the allowable out of service time for MCC D is 8 hours. As MCC D automatically transfers from a normal power supply to a back-up power supply fed from the opposite train, allowable out-of-service times have been applied to the power supplies themselves based on their reliance on a specific EDG to provide the "only" power source for the MCC. Therefore, the normal and backup power supplies for MCC D both have allowable out-of-service times of 72 hours (7 days for periodic refueling outage maintenance) based on the reliance on the remaining power source (EDG A or B) to power the required two Emergency Containment Coolers (ECC's), two Emergency Containment Filters (ECF's) of each unit and one of the required battery chargers 4S. As MCC 3A also automatically transfers from a normal power supply to a back up power supply fed from the opposite train, an allowable out-of-service time has been applied to the normal power supply itself based on the fact that the 3A MCC powers certain auxiliary equipment necessary for OPERABILITY of the A diesel generator. Therefore, upon the



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ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

loss of the normal power supply to the 3A MCC, the A EDG is not OPERABLE. The ACTION statements for the 3A MCC are similar to those applied to an inoperable diesel generator.

With one unit shutdown the 4160 Busses on the associated unit are only permitted to be inoperable for up to 7 days, for periodic refueling outage maintenance, upon issuance of an engineering evaluation based on the single failure vulnerability of equipment powered by sources on the shutdown unit which is required for the opposite unit at power.

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ELECTRICAL POWER SYSTEMS

ASES

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

Operation with a battery cells parameter outside the normal limit but within the allowable value specified in Table 4.8-2 is permitted for a period. During this period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than 0.010 below the manufacturer's recommended full charge specific gravity, ensure that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cells specific gravity, ensures that an individual cell's specific gravity will not be more than 0.030 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit; and (4) the allowable value for an individual cells float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

The ACTION requirements which concern the inoperability of certain Motor Control Centers (MCC's) and 4160 volt Busses are limited by the action requirements of certain equipment which receive power from them. As MCC D is common between both Units 3 and 4, it has been given an allowable out of service time of 24 hours to allow the performance of preplanned maintenance. For all reasons other than the performance of preplanned preventative maintenance, the allowable out of service time for MCC D is 8 hours. As MCC D automatically transfers from a normal power supply to a back-up power supply fed from the opposite train, allowable out-of-service times have been applied to the power supplies themselves based on their reliance on a specific EDG to provide the "only" power source for the MCC. Therefore, the normal and backup power supplies for MCC D both have allowable out-of-service times of 72 hours (7 days for preplanned preventative maintenance) based on the reliance on the remaining power source (EDG A or B) to power the required two Emergency Containment Coolers (ECC's), two Emergency Containment Filters (ECF's) of each unit and one of the required battery chargers 4S. As MCC 3A also automatically transfers from a normal power supply to a back up power supply fed from the opposite train, an allowable out-of-service time has been applied to the normal power supply itself based on the fact that the 3A MCC powers certain auxiliary equipment necessary for OPERABILITY of the A diesel generator. Therefore, upon the loss of the normal power supply to the 3A MCC, the A EDG is not OPERABLE. The ACTION statements for the 3A MCC are similar to those applied to an inoperable diesel generator.

With one unit shutdown the 4160 Busses on the associated unit are only permitted to be inoperable for up to 7 days, for periodic refueling outage maintenance, upon issuance of an engineering evaluation based on the single failure vulnerability of equipment powered by sources on the shutdown unit which is required for the opposite unit at power.

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3/4.9 REFUELING OPERATIONS

BASES

3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the safety analyses. With the required valves closed during refueling operations the possibility of uncontrolled boron dilution of the filled portion of the RCS is precluded. This action prevents flow to the RCS of unborated water by closing flow paths from sources of unborated water. The boration rate requirement of 4 gpm of 20,000 ppm boron or equivalent ensures the capability to restore the SHUTDOWN MARGIN with one OPERABLE charging pump.

3/4.9.2 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core. There are four source range neutron flux channels, two primary and two backup. All four channels have visual and alarm indication in the control room and interface with the containment evacuation alarm system. The primary source range neutron flux channels can also generate reactor trip signals and provide audible indication of the count rate in the control room and containment. At least one primary source range neutron flux channel to provide the required audible indication, in addition to its other functions, and one of the three remaining source range channels shall be OPERABLE to satisfy the LCO.

3/4.9.3 DECAY TIME

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor vessel ensures that sufficient time has elapsed to allow the radioactive decay of the short-lived fission products. This decay time is consistent with the assumptions used in the safety analyses.

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

The requirements on containment building penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

3/4.9.5 COMMUNICATIONS

The requirement for communications capability ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity conditions during CORE ALTERATIONS.



REFUELING OPERATIONS

BASES

3/4.9.6 MANIPULATOR CRANE

The OPERABILITY requirements for the manipulator cranes ensure that: (1) manipulator cranes will be used for movement of drive rods and fuel assemblies, (2) each crane has sufficient load capacity to lift a drive rod or fuel assembly, and (3) the core internals and reactor vessel are protected from excessive lifting force in the event they are inadvertently engaged during lifting operations.

The requirement that the auxiliary hoist load indicator be used to prevent lifting excessive loads will require a manual action. The auxiliary hoist load indicator does not include any automatic mechanical or electrical interlocks that prevent lifting loads in excess of 600 pounds.

3/4.9.7 CRANE TRAVEL - SPENT FUEL STORAGE AREAS

The restriction on movement of loads in excess of the nominal weight of a fuel and control rod assembly and associated handling tool over other fuel assemblies in the storage pool ensures that in the event this load is dropped: (1) the activity release will be limited to that contained in a single fuel assembly, and (2) any possible distortion of fuel in the storage racks will not result in a critical array. This assumption is consistent with the activity release assumed in the safety analyses.

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that: (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor vessel below 140°F as required during the REFUELING MODE, and (2) sufficient coolant circulation is maintained through the core to minimize the effect of a boron dilution incident and prevent boron stratification.

The requirement to have two RHR loops OPERABLE when there is less than 23 feet of water above the reactor vessel flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and at least 23 feet of water above the reactor pressure vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM

The OPERABILITY of this system ensures that the containment ventilation penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

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REFUELING OPERATIONSASES3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL AND STORAGE POOL

The restrictions on minimum water level ensure that sufficient shielding will be available during fuel movement and for removal of iodine in the event of a fuel handling accident. The minimum water depth is consistent with the assumptions of the safety analysis.

3/4.9.12 HANDLING OF SPENT FUEL CASK

Limiting spent fuel decay time from last time critical to a minimum of 1,525 hours prior to moving a spent fuel cask into the spent fuel pit will ensure that potential offsite doses are a fraction of 10 CFR Part 100 limits should a dropped cask strike the stored fuel assemblies.

The restriction to allow only a single element cask to be moved into the spent fuel pit will ensure the maintenance of water inventory in the unlikely event of an uncontrolled cask descent. Use of a single element cask which nominally weighs about twenty-five tons will also increase crane safety margins by about a factor of four.

Requiring that spent fuel decay time from last time critical be at least 20 days prior to moving a fuel assembly outside the fuel storage pit in a shipping cask will ensure that potential offsite doses are a fraction of 10 CFR 100 limits should a dropped cask and ruptured fuel assembly release activity directly to the atmosphere.

3/4.9.13 RADIATION MONITORING

The OPERABILITY of the containment radiation monitors ensures continuous monitoring of radiation levels to provide immediate indication of an unsafe condition.

3/4.9.14 SPENT FUEL STORAGE

The spent fuel storage racks provide safe subcritical storage of fuel assemblies by providing sufficient center-to-center spacing or a combination of spacing and poison to assure k_{eff} is equal to or less than 0.95 for normal operations and postulated accidents.

The spent fuel racks are divided into two regions. Region I racks have a 10.6 inch center-to-center spacing and Region II racks have a 9.0 inch center-to-center spacing. Because of the larger center-to-center spacing and poison (B^{10}) concentration of Region I cells, the only restriction for placement of fuel is that the initial fuel assembly enrichment is equal to or less than 4.5 weight percent of U-235. The limiting value of U-235 enrichment is based upon the assumptions in the spent fuel safety analyses and assures that the limiting criteria for criticality is not exceeded. Prior to placement

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REFUELING OPERATIONSBASES

SPENT FUEL STORAGE (Continued)

in Region II cell locations, strict controls are employed to evaluate burnup of the spent fuel assembly. Upon determination that the fuel assembly meets the burnup requirements of Table 3.9-1, placement in a Region II cell is authorized. These positive controls assure the fuel enrichment limits assumed in the safety analyses will not be exceeded.*

*This Technical Specification is applicable upon installation of the new two-region high density spent fuel racks.

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3/4.10 SPECIAL TEST EXCEPTIONSASES3/4.10.1 SHUTDOWN MARGIN

This special test exception provides that a minimum amount of control rod worth is immediately available for reactivity control when tests are performed for control rod worth measurement. This special test exception is required to permit the periodic verification of the actual versus predicted core reactivity condition occurring as a result of fuel burnup or fuel cycling operations.

3/4.10.2 GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITS

This special test exception permits individual control rods to be positioned outside of their normal group heights and insertion limits during the performance of such PHYSICS TESTS as those required to measure control rod worth.

3/4.10.3 PHYSICS TESTS

This special test exception permits PHYSICS TESTS to be performed at less than or equal to 5% of RATED THERMAL POWER with the RCS T_{avg} slightly lower than normally allowed so that the fundamental nuclear characteristics of the core and related instrumentation can be verified. In order for various characteristics to be accurately measured, it is at times necessary to operate outside the normal restrictions of these Technical Specifications. For instance, to measure the moderator temperature coefficient at BOL, it is necessary to position the various control rods at heights which may not normally be allowed by Specification 3.1.3.6 which in turn may cause the RCS T_{avg} to fall slightly below the minimum temperature of Specification 3.1.1.4.

3/4.10.4 (This specification number is not used.)3/4.10.5 POSITION INDICATION SYSTEM - SHUTDOWN

This special test exception permits the Position Indication Systems to be inoperable during rod drop time measurements. The exception is required since the data necessary to determine the rod drop time are derived from the induced voltage in the position indicator coils as the rod is dropped. This induced voltage is small compared to the normal voltage and, therefore, cannot be observed if the Position Indication Systems remain OPERABLE.

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3/4.11 RADIOACTIVE EFFLUENTS

BASES

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.1 CONCENTRATION

This specification is provided to ensure that the concentration of radioactive materials released in liquid waste effluents to UNRESTRICTED AREAS will be less than the concentration levels specified in 10 CFR Part 20, Appendix B, Table II, Column 2. This limitation provides additional assurance that the levels of radioactive materials in bodies of water in UNRESTRICTED AREAS will result in exposures within: (1) the objectives of Appendix I, 10 CFR Part 50, to a MEMBER OF THE PUBLIC, and (2) the limits of 10 CFR Part 20.106(e) to the population. The concentration limit for dissolved or entrained noble gases is based upon the assumption that Xe-135 is the controlling radioisotope and its MPC in air (submersion) was converted to an equivalent concentration in water using the methods described in International Commission on Radiological Protection (ICRP) Publication 2.

This specification applies to the release of radioactive materials in liquid effluents from all units at the site.

The required detection capabilities for radioactive materials in liquid waste samples are tabulated in terms of the lower limits of detection (LLDs). Detailed discussion of the LLD, and other detection limits can be found in Currie, L. A., "Lower Limit of Detection: Definition and Elaboration of a Proposed Position for Radiological Effluent and Environmental Measurements," NUREG/CR-4077 (September 1984), in HASL Procedures Manual, HASL-300 and in Hartwell, J. K., "Detection Limits for Radioanalytical Counting Techniques," Atlantic Richfield Hanford Company Report ARH-SA-215 (June 1975).

3/4.11.1.2 DOSE

This specification is provided to implement the requirements of Appendix I, 10 CFR Part 50. The Limiting Condition for Operation implements the guides set forth in Appendix I. The ACTION statements provide the required operating flexibility and at the same time implement the guides set forth in Appendix I to assure that the releases of radioactive material in liquid effluents to UNRESTRICTED AREAS will be kept "as low as is reasonably achievable." The dose calculation methodology and parameters in the ODCM implement the requirements in Appendix I that conformance with the guides of Appendix I be shown by calculational procedures based on models and data, such that the actual exposure of a MEMBER OF THE PUBLIC through appropriate pathways is unlikely to be substantially underestimated. The equations specified in the ODCM for calculating the doses due to the actual release rates of radioactive materials in liquid effluents are consistent with the methodology provided in Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," March, 1976 and Regulatory Guide 1.113, "Estimating Aquatic Dispersion of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I," April 1977.

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RADIOACTIVE EFFLUENTSBASESDOSE (Continued)

This specification applies to the release of radioactive materials in liquid effluents from each unit at the site. For units with shared Radwaste Systems, the liquid effluents from the shared system are to be proportional among the units sharing that system.

3/4.11.1.3 LIQUID RADWASTE TREATMENT SYSTEM

The OPERABILITY of the Liquid Radwaste Treatment System ensures that this system will be available for use whenever liquid effluents require treatment prior to release to the environment. The requirement that the appropriate portions of this system be used when specified provides assurance that the releases of radioactive materials in liquid effluents will be kept "as low as is reasonably achievable." This specification implements the requirements of 10 CFR 50.36a, General Design Criterion 60 of Appendix A to 10 CFR Part 50 and the objectives given in Section II.D of Appendix I to 10 CFR Part 50. The specified limits governing the use of appropriate portions of the Liquid Radwaste Treatment System were specified as a suitable fraction of the dose design objectives set forth in Appendix I, 10 CFR Part 50 for liquid effluents.

This specification applies to the release of radioactive materials in liquid effluents from each unit at the site. For units with shared Radwaste Systems, the liquid effluents from the shared system are to be proportioned among the units sharing that system.

RADIOACTIVE EFFLUENTSBASES4.11.2 GASEOUS EFFLUENTS3/4.11.2.1 DOSE RATE

This specification is provided to ensure that the dose at any time at and beyond the SITE BOUNDARY from gaseous effluents from all units on the site will be within the annual dose limits of 10 CFR Part 20 to UNRESTRICTED AREAS. The annual dose limits are the doses associated with the concentrations of 10 CFR Part 20, Appendix B, Table II, Column I. These limits provide reasonable assurance that radioactive material discharged in gaseous effluents will not result in the exposure of a MEMBER OF THE PUBLIC in an UNRESTRICTED AREA, either within or outside the SITE BOUNDARY, to annual average concentrations exceeding the limits specified in Appendix B, Table II of 10 CFR Part 20 (10 CFR Part 20.106(b)). For MEMBERS OF THE PUBLIC who may at times be within the SITE BOUNDARY, the occupancy of that MEMBER OF THE PUBLIC will usually be sufficiently low to compensate for any increase in the atmospheric diffusion factor above that for the SITE BOUNDARY. Examples of calculations for such MEMBERS OF THE PUBLIC, with the appropriate occupancy factors, shall be given in the ODCM. The specified release rate limits restrict, at all times, the corresponding gamma and beta dose rates above background to a MEMBER OF THE PUBLIC at or beyond the SITE BOUNDARY to less than or equal to 500 mrem/year to the whole body or to less than or equal to 3000-mrem/year to the skin. These release rate limits also restrict, at all times, the corresponding thyroid dose rate above background to a child via the inhalation pathway to less than or equal to 1500 mrem/year.

This specification applies to the release of radioactive materials in gaseous effluents from all units at the site.

The required detection capabilities for radioactive material in gaseous waste samples are tabulated in terms of the lower limits of detection (LLDs). Detailed discussion of the LLD, and other detection limits can be found in Currie, L. A., "Lower Limit of Detection: Definition and Elaboration of a Proposed Position for Radiological Effluent and Environmental Measurements," NUREG/CR-4077 (September 1984), in HASL Procedures Manual, HASL-300 and in Hartwell, J.K., "Detection Limits for Radioanalytical Counting Techniques," Atlantic Richfield Hanford Company Report ARH-SA-215 (June 1975).

3/4.11.2.2 DOSE - NOBLE GASES

This specification is provided to implement the requirements of Appendix I, 10 CFR Part 50. The Limiting Condition for Operation implements the guides set forth in Appendix I. The ACTION statements provide the required operating flexibility and at the same time implement the guides set forth in Appendix I to assure that the releases of radioactive material in gaseous effluents to UNRESTRICTED AREAS will be kept "as low as is reasonably achievable." The Surveillance Requirements implement the requirements in Appendix I that conformance with the guides of Appendix I be shown by calculational procedures based on models and data such that the actual exposure of a MEMBER OF THE PUBLIC through appropriate pathways is unlikely to be substantially underestimated. The dose calculation methodology and parameters established

RADIOACTIVE EFFLUENTS

BASES

DOSE-NOBLE GASES (Continued)

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in the ODCM for calculating the doses due to the actual release rates of radioactive noble gases in gaseous effluents are consistent with the methodology provided in Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," ~~March 1976~~, and Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water Cooled Reactors," Revision 1, July 1977. The ODCM equations provided for determining the air doses at and beyond the SITE BOUNDARY are based upon the historical average atmospheric conditions.

This specification applies to the release of radioactive materials in gaseous effluents from each unit at the site. For units with shared radwaste treatment systems, the gaseous effluents from the shared system are proportioned among the units sharing that system.

3/4.11.2.3 DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIOACTIVE MATERIAL IN PARTICULATE FORM

This specification is provided to implement the requirements of Appendix I, 10 CFR Part 50. The Limiting Conditions for Operation are the guides set forth in Appendix I. The ACTION statements provide the required operating flexibility and at the same time implement the guides set forth in Appendix I to assure that the releases of radioactive materials in gaseous effluents to UNRESTRICTED AREAS will be kept "as low as is reasonably achievable." The ODCM calculational methods specified in the Surveillance Requirements implement the requirements in Appendix I that conformance with the guides of Appendix I be shown by calculational procedures based on models and data such that the actual exposure of a MEMBER OF THE PUBLIC through appropriate pathways is unlikely to be substantially underestimated. The ODCM calculational methodology and parameters for calculating the doses due to the actual release rates of the subject materials are consistent with the methodology provided in Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," ~~March 1976~~, and Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors," Revision 1, July 1977. These equations also provide for determining the actual doses based upon the historical average atmospheric conditions. The release rate specifications for Iodine-131, Iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days are dependent upon the existing radionuclide pathways to man in the areas at and beyond the SITE BOUNDARY. The pathways that were examined in the development of the calculations were: (1) individual inhalation of airborne radionuclides, (2) deposition of radionuclides onto green leafy vegetation with subsequent consumption by man, (3) deposition onto grassy areas where milk animals and meat producing animals graze with consumption of the milk and meat by man, and (4) deposition on the ground with subsequent exposure of man.

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RADIOACTIVE EFFLUENTS

BASES

DOSE - IODINE-133, TRITIUM, AND RADIOACTIVE MATERIAL IN PARTICULATE FORM (Continued)

This specification applies to the release of radioactive materials in gaseous effluents from each unit at the site. For units with shared radwaste treatment systems, the gaseous effluents from the shared system are proportioned among the units sharing that system.

3/4.11.2.4 GASEOUS RADWASTE TREATMENT SYSTEM

The OPERABILITY of the GAS DECAY TANK SYSTEM and the VENTILATION EXHAUST TREATMENT SYSTEM ensures that the systems will be available for use whenever gaseous effluents require treatment prior to release to the environment. The requirement that the appropriate portions of these systems be used, when specified, provides reasonable assurance that the releases of radioactive materials in gaseous effluents will be kept "as low as is reasonably achievable." This specification implements the requirements of 10 CFR 50.36a, General Design-Criterion 60 of Appendix A to 10 CFR Part 50 and the objectives given in Section II.D of Appendix I to 10 CFR Part 50. The specified limits governing the use of appropriate portions of the systems were specified as a suitable fraction of the dose objectives set forth in Appendix I, 10 CFR Part 50, for gaseous effluents.

This specification applies to the release of radioactive materials in gaseous effluents from each unit at the site. For units with shared radwaste treatment systems, the gaseous effluents from the shared system are proportioned among the units sharing that system.

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RADIOACTIVE EFFLUENTS

BASES

3/4.11.2.5 EXPLOSIVE GAS MIXTURE

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the GAS DECAY TANK SYSTEM (as measured in the inservice gas decay tank) is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

3/4 11.2.6 GAS DECAY TANKS

The tanks included in this specification are those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another Technical Specification. Restricting the quantity of radioactivity contained in each Gas Decay Tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting whole body exposure to a MEMBER OF THE PUBLIC at the nearest SITE BOUNDARY will not exceed 0.5 rem.

3/4.11.3 SOLID RADIOACTIVE WASTES

This specification implements the requirements of 10 CFR 50.36a and General Design Criterion 60 of Appendix A to 10 CFR Part 50. The process parameters included in establishing the PROCESS CONTROL PROGRAM may include, but are not limited to, waste type, waste pH, waste/liquid/SOLIDIFICATION agent/catalyst ratios, waste oil content, waste principal chemical constituents, and mixing and curing times. These requirements apply to dewatering to meet the requirements of the licensed consignee of the shipment.

3/4.11.4 TOTAL DOSE

This specification is provided to meet the dose limitations of 40 CFR Part 190 that have been incorporated into 10 CFR Part 20 by 46 FR 18525. The specification requires the preparation and submittal of a Special Report whenever the calculated doses due to releases of radioactivity and to radiation from uranium fuel cycle sources exceed 25 mrem to the whole body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem. For sites containing up to four reactors, it is highly unlikely that the resultant dose to a MEMBER OF THE PUBLIC will exceed the dose limits of 40 CFR Part 190 if the individual reactors remain within twice the dose design objectives of Appendix I, and if direct radiation doses from the units are kept small. The

RADIOACTIVE EFFLUENTSBASESTOTAL DOSE (Continued)

Special Report will describe a course of action that should result in the limitation of the annual dose to a MEMBER OF THE PUBLIC to within the 40 CFR Part 190 limits. For the purposes of the Special Report, it may be assumed that the dose commitment to the MEMBER of the PUBLIC from other uranium fuel cycle sources is negligible, with the exception that dose contributions from other nuclear fuel cycle facilities at the same site or within a radius of 8 km must be considered. If the dose to any MEMBER OF THE PUBLIC is estimated to exceed the requirements of 40 CFR Part 190, the Special Report with a request for a variance (provided the release conditions resulting in violation of 40 CFR Part 190 have not already been corrected), in accordance with the provisions of 40 CFR 190.11 and 10 CFR 20.405c, is considered to be a timely request and fulfills the requirements of 40 CFR Part 190 until NRC staff action is completed. The variance only relates to the limits of 40 CFR Part 190, and does not apply in any way to the other requirements for dose limitation of 10 CFR Part 20, as addressed in Specifications 3.11.1.1 and 3.11.2.1. An individual is not considered a MEMBER OF THE PUBLIC during any period in which he/she is engaged in carrying out any operation that is part of the nuclear fuel cycle.



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3/4.12 RADIOLOGICAL ENVIRONMENTAL MONITORING

BASES

3/4.12.1 MONITORING PROGRAM

The Radiological Environmental Monitoring Program required by this specification provides representative measurements of radiation and of radioactive materials in those exposure pathways and for those radionuclides that lead to the highest potential radiation exposure of MEMBERS OF THE PUBLIC resulting from the plant operation. This monitoring program implements Section IV.B.2 of Appendix I to 10 CFR Part 50 and thereby supplements the Radiological Effluent Monitoring Program by verifying that the measurable concentrations of radioactive materials and levels of radiation are not higher than expected on the basis of the effluent measurements and the modeling of the environmental exposure pathways.

The required detection capabilities for environmental sample analyses are tabulated in terms of the lower limits of detection (LLDs). The LLDs required by Table 4.12-1 are considered optimum for routine environmental measurements in industrial laboratories. It should be recognized that the LLD is defined as an a priori (before the fact) limit representing the capability of a measurement system and not as an a posteriori (after the fact) limit for a particular measurement.

Detailed discussion of the LLD, and other detection limits, can be found in Currie, L. A., "Lower Limit of Detection: Definition and Elaboration of a Proposed Position for Radiological Effluent and Environmental Measurements," NUREG/CR-4007 (September 1984), in HASL Procedures Manual, HASL-300 and Hartwell, J. K. "Detection Limits for Radioanalytical Counting Techniques," Atlantic Richfield Hanford Company Report ARH-SA-215 (June 1975).

3/4.12.2 LAND USE CENSUS

This specification is provided to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the Radiological Environmental Monitoring Program are made if required by the results of this census. The best information from the door-to-door survey, from aerial survey or from consulting with local agricultural authorities shall be used. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10 CFR Part 50. Restricting the census to gardens of greater than 50 m² provides assurance that significant exposure pathways via leafy vegetables will be identified and monitored since a garden of this size is the minimum required to produce the quantity (26 kg/year) of leafy vegetables assumed in Regulatory Guide 1.109 for consumption by a child. To determine this minimum garden size, the following assumptions were made: (1) 20% of the garden was used for growing broad leaf vegetation (i.e., similar to lettuce and cabbage), and (2) a vegetation yield of 2 kg/m².



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RADIOLOGICAL ENVIRONMENTAL MONITORINGBASES3/4.12.3 INTERLABORATORY COMPARISON PROGRAM

The requirement for participation in an approved Interlaboratory Comparison Program is provided to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring in order to demonstrate that the results are valid for the purposes of Section IV.B.2 of Appendix I to 10 CFR Part 50. This condition is satisfied by participation in the Environmental Radioactivity Laboratory Intercomparison Studies Program conducted by the Environmental Protection Agency (EPA). The LCO accounts for the process of providing samples for multiple testing programs to a single laboratory without requiring reporting of issues which do not pertain to the Turkey Point Radiological Environmental Monitoring Program.



5.0 DESIGN FEATURES

5.1 SITE

EXCLUSION AREA

5.1.1 The Exclusion Area shall be as shown in Figure 5.1-1.

LOW POPULATION ZONE

5.1.2 The Low Population Zone shall be as shown in Figure 5.1-1.

MAP DEFINING UNRESTRICTED AREAS AND SITE BOUNDARY FOR RADIOACTIVE GASEOUS AND LIQUID EFFLUENTS

5.1.3 Information regarding radioactive gaseous and liquid effluents, which will allow identification of structures and release points shall be as shown in Figure 5.1-2. Definition of UNRESTRICTED AREAS within the SITE BOUNDARY that are accessible to MEMBERS OF THE PUBLIC, shall be as shown in Figure 5.1-1.

5.2 CONTAINMENT

CONFIGURATION

5.2.1 The containment building is a steel-lined, reinforced concrete building of cylindrical shape, with a dome roof and having the following design features:

- a. Nominal inside diameter = 116 feet.
- b. Nominal inside height = 170.6 feet.
- c. Minimum thickness of concrete walls = 3.75 feet.
- d. Minimum thickness of concrete roof = 3.25 feet.
- e. Minimum thickness of concrete floor pad = 10.5 feet.
- f. Nominal thickness of steel liner = 0.25 inches.
- g. Nominal Net free volume = 1,550,000 cubic feet.

DESIGN PRESSURE AND TEMPERATURE

5.2.2 The containment building is designed and shall be maintained for a maximum internal pressure of 59 psig and a temperature of 283°F. The containment building is also structurally designed to withstand an internal vacuum of 2.5 psig.



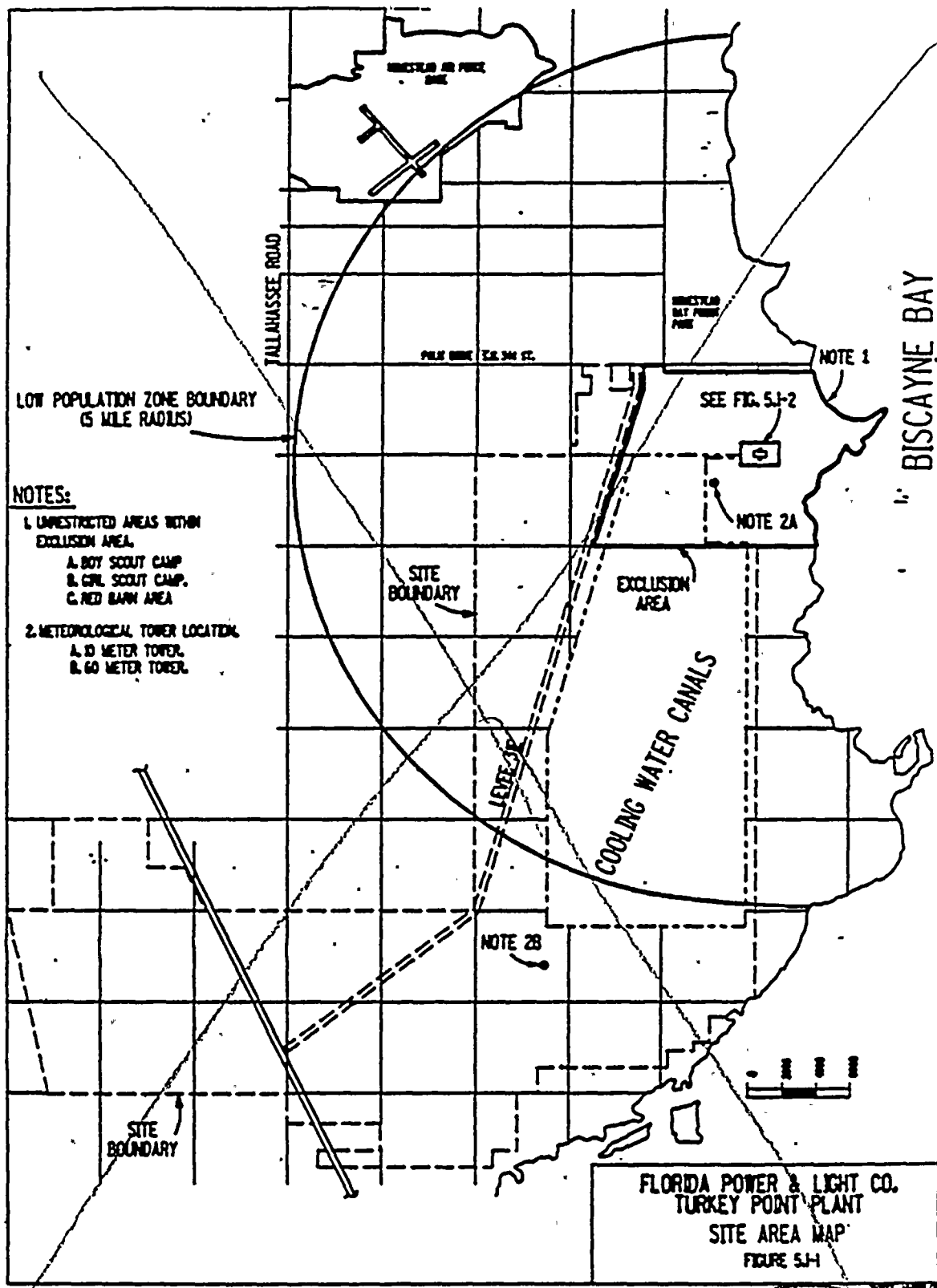


FIGURE 5.1-1 SITE AREA MAP

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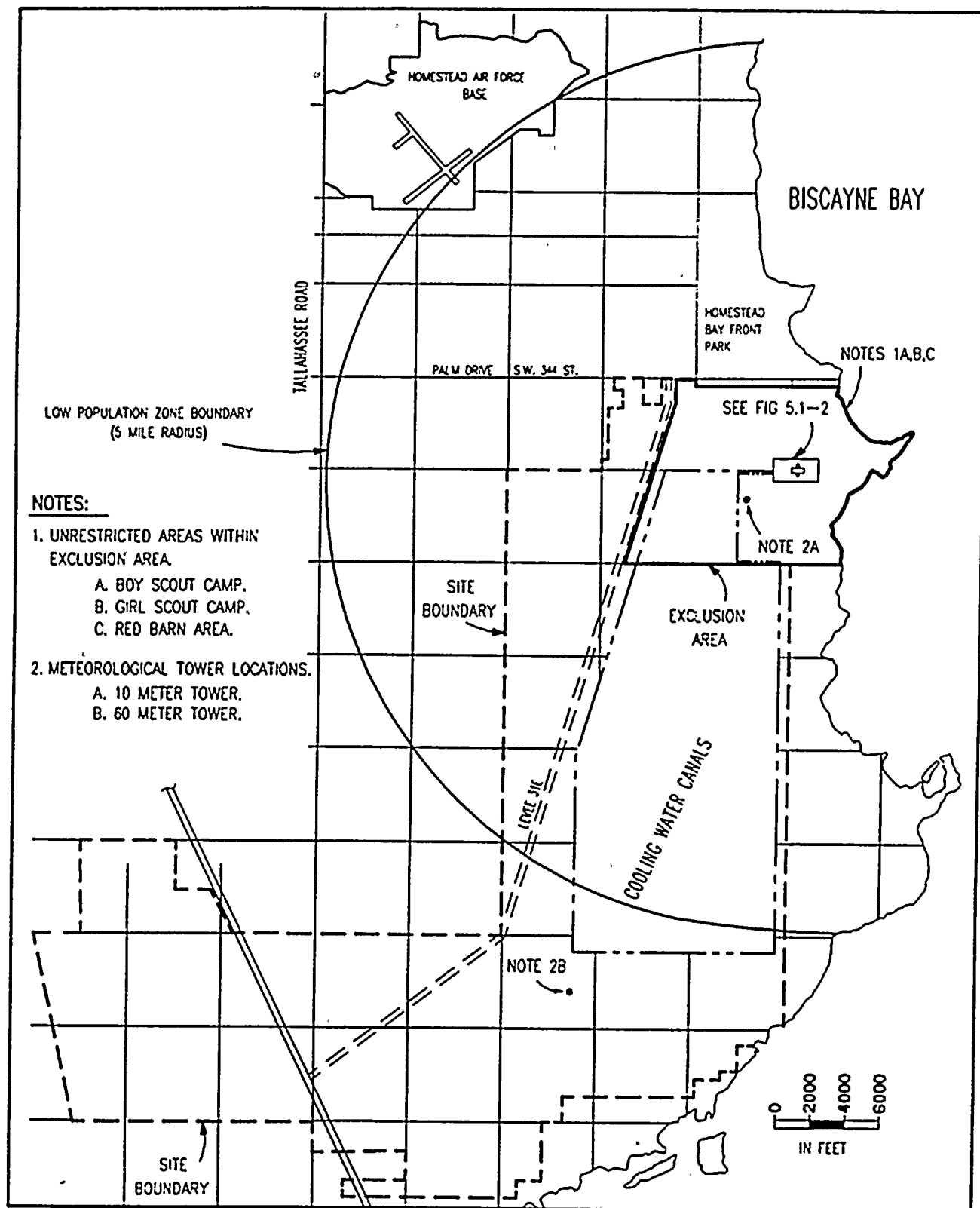


FIGURE 5.1-1 SITE AREA MAP

TURKEY POINT — UNITS 3 & 4



GASEOUS EFFLUENT RELEASE PATHS
(TECH. SPEC. TABLE 3.9-3)

1. PLANT VENT
2. UNIT 3 SPENT FUEL POOL VENT
3. UNIT 3 AIR EJECTOR VENT, (R-3-B)
4. UNIT 4 AIR EJECTOR VENT (R-4-B)

LIQUID EFFLUENT RELEASE PATHS.
(TECH. SPEC. TABLE 3.9-D)

5. RADWASTE EFFLUENT FROM LIQUID RADWASTE SYSTEM (R-1B)
6. RADWASTE EFFLUENT FROM LIQUID RADWASTE SYSTEM (R-2B)
7. UNIT 3 STEAM GENERATOR BLOWDOWN (R-3-B)
8. UNIT 4 STEAM GENERATOR BLOWDOWN (R-4-B)
9. 10. 11. STORM DRAIN

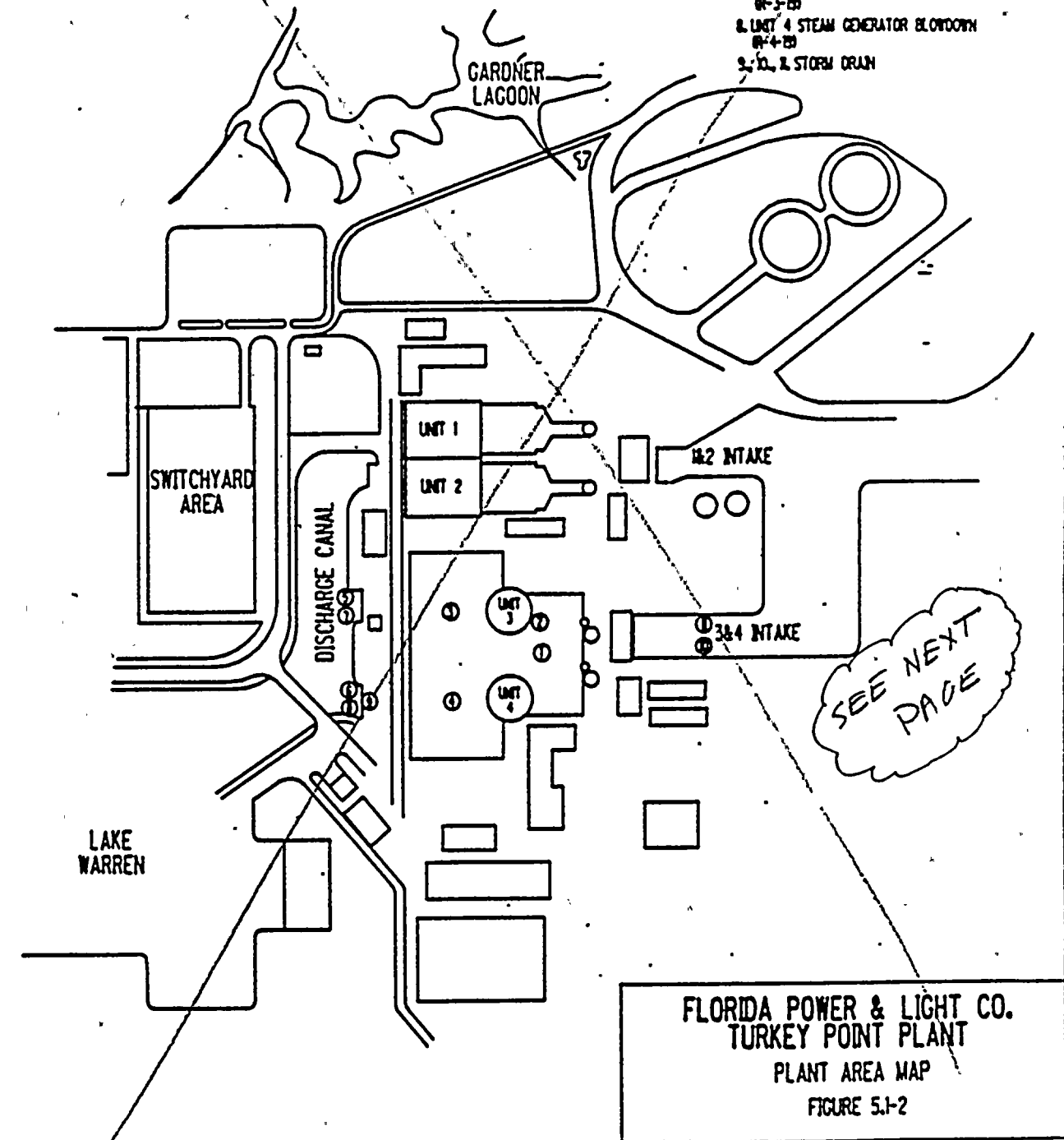


FIGURE 5.1-2 PLANT AREA MAP

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GASEOUS EFFLUENT RELEASE POINTS

(TECH. SPEC. TABLE 4.11-2)

1. PLANT VENT (UNIT 4 SPENT FUEL POOL VENT)
2. UNIT 3 SPENT FUEL POOL VENT
3. UNIT 3 AIR EJECTOR VENT
4. UNIT 4 AIR EJECTOR VENT

LIQUID EFFLUENT RELEASE POINTS

(TECH. SPEC. TABLE 4.11-1)

5. EFFLUENT FROM LIQUID RADWASTE SYSTEM
6. EFFLUENT FROM LIQUID RADWASTE SYSTEM
7. UNIT 3 STEAM GENERATOR BLOWDOWN
8. UNIT 4 STEAM GENERATOR BLOWDOWN
9. STORM DRAIN
10. STORM DRAIN
11. STORM DRAIN

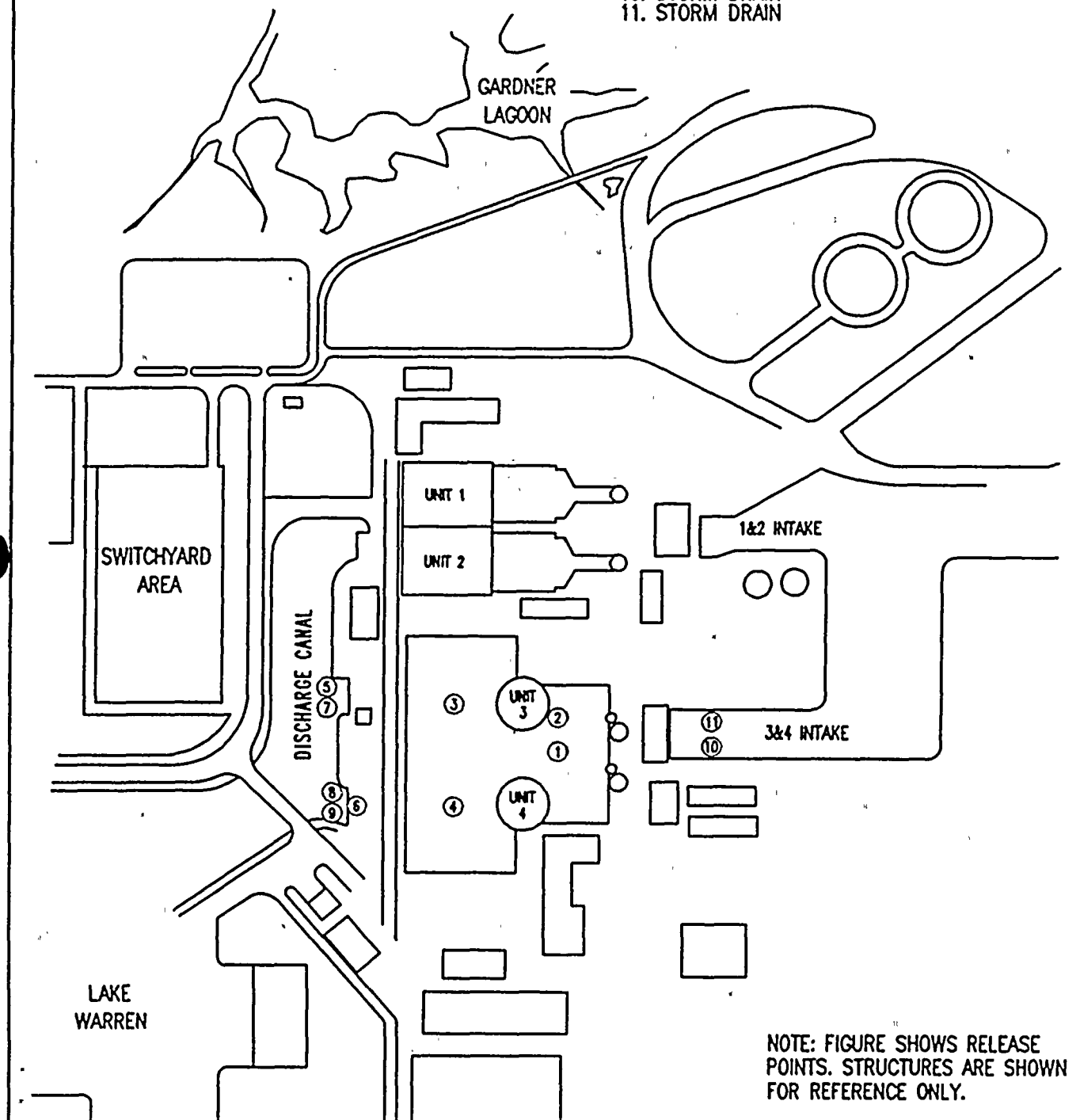


FIGURE 5.1-2 PLANT AREA MAP

TURKEY POINT — UNITS 3 & 4



DESIGN FEATURES

5.3 REACTOR CORE

FUEL ASSEMBLIES

5.3.1 The core shall contain 157 fuel assemblies with each fuel assembly containing 204 fuel rods clad with Zircaloy-4, except that replacement of fuel rods by filler rods consisting of stainless steel, or by vacant rod positions, may be made in fuel assemblies if justified by cycle-specific reload analysis using NRC-approved methodology. The reactor core contains approximately 71 metric tons of uranium in the form of natural or slightly enriched uranium dioxide pellets. Each fuel rod shall have a nominal active fuel length of 144 inches. Should more than 30 individual rods in the core, or 10 fuel rods in any fuel assembly, be replaced per refueling, a Special Report discussing the rod replacements shall be submitted to the Commission within 30 days after cycle startup.

CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 45 full-length control rod assemblies. The full-length control rod assemblies shall contain a nominal 142 inches of absorber material. The absorber material shall be silver, indium, and cadmium. All control rods shall be clad with stainless steel tubing.

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The Reactor Coolant System is designed and shall be maintained:

- a. In accordance with the Code requirements specified in Section 4.1 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 ^{$\pm 1\%$} psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

VOLUME

5.4.2 The nominal water and steam volume of the Reactor Coolant System is 9343 cubic feet at a nominal T_{avg} of 574.2°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological towers shall be located as shown on Figure 5.1-1.

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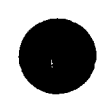
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DESIGN FEATURES

5.6 FUEL STORAGE

5.6.1 CRITICALITY

5.6.1.1 The spent fuel storage racks are designed to provide safe subcritical storage of fuel assemblies by providing sufficient center-to-center spacing or a combination of spacing and poison and shall be maintained with:

- a. A k_{eff} equivalent to less than or equal to 0.95 when flooded with unborated water, which includes a conservative allowance of 2.55% $\Delta k/k$ for uncertainties for single region spent fuel storage racks.
- b. A k_{eff} equivalent to less than or equal to 0.95 when flooded with unborated water, which includes a conservative allowance in region 1 of 0.97% $\Delta k/k$ and in region 2 of 1.96% $\Delta k/k$ for uncertainties for two region fuel storage racks.
- c. A nominal 13.7 inch center-to-center distance between fuel assemblies placed in the single-region storage racks. A nominal 10.6 inch center-to-center distance for Region 1 and 9.0 inch center-to-center distance for Region 2 for two region fuel storage racks.
- d. Fuel assemblies stored in the single-region spent fuel storage racks shall contain no more than 4.1 weight percent of U-235.
- e. After installation of the two-region high density spent fuel storage racks, the maximum enrichment loading for fuel assemblies is 4.5 weight percent of U-235.

5.6.1.2 The racks for new fuel storage are designed to store fuel in a safe subcritical array and shall be maintained with:

- a. A nominal 21 inch center-to-center spacing to assure k_{eff} equal to or less than 0.98 for optimum moderation conditions and equal to or less than 0.95 for fully flooded conditions.
- b. Fuel assemblies placed in the New Fuel Storage Area shall contain no more than 4.5 weight percent of U-235.

DESIGN FEATURES

5.6.1.3 Credit for burnup is taken in determining placement locations for spent fuel in the two-region spent fuel racks.* Administrative controls are employed to evaluate the burnup of each spent fuel assembly stored in areas where credit for burnup is taken. The burnup of spent fuel is ascertained by careful analysis of burnup history, prior to placement into the storage locations. Procedures shall require an independent check of the analysis of suitability for storage. A complete record of such analysis is kept for the time period that the spent fuel assembly remains in storage onsite.

DRAINAGE

5.6.2 The spent fuel storage pit is designed and shall be maintained to prevent inadvertent draining of the pool below a level of 6 feet above the fuel assemblies in the storage racks.

CAPACITY

5.6.3 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 621** fuel assemblies in one region storage racks or 1404 in two region storage racks.

5.7 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.7.1 The components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

*During rack installation, it will be necessary to temporarily store Region I fuel in the Region II spent fuel racks. Administrative controls will be utilized to maintain a checkerboard storage configuration, i.e., alternate cell occupation, in the Region II racks.

**The fuel assembly storage capacity for Unit 4 single region storage racks is 614.



COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT

CYCLIC OR TRANSIENT LIMIT

DESIGN CYCLE OR TRANSIENT

Reactor Coolant System

200 heatup cycles at $\leq 100^\circ\text{F/h}$
and 200 cooldown cycles at
 $\leq 100^\circ\text{F/h}$.

Heatup cycle - T_{avg} from $\leq 200^\circ\text{F}$
to $> 550^\circ\text{F}$.

Cooldown cycle - T_{avg} from $\geq 550^\circ\text{F}$
to $\leq 200^\circ\text{F}$.

200 pressurizer cooldown cycles
at $\leq 200^\circ\text{F/h}$.

Pressurizer cooldown cycle
temperatures from $\geq 650^\circ\text{F}$ to $\leq 200^\circ\text{F}$.

80 loss of load cycles, without
immediate Turbine or Reactor trip.

$> 15\%$ of RATED THERMAL POWER to
0% of RATED THERMAL POWER.

40 cycles of loss-of-offsite
A.C. electrical power.

Loss-of-offsite A.C. electrical
ESF Electrical System.

80 cycles of loss of flow in one
reactor coolant loop.

Loss of only one reactor
coolant pump.

400 Reactor trip cycles.

100% to 0% of RATED THERMAL POWER.

150 leak tests.

Pressurized to ≥ 2435 psig.

5 hydrostatic pressure tests.

Pressurized to ≥ 3100 psig.

Secondary Coolant System

6 loss of secondary pressure

Loss of Secondary pressure

50 leak tests

Pressurized to ≥ 1085 psig

35 hydrostatic pressure tests.

Pressurized to ≥ 1356 psig.



ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Plant Manager - Nuclear shall be responsible for overall unit operation of both units and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Plant Supervisor - Nuclear (or during his absence from the control room, a designated individual) shall be responsible for the control room command function. A management directive to this effect, signed by the Site Vice President shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

ONSITE AND OFFSITE ORGANIZATION

6.2.1 An onsite and an offsite organization shall be established for facility operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

- a. Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to an including all operating organization positions. Those relationships shall be documented and updated, as appropriate, in the form of organizational charts. These organizational charts will be documented in the Topical Quality Assurance Report and updated in accordance with 10 CFR 50.54(a)(3).
- b. The Senior Vice President-Nuclear shall have corporate responsibility for overall plant nuclear safety, and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
- c. The Plant Manager-Nuclear shall be responsible for overall plant safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- d. Although the individuals who train the operating staff and those who carry out the quality assurance functions may report to the appropriate manager onsite, they shall have sufficient organizational freedom to be independent from operating pressures.
- e. Although health physics individuals may report to any appropriate manager onsite, for matters relating to radiological health and safety of employees and the public, the health physics manager shall have direct access to that onsite individual having responsibility for overall unit management. Health physics personnel shall have the authority to cease any work activity when worker safety is jeopardized or in the event of unnecessary personnel radiation exposures.

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ADMINISTRATIVE CONTROLS

LANT STAFF

6.2.2 The plant organization shall be subject to the following:

- a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1;
- b. At least one licensed Operator shall be in the control room when fuel is in either reactor.
- c. At least two licensed Operators shall be present in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips. In addition, while either unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room;
- d. A Health Physics Technician* shall be on site when fuel is in the reactor;
- e. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;
- f. A site Fire Brigade of at least five members* shall be maintained on site at all times. The Fire Brigade shall not include the Shift Supervisor and the two other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency; and
- g. Administrative procedures shall be developed and implemented to limit the working hours of plant staff who perform safety-related functions (e.g., licensed Senior Operators, licensed Operators, health physicists, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modification, on a temporary basis the following guidelines shall be followed:

*The Health Physics Technician and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

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ADMINISTRATIVE CONTROLS


PLANT STAFF (Continued)

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
2. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
3. A break of at least 8 hours should be allowed between work periods, including shift turnover time.
4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the applicable department superintendent, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager - Nuclear or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- h. The Operations Supervisor shall hold a Senior Reactor Operator License.
- i. The Operations Superintendent shall either hold or have held a Senior Reactor Operator License on the Turkey Point Plant, or have held a Senior Reactor Operator License on a similar plant (i.e. another pressurized water reactor).

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Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The *Agrobacterium* strains were grown in the YEA medium for 24 h at 28°C. The cell concentration of the strains was adjusted to 10⁸ cells/ml. The cell suspension was mixed with the plant tissue and the transformation efficiency was determined. The results were expressed as the mean ± SD of three independent experiments.

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TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION

| POSITION | NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION | | |
|----------|---|---|--|
| | BOTH UNITS IN MODE 1, 2, 3, or 4 | BOTH UNITS IN MODE 5 or 6 OR DEFUELED | ONE UNIT IN MODE 1, 2, 3, or 4 AND ONE UNIT IN MODE 5 or 6 or DEFUELED |
| PSN | 1 | 1 | 1 |
| SRO | 1 | none** | 1 |
| RO | 3* | 2* | 3* |
| AO | 3* | 3* | 3* |
| STA | 1*** | none | 1*** |

PSN - Plant Supervisor Nuclear with a Senior Operator license

SRO - Individual with a Senior Operator license

RO - Individual with an Operator license

AO - Auxiliary Operator

STA - Shift Technical Advisor

The shift crew composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Plant Supervisor Nuclear from the control room while a unit is in MODE 1, 2, 3, or 4, an individual (other than the Shift Technical Advisor) with a valid Senior Operator license shall be designated to assume the control room command function. During any absence of the Plant Supervisor Nuclear from the control room while both units are in MODE 5 or 6, an individual with a valid Senior Operator license or Operator license shall be designated to assume the control room command function.

*At least one of the required individuals must be assigned to the designated position for each unit.

**At least one licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling must be present during CORE ALTERATIONS on either unit, who has no other concurrent responsibilities.

***The STA position shall be manned in MODES 1, 2, 3, and 4 unless the Plant Supervisor Nuclear or the individual with a Senior Operator license meets the qualifications for the STA as required by the NRC.

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ADMINISTRATIVE CONTROLS

6.2.3 SHIFT TECHNICAL ADVISOR

6.2.3.1 The Shift Technical Advisor shall provide advisory technical support to the Plant Supervisor Nuclear in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit and the opposite unit. The Shift Technical Advisor shall have a bachelor's degree or equivalent in a scientific or engineering discipline and shall have received specific training in the response and analysis of the unit for transients and accidents, and in unit design and layout, including the capabilities of instrumentation and controls in the control room.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Health Physics Supervisor who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and the Operations Superintendent whose requirement for a Senior Reactor Operator License is as stated in Specification 6.2.2.i. The licensed Operators and Senior Operators shall also meet or exceed the minimum qualifications of the supplemental requirements specified in 10 CFR Part 55 and ANSI 3.1, 1981.

6.3.2 When the Health Physics Supervisor does not meet the above requirements, compensatory action shall be taken which the Plant Nuclear Safety Committee determines and the NRC office of Nuclear Reactor Regulation concurs that the action meets the intent of Specification 6.3.1.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Superintendent and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971, 10 CFR Part 55 and ANSI 3.1, 1981 and shall include familiarization with relevant industry operational experience.

6.4.2 A training program for the fire brigade shall be maintained under the direction of the Fire Protection Supervisor and shall meet or exceed the requirements of 10 CFR 50.48 and 10 CFR 50 Appendix R.

6.5 REVIEW AND AUDIT

6.5.1 PLANT NUCLEAR SAFETY COMMITTEE (PNSC)

FUNCTION

6.5.1.1 The PNSC shall function to advise the Plant Manager - Nuclear on all matters related to nuclear safety.



ADMINISTRATIVE CONTROLS

COMPOSITION

6.5.1.2 The PNSC shall be composed of the:

| | |
|---------|--------------------------------------|
| Member: | Plant Manager - Nuclear |
| Member: | Operations Superintendent - Nuclear |
| Member: | Technical Department Supervisor |
| Member: | Maintenance Superintendent - Nuclear |
| Member: | Instrument and Control Supervisor |
| Member: | Reactor Supervisor |
| Member: | Health Physics Supervisor |
| Member: | Quality Control Supervisor |
| Member: | Operations Supervisor - Nuclear |

The PNSC Chairman shall be appointed in writing from among these members by the Plant Manager - Nuclear.

ALTERNATES

6.5.1.3 All alternate members shall be appointed in writing by the Plant Manager to serve on a temporary basis; however, no more than two alternates shall participate as members in PNSC activities at any one time.

MEETING FREQUENCY

6.5.1.4 The PNSC shall meet at least once per calendar month and as convened by the PNSC Chairman or his designated alternate.

QUORUM

6.5.1.5 The quorum of the PNSC necessary for the performance of the PNSC responsibility and authority provisions of these Technical Specifications shall consist of the Chairman or Vice Chairman and four members including alternates.

RESPONSIBILITIES

6.5.1.6 The PNSC shall be responsible for:

- a. Review of all safety-related plant administrative procedures and changes thereto.
- b. Review of all proposed tests and experiments that affect nuclear safety;
- c. Review of all proposed changes to Appendix "A" Technical Specifications;
- d. Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety;

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ADMINISTRATIVE CONTROLSRESPONSIBILITIES (Continued)

- e. Investigation of all violations of the Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, to the Senior Vice President-Nuclear and to the Chairman of the Company Nuclear Review Board;
- f. Review of all REPORTABLE EVENTS;
- g. Review of reports of significant operating abnormalities or deviations from normal and expected performance of plant equipment or systems that affect nuclear safety.
- h. Performance of special reviews, investigations, or analyses and reports thereon as requested by the Plant Manager - Nuclear or the Chairman of the Company Nuclear Review Board;
- i. Review of the Emergency Plan and implementing procedures and submittal of recommended changes to the Chairman of the Company Nuclear Review Board;
- j. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL;
- k. Review of any accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations, and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Senior Vice President-Nuclear and to the Chairman of the Company Nuclear Review Board.

6.5.1.7 The PNSC shall:

- a. Recommend in writing to the Plant Manager - Nuclear approval or disapproval of items considered under Specification 6.5.1.6a. through d. prior to their implementation and items considered under Specification 6.5.1.6i through k.
- b. Provide written notification within 24 hours to the Plant Manager-Nuclear Senior Vice President-Nuclear and the Company Nuclear Review Board of disagreement between the PNSC and the Plant Manager Nuclear; however, the Plant Manager.- Nuclear shall have responsibility for resolution of such disagreements pursuant to Specification 6.1.1.

ADMINISTRATIVE CONTROLS

RECORDS

6.5.1.8. The PNSC shall maintain written minutes of each PNSC meeting that, at a minimum, document the results of all PNSC activities performed under the responsibility provisions of these Technical Specifications. Copies shall be provided to the Senior Vice President-Nuclear and the Company Nuclear Review Board.

6.5.2 COMPANY NUCLEAR REVIEW BOARD (CNRB)

FUNCTION

6.5.2.1 The CNRB shall function to provide independent review and audit of designated activities in the areas of:

- a. Nuclear power plant operations,
- b. Nuclear engineering,
- c. Chemistry and radiochemistry,
- d. Metallurgy,
- e. Instrumentation and control,
- f. Radiological safety,
- g. Mechanical and electrical engineering, and
- h. Quality assurance practices.

The CNRB shall report to and advise the Executive Vice President on those areas of responsibility specified in Specifications 6.5.2.7 and 6.5.2.8.

COMPOSITION

6.5.2.2 The CNRB shall be composed of the:

Vice President -

Member: Senior Vice President-Nuclear
Member: Vice President-Nuclear Energy
Member: ~~Director~~ Plant Support
Member: Director-Nuclear Engineering
Member: Director-Quality Assurance
Member: Director-Nuclear Licensing
Member: Manager-Nuclear Engineering
Member: Manager-Nuclear Energy Services
Member: Manager-Nuclear Fuels
Member: Senior Vice President

The Chairman shall be a member of the CNRB and shall be designated in writing by the Executive Vice President.

ALTERNATES

6.5.2.3 All alternate members shall be appointed in writing by the CNRB Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in CNRB activities at any one time.



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ADMINISTRATIVE CONTROLS

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the CNRB Chairman to provide expert advice to the CNRB.

MEETING FREQUENCY

6.5.2.5 The CNRB shall meet at least once per 6 months and as convened by the CNRB chairman or his designated alternate.

QUORUM

6.5.2.6 The quorum of the CNRB necessary for the performance of the CNRB review and audit functions of these Technical Specifications shall consist of the Chairman or his designated alternate and at least four CNRB members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the facility.

REVIEW

6.5.2.7 The CNRB shall be responsible for the review of:

- a. The safety evaluations for: (1) changes to procedures, equipment, or systems; and (2) tests or experiments completed under the provision of 10 CFR 50.59, to verify that such actions did not constitute an unreviewed safety question;
- b. Proposed changes to procedures, equipment, or systems which involve an unreviewed safety question as defined in 10 CFR 50.59;
- c. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59;
- d. Proposed changes to Technical Specifications or this Operating License;
- e. Violations of Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance;
- f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety;
- g. All REPORTABLE EVENTS;
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety; and
- i. Reports and meeting minutes of the PNSC.

ADMINISTRATIVE CONTROLSAUDITS

6.5.2.8 Audits of unit activities shall be performed under the cognizance of the CNRB. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months;
- b. The performance, training, and qualifications of the entire facility staff at least once per 12 months;
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or method of operation that affect nuclear safety, at least once per 6 months;
- d. The performance of activities required by the Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, at least once per 24 months;
- e. The fire protection programmatic controls including the implementing procedures at least once per 24 months by qualified licensee QA personnel;
- f. The fire protection equipment and program implementation at least once per 12 months utilizing either a qualified offsite licensee fire protection engineer or an outside independent fire protection consultant. An outside independent fire protection consultant shall be used at least every third year;
- g. The Radiological Environmental Monitoring Program and the results thereof at least once per 12 months;
- h. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months;
- i. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 24 months;
- j. The performance of activities required by the Quality Assurance Program for effluent and environmental monitoring at least once per 12 months;
- k. The Emergency Plans and implementing procedures at least once per 12 months;
- l. The Security Plans and implementing procedures at least once per 12 months; and
- m. Any other area of unit operation considered appropriate by the CNRB or the Executive Vice President.

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ADMINISTRATIVE CONTROLSRECORDS

6.5.2.9 Records of CNRB activities shall be prepared, approved, and distributed as indicated below:

- a. Minutes of each CNRB meeting shall be prepared, approved, and forwarded to the Executive Vice President within 14 days following each meeting;
- b. Reports of reviews encompassed by Specification 6.5.2.7 shall be prepared, approved, and forwarded to the Executive Vice President within 14 days following completion of the review; and
- c. Audit reports encompassed by Specification 6.5.2.8 shall be forwarded to the Executive Vice President and to the management positions responsible for the areas audited within 30 days after completion of the audit by the auditing organization.

6.5.3 TECHNICAL REVIEW AND CONTROLACTIVITIES

6.5.3.1 Activities that affect nuclear safety shall be conducted as follows:

- a. Procedures required by Specification 6.8, and other procedures that affect nuclear safety, and changes thereto, shall be prepared, reviewed, and approved. Each such procedure, or change thereto, shall be reviewed by an individual/group other than the individual/group who prepared the procedure, or change thereto, but who may be from the same organization as the individual/group who prepared the procedure, or change thereto. Procedures other than plant administrative procedures shall be approved by the Plant Manager-Nuclear, Operations Superintendent, or the head of the department assigned responsibility for those procedures prior to implementation. The Plant Manager-Nuclear shall approve plant administrative procedures and emergency plan implementing procedures. Security Plan and the implementing procedures shall be approved by Site Services Manager-Nuclear prior to implementation. Changes to procedures that may involve a change to the intent of the original procedures shall be approved by the individual authorized to approve the procedure prior to implementation of the change.

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ADMINISTRATIVE CONTROLS

ACTIVITIES (Continued)

- b. Individuals responsible for reviews performed in accordance with Specification 6.5.3.1 (a) shall be members of the plant staff previously designated by the Plant Manager-Nuclear and meet or exceed the minimum qualifications of ANSI N18.1-1971, Sections 4.2, 4.3.1, 4.4 and 4.6.1.
- c. Each review shall include a determination of whether or not additional, cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by qualified personnel of the appropriate discipline.
- d. Each review will include a determination of whether or not an unreviewed safety question is involved.

6.5.3.2 Records of the above activities shall be provided to the Plant Manager, PNSC, and/or the CNRB as necessary for required reviews.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the PNSC, and the results of this review shall be submitted to the CNRB and the Senior Vice President-Nuclear.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. In accordance with 10 CFR 50.72, the NRC Operations Center, shall be notified by telephone as soon as practical and in all cases within one hour after the violation has been determined. The Senior Vice President-Nuclear, and the CNRB shall be notified within 24 hours.

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ADMINISTRATIVE CONTROLSSAFETY LIMIT VIOLATION (Continued)

- b. A Licensee Event Report shall be prepared in accordance with 10 CFR 50.73.
- c. The License Event Report shall be submitted to the Commission in accordance with 10 CFR 50.73, and to the CNRB, and the Senior Vice President-Nuclear within 30 days after discovery of the event.
- d. Critical operation of the unit shall not be resumed until authorized by the Nuclear Regulatory Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, Sections 5.1 and 5.3 of ANSI N18.7-1972;
- b. The emergency operating procedures required to implement the requirements of NUREG-0737 and Supplement 1 to NUREG-0737 as stated in Generic Letter No. 82-33;
- c. Security Plan implementation;
- d. Emergency Plan implementation;
- e. PROCESS CONTROL PROGRAM implementation;
- f. OFFSITE DOSE CALCULATION MANUAL implementation;
- g. Quality Control Program for effluent monitoring using the guidance in Regulatory Guide 1.21, Revision 1, June 1974;
- h. Facility Fire Protection Program; and
- i. Quality Control Program for environmental monitoring using the guidance in Regulatory Guide 4.1, Revision 1, April 1975.

6.8.2 Each procedure of Specification 6.8.1 (a through h), and changes thereto, shall be reviewed and approved prior to implementation and reviewed periodically as set forth in Specification 6.5.3 and administrative procedures.

6.8.3 Temporary changes to procedures of Specification 6.8.1 (a through i) may be made provided:

- a. The intent of the original procedure is not altered;

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ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Operator license on the unit affected; and
- c. The change is documented, reviewed in accordance with Specification 6.5.3 and approved by the Plant Manager-Nuclear or the department head of the responsible department within 14 days of implementation.

6.8.4 The following programs shall be established, implemented, and maintained:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the Safety Injection System, Chemical and Volume Control System, and the Containment Spray System. The program shall include the following:

- (1) Preventive maintenance and periodic visual inspection requirements, and
- (2) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

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

- (1) Training of personnel,
- (2) Procedures for monitoring, and
- (3) Provisions for maintenance of sampling and analysis equipment.

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

- (1) Identification of a sampling schedule for the critical variables and control points for these variables,
- (2) Identification of the procedures used to measure the values of the critical variables,

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

c. Secondary Water Chemistry

- (3) Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- (4) Procedures for the recording and management of data,
- (5) Procedures defining corrective actions for all off-control point chemistry conditions, and
- (6) A procedure identifying: (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Post-Accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- (1) Training of personnel,
- (2) Procedures for sampling and analysis, and
- (3) Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC pursuant to 10 CFR 50.4.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following: (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit.



ADMINISTRATIVE CONTROLS

STARTUP REPORT (Continued)

The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions of characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report. Subsequent Startup Reports shall address startup tests that are necessary to demonstrate the acceptability of changes and/or modifications.

Startup Reports shall be submitted within: (1) 90 days following completion of the Startup Test Program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of Startup Test Program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every 3 months until all three events have been completed.

ANNUAL REPORTS*

6.9.1.2 Annual Reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year.

Reports required on an annual basis shall include:

- a. A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions** (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling). The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole-body dose received from external sources should be assigned to specific major work functions;
- b. The results of specific activity analyses in which the primary coolant exceeded the limits of Specification 3.4.8. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded (in graphic and tabular format); (2) Fuel burnup by core region; (3) Clean-up flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) History of degassing operations, if any, starting 48 hours prior to the first sample in which the limit was exceeded; and (5) The time duration when the specific activity of the primary coolant exceeded 1.0 microcurie per gram DOSE EQUIVALENT I-131.

*A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

**This tabulation supplements the requirements of § 20.407 of 10 CFR Part 20.



ADMINISTRATIVE CONTROLS

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

6.9.1.3 Routine Annual Radiological Environmental Operating Reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of the following year.

The Annual Radiological Environmental Operating Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, with operational controls, as appropriate, and with previous environmental surveillance reports, and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of the Land Use Census required by Specification 3.12.2.

The Annual Radiological Environmental Operating Reports shall include the results of analysis of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the Offsite Dose Calculation Manual, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the Radiological Environmental Monitoring Program; at least two legible maps* covering all sampling locations keyed to a table giving distances and directions from the centerline of one reactor; the results of licensee participation in the Interlaboratory Comparison Program and the corrective action taken if the specified program is not being performed as required by Specification 3.12.3; reasons for not conducting the Radiological Environmental Monitoring Program as required by specification 3.12.1, and discussion of all deviations from the sampling schedule of Table 3.12-1; discussion of environmental sample measurements that exceed the reporting levels of Table 3.12-2 but are not the result of plant effluents, pursuant to ACTION b. of Specification 3.12.1; and discussion of all analyses in which the LLD required by Table 4.12-1 was not achievable.

*A single submittal may be made for a multiple unit station.

*One map shall cover stations near the SITE BOUNDARY; a second shall include the more distant stations.



ADMINISTRATIVE CONTROLS

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT*

6.9.1.4. Routine Semiannual Radioactive Effluent Release Reports covering the operation of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year.

The Semiannual Radioactive Effluent Release Reports shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit as outlined in Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis following the format of Appendix B thereof. For solid wastes, the format for Table 3 in Appendix B shall be supplemented with three additional categories: class of solid wastes (as defined by 10 CFR Part 61), type of container (e.g., strong tight package, Type A, Type B) and SOLIDIFICATION agent or absorbent (e.g., cement).

The Semiannual Radioactive Effluent Release Report to be submitted within 60 days after January 1 of each year shall include an annual summary of hourly meteorological data collected over the previous year. This annual summary may be either in the form of an hour-by-hour listing on magnetic tape of wind speed, wind direction, atmospheric stability, and precipitation (if measured), or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability.** This same report shall include an assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to MEMBERS OF THE PUBLIC due to their activities inside the SITE BOUNDARY (Figure 5.1-1) during the report period. All assumptions used in making these assessments, i.e., specific activity, exposure time, and location, shall be included in these reports. The meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents, as determined by sampling frequency and measurement, shall be used for determining the gaseous pathway doses. Approximate and conservative methods may be used in lieu of actual meteorological measurements. The assessment of radiation doses shall be performed in accordance with the methodology and parameters in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

*A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

**In lieu of submission with the Semiannual Radioactive Effluent Release Report, the licensee has the option of retaining this summary of required meteorological data on site in a file that shall be provided to the NRC upon request.

ADMINISTRATIVE CONTROLS

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT (Continued)

The Semiannual Radioactive Effluent Release Report to be submitted within 60 days after January 1 of each year shall also include an assessment of radiation doses to the likely most exposed MEMBER OF THE PUBLIC from reactor releases from the previous calendar year and other nearby uranium fuel cycle sources, including doses from primary effluent pathways and direct radiation, for the previous calendar year to show conformance with 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operation." Acceptable methods for calculating the dose contribution from liquid and gaseous effluents are given in Regulatory Guide 1.109, ~~March 1976~~ Rev. 1, ~~October 1977~~.

The Semiannual Radioactive Effluent Release Reports shall include a list and description of unplanned releases from the site to UNRESTRICTED AREAS of radioactive materials in gaseous and liquid effluents made during the reporting period.

-- The Semiannual Radioactive Effluent Release Reports shall include any changes made during the reporting period to the PROCESS CONTROL PROGRAM (PCP) and to the OFFSITE DOSE CALCULATION MANUAL (ODCM), pursuant to Specifications 6.13 and 6.14, respectively, as well as any major change to Liquid, Gaseous, or Solid Radwaste Treatment Systems pursuant to Specification 6.15. It shall also include a listing of new locations for dose calculations and/or environmental monitoring identified by the Land Use Census pursuant to Specification 3.12.2.

The Semiannual Radioactive Effluent Release Reports shall also include the following: an explanation as to why the inoperability of liquid or gaseous effluent monitoring instrumentation was not corrected within the time specified in Specification 3.3.3.8 or 3.3.3.7, respectively; and description of the events leading to liquid holdup tanks or gas storage tanks exceeding the limits of Specification 3.11.1.4 or 3.11.2.6

MONTHLY OPERATING REPORTS

6.9.1.5 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves, shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC, no later than the 15th of each month following the calendar month covered by the report.

PEAKING FACTOR LIMIT REPORT

6.9.1.6 The $W(Z)$ function(s) for Base-Load Operation corresponding to a $\pm 2\%$ band about the target flux difference and/or a $\pm 3\%$ band about the target flux difference, the Load-Follow function $F_Z(Z)$ and the augmented surveillance turnon power fraction, P_T , shall be provided to the U.S. Nuclear Regulatory Commission, whenever P_T is < 1.0 . In the event, the option of Baseload Operation (as defined in Section 4.2.2.3) will not be exercised, the submission of the $W(Z)$ function is not required. Should these values (i.e., $W(Z)$, $F_Z(Z)$ and P_T) change requiring a new submittal or an amended submittal to the Peaking



ADMINISTRATIVE CONTROLS

PEAKING FACTOR LIMIT REPORT (Continued)

Factor Limit Report, the Peaking Factor Limit Report shall be provided to the NRC Document Control desk with copies to the Regional Administrator and the Resident Inspector within 30 days of their implementation, unless otherwise approved by the Commission.

The analytical methods used to generate the Peaking Factor limits shall be those previously reviewed and approved by the NRC. If changes to these methods are deemed necessary they will be evaluated in accordance with 10 CFR 50.59 and submitted to the NRC for review and approval prior to their use if the change is determined to involve an unreviewed safety question or if such a change would require amendment of previously submitted documentation.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report as stated in the Specifications within Sections 3.0, 4.0, or 5.0.

6.10 RECORD RETENTION

6.10.1 In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

6.10.2 The following records shall be retained for at least 5 years:

- a. Records and logs of unit operation covering time interval at each power level;
- b. Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety;
- c. All REPORTABLE EVENTS;
- d. Records of surveillance activities, inspections, and calibrations required by these Technical Specifications;
- e. Records of changes made to the procedures required by Specification 6.8.1;
- f. Records of radioactive shipments;
- g. Records of sealed source and fission detector leak tests and results; and
- h. Records of annual physical inventory of all sealed source material of record.

6.10.3 The following records shall be retained for the duration of the unit Operating License:

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ADMINISTRATIVE CONTROLS

RECORD RETENTION (Continued)

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report;
- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;
- c. Records of facility radiation and contamination surveys;
- d. Records of radiation exposure for all individuals entering radiation control areas;
- e. Records of gaseous and liquid radioactive material released to the environs;
- f. Records of transient or operational cycles for those unit components identified in Table 5.7-1;
- g. Records of reactor tests and experiments;
- h. Records of training and qualification for current members of the facility staff;
- i. Records of inservice inspections performed pursuant to these Technical Specifications;
- j. Records of quality assurance activities required for the duration of the unit Operating License by the Quality Assurance Manual;
- k. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59;
- l. Records of meetings of the PNSC and the CNRB;
- m. Records of the service lives of all hydraulic and mechanical snubbers required by Specification 3.7.6 including the date at which the service life commences and associated installation and maintenance records;
- n. Records of secondary water sampling and water quality; and
- o. Annual Radiological Environmental Monitoring Reports and records of analyses transmitted to the licensee which are used to prepare the Annual Radiological Environmental Monitoring Report.
- p. Records for Environmental Qualification which are covered under the provisions of 10 CFR 50.49.

6.11 RADIATION PROTECTION PROGRAM

6.11.1 Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved,

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ADMINISTRATIVE CONTROLS

RECORD RETENTION (Continued)

maintained, and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to paragraph 20.203(c)(5) of 10 CFR Part 20, in lieu of the "control device" or "alarm signal" required by paragraph 20.203(c), each high radiation area, as defined in 10 CFR Part 20, in which the intensity of radiation is equal to or less than 1000 mR/h at 45 cm (18 in.) from the radiation source or from any surface which the radiation penetrates shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., Health Physics Technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates equal to or less than 1000 mR/h, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area; or
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them; or
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the Health Physics Shift Supervisor in the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels greater than 1000 mR/h at 45 cm (18 in.) from the radiation source or from any surface which the radiation penetrates shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the shift supervisor on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

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ADMINISTRATIVE CONTROLSHIGH RADIATION AREA (Continued)

For individual high radiation areas accessible to personnel with radiation levels of greater than 1000 mR/h that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 The PCP shall be reviewed by the PNSC prior to implementation.

6.13.2 Licensee-initiated changes to the PCP:

- a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:
 - (1) Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;
 - (2) A determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and
 - (3) Documentation of the fact that the change has been reviewed and found acceptable by the PNSC.
- b. Shall become effective upon review and acceptance by the PNSC.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 Licensee-initiated changes to the ODCM:

- a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made effective. This submittal shall contain:
 - (1) Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered, dated and containing the revision number, together with appropriate analyses or evaluations justifying the change(s);

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ADMINISTRATIVE CONTROLS

OFFSITE DOSE CALCULATION MANUAL (ODCM) (Continued)

- (2) A determination that the change will not reduce the accuracy or reliability of dose calculations or Setpoint determinations; and
- (3) Documentation of the fact that the change has been reviewed and found acceptable by the PNSC.

b. Shall become effective upon review and acceptance by the PNSC.

6.15 MAJOR CHANGES TO LIQUID, GASEOUS, AND SOLID RADWASTE TREATMENT SYSTEMS*

6.15.1 Licensee-initiated major changes to the Radwaste Treatment Systems (liquid, gaseous, and solid):

- a. Shall be reported to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the evaluation was reviewed by the PNSC. The discussion of each change shall contain:
 - (1) A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR 50.59;
 - (2) Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;
 - (3) A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems;
 - (4) An evaluation of the change, which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments thereto;
 - (5) An evaluation of the change, which shows the expected maximum exposures to a MEMBER OF THE PUBLIC in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments thereto;
 - (6) A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the change is to be made;
 - (7) An estimate of the exposure to plant operating personnel as a result of the change; and
 - (8) Documentation of the fact that the change was reviewed and found acceptable by the PNSC.

b. Shall become effective upon review and acceptance by the PNSC.

*Licensees may choose to submit the information called for in this Specification as part of the annual FSAR update.

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ATTACHMENT II
TURKEY POINT UNITS 3 & 4

SAFETY EVALUATION
FOR
REVISED TECHNICAL SPECIFICATIONS

APPENDIX A - NO SIGNIFICANT HAZARDS EVALUATION

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SAFETY EVALUATION

1.0 BACKGROUND

Turkey Point Units 3 & 4 currently operate with custom technical specifications issued with the operating licenses in 1972 and 1973. Subsequently, the NRC has issued NUREG 0452, Standard Technical Specifications for Westinghouse Pressurized Water Reactors. The Standard Technical Specifications, which have been utilized by new licensed plants, are recognized to be more prescriptive and contain an increased number and frequency of surveillances than the custom Turkey Point Technical Specifications.

By letter dated April 11, 1984 to J. P. O'Reilly, NRC Regional Administrator, Region II, FPL formalized commitments to implement the Turkey Point Performance Enhancement Program. It was the intention of FPL to review and implement, where appropriate, the philosophy and guidance of the Standard Technical Specifications in the development of upgraded plant procedures. In addition, FPL committed to incorporate the requirements of the Standard Technical Specifications in all future proposed amendments to the Turkey Point Technical Specifications. NRC Confirmatory Order EA-84-55 dated July 13, 1984 required implementation of the Turkey Point Performance Enhancement Program (Revision I) and the commitments outlined in the April 11, 1984 letter.

In September of 1984, FPL voluntarily expanded the original commitment to include the development of a fully revised and reformatted set of Turkey Point Technical Specifications within certain limitations. The revised set of Technical Specifications were to be based on Draft Revision 5 of NUREG 0452. The limitations were that the revised Technical Specifications would not require hardware changes, would reflect the current Turkey Point plant design and analytical basis, and would consider operating hardship or reasonable resource additions. The Technical Specification Revision Project became Performance Enhancement Project (PEP) No. 10, an addition to the original PEP Projects 1 through 9 which were under the Confirmatory Order.

2.0 EVALUATION

The proposed amendment is a total replacement of the Turkey Point Units 3 & 4 current Technical Specifications with revised Technical Specifications which include the format and guidance of the Standard Technical Specifications within the limitations discussed above.

Paragraph 50.36 of Part 10 of the Code of Federal Regulations requires that each license authorizing operation of a commercial nuclear power plant shall include Technical Specifications that include the following categories of information:

- Safety Limits, Limiting Safety Settings and Limiting Control Settings
- Limiting Conditions for Operation
- Surveillance Requirements
- Design Features
- Administrative Controls including reporting requirements

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Although the current Technical Specifications include these categories of information, the revised Technical Specifications will allow incorporation of additional information that has been gained through industry experience and incorporated in the Standard Technical Specifications. The revised Technical Specifications also include the format of the Standard Technical Specifications which has gained industry acceptance and will help resolve minor instances of uncertainty that may exist in the current Technical Specifications.

Numerous new and more restrictive operational and surveillance requirements have been added to the revised Technical Specifications. These requirements were modelled on the Standard Technical Specifications as they apply to the Turkey Point plant design. Because the standard plant model on which the Standard Technical Specifications are based envelopes the Turkey Point plant design bases in these areas, these new and more restrictive requirements are consistent with the Standard Technical Specification philosophy, and are, therefore, appropriate for Turkey Point.

The discussion that follows provides a general overview of how the required categories of information have improved in content, format and understandability in the revised Technical Specifications. Appendix A is the No Significant Hazards Evaluation for each revised Technical Specification and includes a specific summary and justification of changes for each revised Technical Specification.

2.1 Safety Limits, Limiting Safety System Settings and Limiting Control Settings.

Safety limits for nuclear reactors are limits upon important process variables which are found to be necessary to reasonably protect the integrity of certain of the physical barriers which guard against the uncontrolled release of radioactivity. Limiting safety system settings for nuclear reactors are settings for automatic protective devices related to those variables having significant safety functions. Key safety limits and safety system settings are found primarily in Chapter 2.0 of both the current and revised Technical Specifications. Revised Technical Specification improvements in Chapter 2.0 include the addition of explicit ACTION statements for Sections 2.1.1 Safety Limits - Reactor Core and Section 2.1.2 Safety Limits - Reactor Coolant System Pressure and Reactor Trip System Instrumentation Setpoints. The revised Chapter 2.0 Technical Specifications have been revised to clearly indicate applicable modes consistent with the Standard Technical Specifications. Revised Technical Specification Section 2.2.1 includes a more complete set of trip functions. All of Section 2.0 revised Technical Specifications are reformatted in accordance with the Standard Technical Specifications.

2.2 Limiting Conditions for Operation

The limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When the Limiting Condition for Operation is not met, the licensee must shut down the reactor or follow remedial actions as indicated in the Technical Specifications.



The text format of Chapter 3.0 of the current Technical Specifications can make difficult, in some cases, the determination of the Limiting Condition for Operation, the required actions and plant operating modes for which conditions and actions are applicable. The revised Technical Specification uses the Standard Technical Specification format of explicit LIMITING CONDITIONS FOR OPERATION (LCO), Mode APPLICABILITY and ACTION statements for each Chapter 3.0 Technical Specification.

For some Chapter 3 current Technical Specifications, the user must refer to specification 3.0 which provides a generic action requirement in instances where the ACTION statement is not explicitly stated for the individual Technical Specifications. The inclusion of an explicit ACTION statement in each Chapter 2.0 and 3.0 revised Technical Specification will provide the user with improved clarity and direction.

The Chapter 2.0 and 3.0 current Technical Specifications do not consistently use the current industry accepted practice of using the mode applicability numbers to define the plant operating mode for which LIMITING CONDITIONS FOR OPERATION and ACTION statements are applicable. The revised Technical Specifications provide an explicit mode APPLICABILITY statement for each Chapter 2.0 and 3.0 specification in accordance with the format of the Standard Technical Specifications.

In addition to these format changes to improve operator understanding and interpretation, the revised Technical Specifications provide additional limitations, restrictions and controls. Many of the revised Technical Specifications include more restrictive or additional LIMITING CONDITIONS FOR OPERATION and ACTION statements. Appendix A, No Significant Hazards Evaluations, describes how certain revised Technical Specifications are more restrictive than the current Technical Specifications because they contain additional or more restrictive LIMITING CONDITIONS FOR OPERATION, Mode APPLICABILITY or ACTION statements.

2.3 Surveillance Requirements

The SURVEILLANCE REQUIREMENTS are requirements for tests, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within the safety limits, and that the limiting conditions for operation will be met.

Chapter 4.0 of the current and revised Technical Specifications provides the surveillance requirements. In the current Technical Specifications, the Chapter 4 requirements are separated from their associated Chapter 3 system related LCO, APPLICABILITY and ACTION statements. In addition, the surveillance requirements for a particular system may appear in two or more Chapter 4 locations. These features of the current Technical Specifications can make difficult the locating and identification of all LCO, APPLICABILITY, ACTION and SURVEILLANCE statements for a particular system. The revised Technical Specifications utilize the Standard Technical Specification format of system Technical Specification which bring together the Chapter 3/4 LCO, APPLICABILITY, ACTION and SURVEILLANCE



statements. One of the most significant improvements is that a majority of the revised Technical Specifications include added or more restrictive Surveillance Requirements (see Appendix A). Although most of the added surveillance requirements could previously be found in existing plant logs, procedures or testing programs, inclusion in the revised Technical Specifications brings these surveillance requirements into step with current industry requirements and practice.

2.4 Design Features

Design features are those features of the facility such as materials of construction and geometric arrangements, which if altered or modified, would have a significant effect on safety.

Chapter 5 provides a listing of design features in both the current and revised Technical Specifications. Some new Chapter 5 Technical Specifications have been added to the revised Technical Specifications while other specifications containing outdated or unnecessary information have been deleted consistent with the Standard Technical Specifications. Several Chapter 5 Technical Specifications are revised to provide additional information (see Appendix A).

2.5 Administrative Controls and Reporting Requirements

Administrative controls are the provisions relating to organization and management, procedures, and record keeping, review and audit and reporting necessary to assure operation of the facility in a safe manner.

Chapter 6 provides Administrative Controls in both the current and revised Technical Specifications. The Chapter 6 revised Technical Specifications are provided in a format consistent with the Standard Technical Specifications (see Appendix A).

3.0 RELAXATIONS

Selected revised Technical Specifications contain relaxations from the current Technical Specifications. Many of the relaxations concern changes in the ACTION statement times or surveillance frequencies. In general, these relaxations bring the revised Technical Specifications in line with industry practice and the Standard Technical Specifications. The key relaxations are justified in detail in the individual No Significant Hazards Evaluations (Appendix A).

4.0 CONCLUSION

The revised Technical Specifications represent a significant improvement in format, content and understandability for the Turkey Point operators and support groups. The Standard Technical Specification format will provide the NRC onsite inspectors and FPL engineering support groups a set of Technical Specifications that are consistent with the industry and, therefore, easier to use and locate information. As indicated in Section 2.0 above and the attached No Significant Hazards Evaluations, there is a significant increase in the content of information. The added or more restrictive LCO's, APPLICABILITY modes, ACTION

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and SURVEILLANCE statements modelled on the Standard Technical Specifications will provide more comprehensive and consistent requirements for system readiness and operation.

The standards used to arrive at a proposed determination that the proposed changes involve no significant hazards consideration are included in 10 CFR 50.92. The individual No Significant Hazards Evaluations for each revised Technical Specification (attached Appendix A) demonstrate that the revised Technical Specifications do not involve a significant hazards consideration in that the 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.

Given these considerations, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed Turkey Point Units 3 & 4 Revised Technical Specifications.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: DEFINITION

NO: 1.0

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 1.0, and Table 4.1-1.

2) Proposed Condition of License:

- a. The amendment reformats the definitions used in current Technical Specification requirements into this Specification for consistency with Standard Technical Specification definitions.

Additional definitions included in this revision that are not specified in the current Technical Specification are:

1. ACTUATION LOGIC TEST
2. AXIAL FLUX DIFFERENCE
3. CONTROLLED LEAKAGE
4. FREQUENCY NOTATION
5. IDENTIFIED LEAKAGE
6. PRESSURE BOUNDARY LEAKAGE
7. SHUTDOWN MARGIN
8. SOLIDIFICATION
9. SOURCE CHECK
10. TRIP ACTUATION DEVICE OPERATIONAL TEST
11. UNIDENTIFIED LEAKAGE

- b. The revision adds a frequency notation table (Table 1.1) which includes an explicit definition of a refueling interval (R) as 18 months or less.

- c. The revision omits the following current Technical Specification definitions:

1. SAFETY LIMITS
2. LIMITING SAFETY SYSTEM SETTINGS
3. LIMITING CONDITIONS FOR OPERATION
4. PROTECTIVE INSTRUMENTATION LOGIC
5. DESIGN POWER
6. REACTOR COOLANT PUMPS
7. ENGINEERED SAFETY FEATURES
8. REACTOR PROTECTION SYSTEM

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9. SAFETY RELATED SYSTEMS AND COMPONENTS
10. PER ANNUM
11. REACTOR COOLANT SYSTEM PRESSURE BOUNDARY
INTEGRITY
12. COOLANT LOOPS
13. HEAVY LOADS

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve or plant modifications.
- 2) The change in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions and controls by requiring surveillances with frequency "R" to be performed at least once per 18 months.
- 3) The proposed changes described in Item 2.c represent definitions of terms which are not used or which are defined in other places in the revised technical specifications. In some cases, the proposed changes described in Item 2.c represent restrictions to plant operation. In each case where an omitted definition contains a restriction, the restriction is included in another section of the revised technical specifications.

Therefore, the proposed changes described in Item 2.c also are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

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Based on the above considerations the changes included in the development of proposed Technical Specification 1.0 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: DEFINITION - OPERABILITY

NO: 1.17

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 1.4, 3.0.5, and the bases to 3.0.5.

The current Technical Specification definition of OPERABILITY requires normal and emergency power for system operability and 3.0.5 precludes cascading A-C power inoperability into the Technical Specifications in MODES 1 thru 4 if all redundant subsystems are OPERABLE. The 3.0.5 exemption does not apply in MODES 5 and 6.

2) Proposed Condition of License:

In the proposed Technical Specifications the definition of OPERABILITY requires "electrical power" for system operability and the A-C power source requirements are defined by the A-C sources Technical Specification.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

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In MODES 1 through 4 the requirements in the current and proposed Technical Specifications governing component inoperability due to A-C power source inoperability are the same provided all components in redundant systems are operable. In those cases where one of the A-C sources is inoperable and a component in the opposite train of a redundant system is inoperable, the current Technical Specification requires that both of the redundant trains be declared inoperable, while in the revised Specification, the ACTION restrictions of the A-C source govern. In this case the current Technical Specifications would typically require MODE reduction within 7 hours due to 3.0.1 while in the proposed A-C source Technical Specification a mode reduction within 14 hours is required due to one D-G and an opposite train component inoperable.

The potential relaxation discussed above is acceptable because of the generally high reliability of the A-C sources, the marginal reduction in overall system reliability due to the temporary unavailability of one of the two A-C sources and the slight increase on time allowed for the mode reduction (7 to 14 hours). Also, due to the generally high reliability of the safety systems in the plant, the likelihood of one train of a two train safety system being inoperable at the same time that one of the two A-C sources powering the opposite train components is inoperable, is extremely remote.

The proposed change to applicability requirement 3.0.5 in MODES 5 and 6 described above will extend the exemption which allows one of the two required A-C power sources to be inoperable without cascading the inoperability to components or systems in the LCO's. Without the exemption, inoperability of either A-C power source requires each component or system powered by that source to be declared inoperable because the definition of operability requires both the normal and emergency source to be operable.

The origin and basis for the current Technical Specification 3.0.5 applicability statement is contained in an NRC letter dated 4-10-80 to all power reactor licensees. The intent of 3.0.5 is to allow the A-C source Technical Specification to control the allowed outage time when an A-C source is inoperable rather than having the time controlled by some other LCO on a system or component which is powered by the A-C source but has a more restrictive allowed outage time.

The 3.0.5 applicability statement cannot be invoked unless two requirements are met. They are, the alternate source of A-C power must be available in the affected train of the system and all of the components in the redundant train of the system must be operable. If these requirements cannot be met the plant is required to go to COLD SHUTDOWN. These requirements ensure against a single failure leading to the complete loss of a system function when one A-C source is inoperable.

[illegible]

The above NRC letter does not discuss the reason why 3.0.5 is not applicable in modes 5 or 6. Since 3.0.5 directs the plant to COLD SHUTDOWN when the required condition is not met, restricting 3.0.5 to modes 1 thru 4 seems reasonable (i.e., if applied in mode 5, the plant would already be in mode 5 and the required mode reduction would be unnecessary). However, since the 3.0.5 applicability statement represents an exemption to another requirement, excluding the exemption in fact makes the requirement more restrictive.

Specifically, wherever a mode 5 or 6 LCO requires two trains of a redundant system to be operable and 3.0.5 does not apply, both trains of the system must have both their normal and emergency power A-C sources operable. If 3.0.5 is applicable, only one of the A-C sources to each train of the system need be operable to satisfy the LCO.

In the proposed Turkey Point Technical Specifications there are two LCO's in modes 5 or 6 where a train redundant system is required. In each of these cases either one of the redundant trains of the RHR system is adequate to perform the decay heat removal function. They are, the RHR system in mode 5 with the loops not filled and in mode 6 with the RCS level less than 23 feet. In both LCO's the ACTION statement requires immediate action to restore the system if the LCO requirement cannot be met. With the proposed A-C Sources Specification and the definition of OPERABILITY each RHR train would be powered by a minimum of one A-C source. With the current 3.0.5 applicability requirement in effect in these modes, each RHR train would be powered by two A-C sources.

In the design of the Turkey Point emergency power system, the emergency power sources are shared between the units. In the normal case where both units are not in modes 5 or 6 at the same time, the operability of the diesels will be determined by the unit in the higher mode. Therefore, in most cases two diesel generators will be operable when either unit is in mode 5 or 6.

Also, a review of available literature dealing with the reliability of the off-site power source for licensed power reactors has shown that while loss of off-site power events have occurred at several plants the off-site source can generally be expected to be restored within an hour (see NSAC-111). In addition, in this mode the RHR system can be deenergized for an hour as allowed by the Technical Specifications. Therefore, the RHR system functional reliability to be gained by requiring both the emergency and normal A-C power sources to be OPERABLE in the lower modes is marginal. In addition, an evaluation of the contribution to total plant risk from RHR system operation in the lower modes has shown that these modes are not risk dominant (see NSAC-84, "Zion Nuclear Plant Residual Heat Removal PRA," Electric Power Research Institute, July 1985).

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- 1) The proposed changes to the definition of OPERABILITY and to extend the 3.0.5 exemption to modes 5 and 6 does not involve a significant hazards consideration because these changes would not:

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

As discussed above, the proposed definition of OPERABILITY which replaces "normal and emergency power" with "electrical power" in conjunction with the A-C sources specification does not significantly reduce the reliability of the redundant safety systems in the plant. Also, relaxing the restriction which requires both the normal and emergency power sources to be operable in modes 5 and 6 does not significantly reduce the reliability of the RHR system.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

- c. Involve a significant reduction in a margin of safety because this change does not involve changes in plant design, mode of plant operation or affect any safety analysis assumption. In addition, in Modes 5 and 6 the change has no impact on the functional capability of the RHR system.

Based on the above considerations the changes included in the development of proposed Technical Specification 1.17 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SAFETY LIMITS - REACTOR CORE

NO: 2.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 1.1, 2.1, and B2.1.

2) Proposed Condition of License:

- a. The amendment reformats the current Technical Specification requirements into this Specification.
- b. The revision is more restrictive than the current requirements as follows:
 1. An ACTION statement is added for consistency with the Standard Technical Specification. The ACTION statement defines time limits for mode reduction (one hour), and references the appropriate ADMINISTRATIVE CONTROLS section (6.7.1) which contains reporting requirements and restrictions on unit operation.
 2. The current requirements for TWO and ONE Loop operation, and natural circulation are deleted because power operation (MODES 1, and 2) with less than three loops is not analyzed in the safety analysis.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a Technical Specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls. The ACTION statement requires a mode reduction to HOT STANDBY or lower within one hour if the SAFETY LIMIT is violated. The SAFETY LIMIT applicability is also restricted to three loops in operation, consistent with safety analysis assumptions.

Based on the above considerations the changes included in the development of proposed Technical Specification 2.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SAFETY LIMITS - REACTOR COOLANT SYSTEM PRESSURE

NO: 2.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 1.1, 2.2, and B2.2.

2) Proposed Condition of License:

- a. The amendment reformats the current Technical Specification requirements into this Specification.
- b. The revision is more restrictive than the current requirements as follows:

An ACTION statement is added that requires plant shutdown within 1 hour and compliance with the applicable ADMINISTRATIVE CONTROLS Section 6.7.1 if the SAFETY LIMIT is not met in MODE 1 or 2. (Section 6.7.1 contains reporting requirements and restrictions on unit operation).

In MODES 3, 4 or 5 the SAFETY LIMIT is required to be restored within 5 minutes and the applicable ADMINISTRATIVE CONTROLS Section 6.7.1 complied with.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a Technical Specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The change in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides additional restrictions and controls. The ACTION statement requires a mode reduction to HOT STANDBY or lower and the restoration of the SAFETY LIMIT within a fixed time period.

Based on the above considerations the changes included in the development of proposed Technical Specification 2.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTOR TRIP SYSTEM INSTRUMENTATION SETPOINTS

NO: 2.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 2.3.

2) Proposed Condition of License:

a. The amendment reformats the current requirements into the Standard Technical Specification format and explicitly states the APPLICABLE MODES and ACTION limits.

b. The revision is more complete than the current Technical Specification as follows:

1. The reactor trip setpoint table includes a more complete set of trip functions.
2. The MODE APPLICABILITY and ACTION requirements for each channel are explicitly stated.

c. The revision relaxes the following current requirements:

The trip setpoint table includes an allowance for channel drift.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specification, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a Technical Specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide a more complete set of trip functions and explicit MODE APPLICABILITY and ACTION limits are stated for each trip function. The more complete set of trip functions includes the Source and Intermediate Range trip channels required to be operable in Mode 2 and the steam generator water level low coincident with a steam flow/feed flow mismatch trip. The ACTION statement restrictions include appropriate power restrictions or increased surveillance requirements to compensate for a specific inoperable channel. For example, with an inoperable power range neutron flux channel, the ACTION statement restrictions include a power reduction and a high flux setpoint reduction or a quadrant power tilt surveillance frequency increase from 7 days to 12 hours.
- 3) The proposed change in item 2.c to allow a specific allowance for setpoint drift between trip channel surveillance tests does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. This proposed technical specification provides an allowables column only, but does not provide allowable values. Therefore, the setpoint values are still the limiting values.

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Therefore, an explicit allowance for drift in the trip setpoint table will not result in a significant increase in the probability of or consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed change does not involve changes in plant design, mode of plant operation or affect any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 2.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: APPLICABILITY

NO: 3/4.0

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.0, 4.0 and B3.0.

2) Proposed Condition of License:

a. The amendment consolidates the current Technical Specification requirements into these specifications for consistency with the Standard Technical Specification format.

b. The revision is more restrictive than the current Technical Specification as follows:

1. Includes a statement that failure to perform the required surveillance test makes the component inoperable.

c. The revision relaxes the following current requirement:

1. Proposed Specification 3.0.4 will allow entry into an operational MODE or other specified conditions with LCO requirements not fully established if conformance with ACTION statement requirements permits continued operation of the facility for an unlimited period of time. The current specification prevents entry into an operational MODE or other specified condition unless the conditions for the LCO are met without reliance on provisions contained in the ACTION Requirements.

2. Proposed Specification 4.0.3 will allow a 24 hour grace period to perform missed surveillances when the allowable outage times of the ACTION Requirements are less than 24 hours. The current specification does not allow this grace period.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b.1 is similar to example (ii) of 48 FR 14870 in that it provides additional controls by specifically defining a missed surveillance test as cause for component inoperability.
- 3) The proposed change as outlined in Item 2.c.1 above does not involve a significant hazards consideration because this change would not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated. The current 3.0.4 specification states that entry into an operational MODE or other specified condition shall not be made unless the LCO is met without reliance on the provisions of the ACTION Requirements. This unduly restricts facility operation when conformance to ACTION Requirements establishes an acceptable level of safety for unlimited continuous operation of the facility. For an LCO that has ACTION Requirements permitting continued operation for an unlimited period of time, entry into an operational MODE or other condition of operation should be allowed in accordance with those ACTION Requirements. Entry into an operational MODE or other specified condition should only be restricted

if conformance with ACTION statement Requirements establishes a specified time interval in which the LCO must be met or a shutdown of the facility would be required. Thus, the proposed specification would not increase the probability of or consequences of an accident previously evaluated because facility operation is within the requirements of the LCO.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation outside the requirements of the LCO nor involves a physical modification to the plant.
 - c. Involves a significant reduction in a margin of safety because entry into operational MODES or other specified conditions with LCO requirements not fully established will only be permitted in conformance with ACTION Requirements that allow unlimited continuous operation of the facility. Addition of the proposed 3.0.4 specification is consistent with the NRC's staff position as described in Generic Letter 87-09, dated June 4, 1987.
- 4) The proposed change as outlined in Item C.2 above does not involve a significant hazards consideration because this change would not:
- a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The current 4.0.3 specification states that failure to perform a surveillance within the specified time interval shall constitute a failure to meet the LCO's Operability Requirements; consequently, ACTION statement requirements must then be met. It is overly conservative to assume that systems or components are inoperable when a surveillance has not been performed because the vast majority of surveillances do in fact demonstrate that systems or components are operable. When a surveillance is missed, it is primarily a question of operability that has not been verified, not necessarily the unavailability of a system or component to perform its design function. The allowable outage time limits of some ACTION Requirements do not provide appropriate time for performing a missed surveillance before shutdown requirements apply. A technical specification time limit that allows a 24 hour delay of ACTION Requirements to perform a missed surveillance is acceptable because it allows for adequate plant planning, availability of personnel and increased plant safety by reducing pressure on the plant staff to expeditiously complete the required surveillance so that the plant can return to normal operation.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety because the additional time allowed to perform missed surveillance requirements reduces the probability of performing testing during plant transients conditions that could lead to a need for those systems or components being tested. The additional time would also avoid increasing pressure on the plant staff to expeditiously complete the missed surveillance so that the plant could return to normal operation. Addition of the proposed 4.0.3 specification is consistent with the NRC's staff position as described in Generic Letter 87-09, dated June 4, 1987.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.0 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: MODE APPLICABILITY

NO: 4.0.1 AND GENERIC ISSUES RELATED TO MODE APPLICABILITY

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

In many Turkey Point Technical Specifications APPLICABLE MODES are not explicitly identified in the SURVEILLANCE REQUIREMENTS. Typically, MODE APPLICABILITY is defined in the narrative text of the LCO with phrases such as "while critical", above 350 degrees", during refueling" etc. In many cases SURVEILLANCE REQUIREMENTS have no associated MODE APPLICABILITY. Also, in many ACTION statements, the required MODE reduction is unrelated to the implied LCO MODE APPLICABILITY by requiring MODE reduction beyond that needed to avoid the LCO.

2) Proposed Condition of License:

- a. In the revised Technical Specifications the generic Standard Technical Specification format is used. This format explicitly defines the MODE APPLICABILITY for each SAFETY LIMIT, LIMITING SAFETY SYSTEM SETTING AND LCO. In addition, APPLICABILITY REQUIREMENT 3.0.1 defines LCO compliance in terms of the associated MODE APPLICABILITY requirement and SURVEILLANCE REQUIREMENT 4.0.1 defines SURVEILLANCE compliance in terms of the associated MODE APPLICABILITY requirement. Also, in general, the revised Technical Specification ACTION restrictions follow the generic Standard Technical Specification practice of requiring a MODE reduction to the highest MODE for which the LCO does not apply when the LCO and ACTION are not satisfied.
- b. In some cases the revised Technical Specification will be less restrictive than the current requirements because MODE APPLICABILITY is explicitly defined for each SURVEILLANCE REQUIREMENT and forced MODE reductions required by ACTION statements will generally stop with the first MODE beyond the LCO requirement.

For example, reactor trip functions such as low flow in one loop, which are only active during high power operation are not required to be operable during startup in the revised Technical Specifications.

Surveillance requirements for sampling the reactor coolant for DOSE EQUIVALENT I-131 and E are restricted to MODE 1 in the revised Technical Specification but are not restricted by MODE in the current Technical Specifications.

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In the revised Technical Specifications for the ECCS the MODE APPLICABILITY is 1, 2, and 3, and the ACTION statement MODE reduction stops at MODE 4 while the current ECCS ACTION statement requires a MODE reduction to MODE 5 even though the LCO only applies "while critical".

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item A.2.a which contain the same or more restrictive MODE APPLICABILITY requirements are similar to examples (i) and (ii) of 48 FR 14870 in that they are administrative changes which identify MODE APPLICABILITY using the format of the Standard Technical Specifications or are more restrictive MODE APPLICABILITY requirements consistent with the Standard Technical Specifications.
- 2) The proposed change as described in Item A.2.b does not involve a significant hazards consideration because these changes would not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated.

In those cases where the revised Technical Specification MODE APPLICABILITY is less restrictive than current requirements, the relaxation involves systems or parameters which are included in the Standard Technical Specifications and the revised Technical Specification MODE APPLICABILITY is derived from the Standard Technical Specifications. In the above example, the single loop low flow reactor trip requires reactor power to be above P-8 (45%) to trip the reactor. With the plant in MODE 2, this trip function would not initiate a reactor trip on low flow in one loop and the trip function MODE APPLICABILITY can be restricted to MODE 1 with no impact on any accident transient analyzed in the safety analysis.

In those cases where less restrictive surveillance requirements apply due to the explicit MODE dependence in the revised Technical Specifications the relaxation involves systems or parameters which are included in the Standard Technical Specifications and the revised Technical Specification MODE APPLICABILITY is derived from the Standard Technical Specifications. In the above example, the surveillance for sampling the reactor coolant for DOSE EQUIVALENT I-131 and E can be restricted to MODE 1 because the safety analysis for predicting off-site doses from accident transients is based on RCS coolant activity levels consistent with MODE 1 operation. The off-site dose analysis for accident transients with a potential release of RCS activity in MODE 1 bounds the potential release of RCS activity in the lower MODES.

In those cases where less restrictive MODE reduction requirements in ACTION statements apply, the MODE reduction in the revised Technical Specifications is based on the MODE reduction in the Standard Technical Specifications. In the above example, the ECCS MODE APPLICABILITY is 1 and 2 in the current Technical Specification and 1, 2, and 3 in the revised Technical Specifications. The current Technical Specification allows noncompliance in MODE 3 if the plant is in a startup but requires a MODE reduction to MODE 5 if the noncompliance occurs in MODES 1 or 2. The revised Technical Specification allows the plant to remain in MODE 4 if the ECCS LCO is not satisfied in either case (i.e. startup or shutdown). The generic Standard Technical Specifications and the revised Technical Specifications allow for a reduced ECCS LCO in MODE 4. The bases for the reduced LCO requirement in MODE 4 is the reduced probability of and consequences from a design basis rupture of the RCS or steam system piping.

In summary, the above changes to define explicit MODE APPLICABILITY requirements for LCOs and SURVEILLANCES, and to allow ACTION statement MODE reductions consistent with the associated LCO MODE APPLICABILITY will not result in a significant increase in the probability of or consequences of a previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed changes introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in margin of safety because the above relaxations have been determined to have no impact on any previously evaluated accident.

Based on the above considerations the changes included in the development of proposed Technical Specification 4.0.1 and the generic adoption of the Standard Technical Specification Format for defining MODE APPLICABILITY are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposal.



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NO SIGNIFICANT HAZARD EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SHUTDOWN MARGIN -T_{AVG} GREATER THAN 200 DEGREES - F

NO: 3/4.1.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specifications 3.2.1.f, 3.2.4.c, Table 4.1-2, Item 1.e, 4.11, and 6.9.3.m.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The SHUTDOWN MARGIN LCO applies to more operational modes, MODES 3 and 4.

2. The ACTION statement includes minimum flow and boron concentration requirements.

3. In addition to boron concentration the SURVEILLANCE REQUIREMENTS include the following parameter surveillances: Control rod position, Reactor Coolant System average temperature, Fuel Burnup, and Xenon and Samarium concentration.

c. The revision relaxes the following current requirements:

1. In the event that a control rod is inoperable, the current Technical Specification requires boration to compensate for the inoperable control rod. The proposed Technical Specification requires boration to compensate for an untrippable inoperable control rod only if the required SHUTDOWN MARGIN is not met, with an increased allowance for the withdrawn worth of the inoperable rod.

2. The current Technical Specification requires RCS boron concentration surveillance twice per week. The proposed Technical Specification requires RCS boron concentration surveillance at least once per 31 EFPD's in MODES 1 and 2.

3. The current surveillance requires that if the difference between the observed and predicted values of overall core reactivity reaches the equivalent of 1% d-K/K, the NRC must be notified

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within 24 hours and an evaluation shall be prepared and submitted to the Commission pursuant to Specification 6.9.3.m within 30 days. The proposed change deletes the reporting requirement.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The changes in item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a Technical Specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The changes in item 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls in the added MODES and the more complete and restrictive ACTION and SURVEILLANCE REQUIREMENTS. The MODE applicability is expanded to include SHUTDOWN MODES 3 and 4. The ACTION statement includes minimum boron concentration and flow requirements when boration is required and the SURVEILLANCE REQUIREMENTS include daily SURVEILLANCE of boron concentration, control rod position, Reactor Coolant System temperature, Fuel Burnup, and Xenon and Samarium concentration in MODES 3 and 4.
- 3) The change in 2.c.1 involving boration to increase the SHUTDOWN MARGIN is only required if an inoperable rod would result in a SHUTDOWN MARGIN limit violation. The change in item 2.c.2 involves the RCS boron concentration surveillance frequency reduction in MODES 1 and 2 from twice weekly to once per 31 EFPD's. The change in item 2.c.3 involves deleting the reporting requirement when the predicted and measured core reactivity values differ by a specific amount. These changes do not involve a significant hazards consideration because the changes will not:



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

The proposed change to require boration only when the SHUTDOWN MARGIN limit is violated as the result of an inoperable rod is sufficient to preserve the safety analysis assumption involving SHUTDOWN MARGIN requirements for accident mitigation. Because the accident analysis only assumes that the minimum SHUTDOWN MARGIN required by the Technical Specifications is available, preserving the limit, as required by the proposed Technical specification, ensures that all accident analysis results that depend on SHUTDOWN MARGIN remain valid.

The proposed reduction in the RCS boron concentration surveillance in MODES 1 and 2 from twice per week to once per 31 EFPD's is adequate to support the SHUTDOWN MARGIN Technical Specification limit because the RCS boron concentration is not directly related to SHUTDOWN MARGIN in MODES 1 and 2. The SHUTDOWN MARGIN in MODES 1 and 2 is ensured by surveillance of the control rod bank position and verifying that the rod bank withdrawal is within the allowable withdrawal limit. The proposed Technical Specification surveillance frequency on rod bank position is once per 12 hours.

The 31 EFPD surveillance of RCS boron concentration is used in the overall core reactivity balance to demonstrate agreement with the predicted core reactivity trend over the fuel cycle. Past operating experience at Turkey Point as well as at other Westinghouse plants has shown that core reactivity trends change slowly with time and that the Standard Technical Specification surveillance frequency of once each 31 EFPD's is adequate for ensuring that the actual core depletion is following the predicted reactivity trend throughout the fuel cycle.

The proposed requirement would delete the present reporting requirement. However, if the difference between the observed and predicted values of overall core reactivity exceeds the equivalent of 1% d-K/K the reporting requirement of 10 CFR 50.73 is triggered and an LER would be submitted within 30 days. No significant safety impact is expected within the 30 day interval because of the relatively slow change in the core reactivity characteristics with time. Therefore, the deletion of this reporting requirement will not significantly increase the probability of or consequences of any previously analyzed accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety because the proposed change does not involve changes in plant design, mode of plant operation or affect any safety analysis assumption.

The proposed deletion of the present reporting requirement would not involve a significant reduction in a margin of safety because the d-K/K will not significantly change within the 30 day interval.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARD EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SHUTDOWN MARGIN -T_{AVG} LESS THAN OR EQUAL 200 DEGREES - F

NO: 3/4.1.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

There is no corresponding LCO requirement in the current Turkey Point Technical Specifications. A related Surveillance Requirement is contained in Table 4.1-2, item 1.e.

2) Proposed Condition of License:

- a. The amendment adds a new Technical Specification that specifies the LCO, APPLICABLE MODES, ACTION statements and SURVEILLANCE REQUIREMENTS for SHUTDOWN MARGIN in MODE 5 operation.
- b. The revision is more restrictive than the current requirements as follows:
 1. A new LCO is added which contains SHUTDOWN MARGIN requirements applicable to MODE 5.
 2. An explicit ACTION statement is included which requires immediate boration of 4 gpm of 20,000 ppm boron or equivalent if an LCO violation occurs.
 3. The SURVEILLANCE REQUIREMENTS include a daily determination of SHUTDOWN MARGIN including changes in SHUTDOWN MARGIN due to changes in RCS temperature, boron concentration, control rod position, fission product concentration and fuel burnup. The impact of an inoperable rod must also be included.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, for example, a more stringent surveillance requirement.

- 1) The change in item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a Technical Specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The changes in item 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide a new LCO for controlling SHUTDOWN MARGIN in MODE 5, an ACTION statement requiring immediate boration if the LCO limit is violated, and a SURVEILLANCE REQUIREMENT to determine the SHUTDOWN MARGIN at least once per 24 hours.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARD EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: MODERATOR TEMPERATURE COEFFICIENT (MTC)

NO: 3/4.1.1.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.1.2.1.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and adds SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current requirements because:

SURVEILLANCE REQUIREMENTS require measuring the MTC prior to initial power operation to ensure that the MTC is less positive than the positive limit. As the end of cycle is approached an MTC measurement is again required to ensure that the MTC is less negative than the negative limit.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The change in item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a Technical Specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The change in item 2.b is similar to example (ii) of 48 FR 14870 in that it provides more complete and restrictive SURVEILLANCE REQUIREMENTS to ensure that the temperature coefficient is within its limit.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.1.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: MINIMUM TEMPERATURE FOR CRITICALITY

NO: 3/4.1.1.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

There is no corresponding requirement in the current Turkey Point Technical Specifications.

2) Proposed Condition of License:

- a. The amendment adds a new Technical Specification that specifies the LCO, APPLICABLE MODES, ACTION statements and SURVEILLANCE REQUIREMENTS for minimum temperature for criticality.
- b. The proposed change is more restrictive than the current requirements because it includes an explicit limit on the minimum temperature allowed for critical operation, required ACTIONS if a limit violation occurs and SURVEILLANCES to ensure that the limit is not exceeded. The ACTION statement allows 15 minutes to restore the temperature or be in HOT STANDBY and the SURVEILLANCE requires a temperature check within 15 minutes of achieving criticality.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



The changes in items 2.a and 2.b are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by addition of a new Technical Specification for the MINIMUM TEMPERATURE FOR CRITICALITY. The new technical specification includes more complete and restrictive ACTION and SURVEILLANCE REQUIREMENTS. The ACTION statement allows 15 minutes to restore the temperature or be in HOT STANDBY and the SURVEILLANCE requires a temperature check within 15 minutes of achieving criticality.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.1.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: BORATION SYSTEMS FLOW PATH - SHUTDOWN

NO: 3/4.1.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.6.a, Table 4.1.-1 Item 19 and Table 4.18-1, item 8.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this proposed specification and explicitly stated the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the requirements as follows:

1. ACTION limits are more explicit,
2. SURVEILLANCE REQUIREMENTS include surveillance of flow path temperature.

c. The revision relaxes the following current requirement:

A test of the boric acid flow controller is deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) or 48 FR 14870 in that they provide additional restrictions and controls in the added ACTION limits, which require that any CORE ALTERATION operation or positive reactivity addition be suspended if no boron injection flow path is OPERABLE. The surveillance requirements are more complete because they include a temperature surveillance with a minimum temperature requirement of 145 F on the heat traced portion of the flow path.
- 3) The proposed change to delete the test of the boric acid flow controller does not involve a significant hazards consideration because this change would not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated. The boric acid controller is not used by any automatic accident mitigation system. Therefore, the safety analysis is not affected by the operability of the boric acid controller. Also the boric acid controller is the normal method for varying RCS boron concentration. As such, the system is proven to be operable each time it is used. The current Technical Specification surveillance requirement to perform a surveillance test once each refueling provides an insignificant increase in the system reliability. Therefore, there is no significant increase in the probability of or consequences of an accident previously evaluated because the boric acid controller surveillance is deleted.



- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed deletion of the boric acid flow controller does not involve changes in plant design, mode of plant operation or affect any safety analysis assumption.

The proposed technical specification deletion of the boric acid flow controller test is consistent with industry practices in that the Standard Technical Specifications do not include the subject test.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTIVITY CONTROL SYSTEMS FLOW PATHS - OPERATING

NO: 3/4.1.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.6.a, 3.6.b.2 and b.4, 3.6.c.2 and c.4, 3.6.d.2, and Table 4.18-1, item 8.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

An explicit SURVEILLANCE REQUIREMENT in the current requirements to verify the availability of power to required flow path components is included in the definition of OPERABILITY in the proposed change.

- b. The revision is more complete than the current Technical Specification as follows:

1. APPLICABILITY REQUIREMENTS are more restrictive because they apply to more MODES, (Modes 3 and 4),
2. SURVEILLANCE REQUIREMENTS include surveillance of flow path temperature and boric acid pump flow rate.

- c. The revision relaxes the following current requirements:

1. OPERABILITY requirements on the boric acid pumps are tied to the associated flow path OPERABILITY. A boric acid pump is only required to be operable when its associated flow path is required to be OPERABLE.
2. The allowed outage time for a boric acid pump is relaxed from 24 hours to 72 hours.
3. The requirements for restoring operability if the boric acid pump or the boric acid flow path is not returned to service within the initial time period is changed from placing the plant in cold shutdown within an additional 48 hours to placing the plant in hot standby and borating to 1% delta-k/k at 200°F within the next 6 hours and restoring the plant to operable status within the next 72 hours or be in cold shutdown within the next 30 hours.

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4. An explicit ACTION time is included for restoring operability of the boric acid flow path. Up to 72 hours are allowed to restore the flow path before a mode reduction is required. If the boric acid flow path is not returned to service within this initial time period, the plant must be placed in hot standby and borated to 1% delta-k/k at 200°F within the next 6 hours. If the flow path is not restored to operable status within the next 72 hours the plant must be placed in cold shutdown within the next 30 hours.
5. An explicit ACTION restriction is included which addresses the case where both the boric acid source and the normal flow path through the regenerative heat exchanger is inoperable. No equivalent action statement exists in the current requirements, thus the generic 3.0.1 restriction applies.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

The deletion of the explicit surveillance of the flow path component power source has no impact on flow path OPERABILITY because the Revised Technical Specification definition of OPERABILITY (Section 1.0) requires that all support functions needed by an OPERABLE component must also be capable of performing their related support functions.

- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) or 48 FR 14870 in that they provide boration system flow path restrictions applicable in MODES 3 and 4 and more complete surveillance requirements for determining flow path operability.
- 3) The proposed changes in item 2.c do not involve a significant hazards consideration because these changes do not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The boric acid pump OPERABILITY requirement deletes the requirement for a redundant OPERABLE boric acid pump. The current requirement for BAT PUMP OPERABILITY independent of the boron injection flowpath OPERABILITY requirement only serves to ensure that a redundant boric acid pump would be available if needed by an OPERABLE boron injection flow path. The current requirement then tends to improve the availability of the boration flow path. Because the boric acid pumps are not required to be OPERABLE for accident mitigation and are not actuated by the reactor trip or ESF actuation systems this availability reduction has no impact on any accident previously evaluated.

The boric acid pump allowed outage time relaxation also impacts the flow path availability but represents no increase in the probability of or consequences of an accident previously evaluated because these components are not assumed to be operable for accident mitigation in the safety analysis. The proposed revision is consistent with industry practices in that the Standard Technical Specifications allow a 72 hour outage time for one boron injection flowpath inoperable.

The 72 hour outage time limit is discussed in a letter from Mr. V. Stello, Jr., Assistant Director for Reactor Safety, NRC to Mr. R. Vollmer, Chief, Quality Assurance Branch, RL, dated 12/5. This letter summarizes a study performed by Science Applications, Inc. (SAI) entitled "The Impact of Component Outages on ECCS Unavailability", SAI-75-550-WA, funded by the NRC. This study concluded that the increase in outage time from 48 to 72 hours has only a slight impact on the system average unreliability even if such an outage were to occur each month. Mr. Stello went on to recommend that the PWR Standard Technical Specifications be revised to permit a single train of ECCS to be OOS for 72 hour rather than 48 hours. Since the boric acid transfer pumps and the boric acid flow path are less critical than the ECCS trains, it can be concluded that their allowed outage time can also be extended to 72 hours.

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If the boric acid pumps or the boric acid flow path are not restored to service within the specified time limit, the proposed Technical Specification requires that the plant be borated to the cold shutdown SDM within 6 hours. Although it does not require reducing the plant to the lower mode required currently, the plant will still be borated to the same level as in the current Technical Specification.

However the revised requirement allows an extra time window for restoration of the system prior to a forced mode change, provided the ultimate boration system safety function (i.e., borate to cold shutdown) has been accomplished.

After borating to cold shutdown SDM, the only boration system function is make-up for loss in volume due to shrink. In the event that this capability is lost in this time interval, the plants ability to reduce modes as required is lost, but the safety aspect of maintaining the SDM is preserved. So, extending the time period to restore operability to the pumps or flow path does not result in an increase in the probability of or impact on the consequences of an accident previously evaluated.

An explicit ACTION statement in the revised Technical Specifications addresses the case where both the boric acid source and the normal flow path through the regenerative heat exchanger is inoperable. The applicable ACTION statement in this case requires the plant to immediately borate and go to COLD SHUTDOWN. With these components inoperable the plant's ability to borate is significantly reduced and the proposed ACTION restriction recognizes this by not placing a specific time limit on the required MODE reduction. Without this ACTION statement the plant would have to invoke the 3.0.1 and be required to be in MODE 3 within 6 hours. It has been shown that at the most restrictive time in life, as long as 8 hours may be required to borate from the RWST and the 3.0.1 requirement could not be met.

This added ACTION requirement addresses an inherent limitation of the plant which potentially avoids a forced mode change within a time limit that cannot be achieved. Therefore, this requirement will not significantly increase the probability of or consequences of any previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the above relaxations in the current requirements do not affect any system or component required to be operable for accident mitigation.



Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: REACTIVITY CONTROL SYSTEMS CHARGING PUMPS - OPERATING

NO: 3/4.1.2.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.6.b.1, 3.6.c.1, 3.6.d.1, Table 4.1-1, items 12 and 16.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. APPLICABILITY REQUIREMENTS are more restrictive because they apply to more MODES (MODES 3 and 4).
 2. SURVEILLANCE REQUIREMENTS are more explicit. Entry into Mode 3 is allowed for surveillance testing, consistent with current plant practice, to allow a more meaningful test of the positive displacement pumps by testing with a higher RCS backpressure.
 3. The LCO requires each OPERABLE charging pump to be powered from independent power supplies, with an exemption to the provisions of Specification 3.0.4.
- c. The revision relaxes the following current requirements:
 1. The allowed outage time for the charging pumps is relaxed from 24 to 72 hours.
 2. The requirements for restoring operability if the charging pump is not returned to service within the initial time period is changed from placing the plant in COLD SHUTDOWN within an additional 48 hours to placing the plant in HOT STANDBY and borating to 1% delta-k/k at 200°F within the next 6 hours and restoring the plant to operable status within the next 72 hours or be in COLD SHUTDOWN within the next 30 hours.
 3. A SURVEILLANCE REQUIREMENT to calibrate the charging pump flow channel is deleted.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) or 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions by including MODES 3 and 4 in the MODE APPLICABILITY requirements, by including an explicit SURVEILLANCE REQUIREMENT for the charging pumps and by requiring independent power supplies.
- 3) The proposed changes to relax the charging pump allowed outage times and the charging pump flow channel calibration does not involve a significant hazards consideration because these changes would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The longer outage time is supported by the system design which includes three charging pumps where only two charging pumps are required to be operable to meet the Technical Specification. The revised outage time is also consistent with the Standard Technical specifications. In addition the charging pumps are not used for accident mitigation. Therefore the above proposed changes to relax the charging pump allowed outage time has no impact on any previously evaluated accident.

The 72 hour outage time limit is discussed in a letter from Mr. V. Stello, Jr., Assistant Director for Reactor Safety, NRV to Mr. R. Vollmer, Chief, Quality Assurance Branch, RL dated 12/75. This letter

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summarizes a study performed by Science Applications, Inc. (SAI) entitled "The Impact of Component Outages on ECCS Unavailability", SAI-75-550-WA, funded by the NRC. This study concluded that the increase in outage time from 48 to 72 hours has only a slight impact on the system average unreliability even if such an outage were to occur each month. Mr. Stello went on to recommend that the PWR Standard Technical Specifications be revised to permit a single train of ECCS to be OOS for 72 hours rather than 48 hours. Since the charging pump operability is less critical than the ECCS trains, it can be concluded that their allowed outage time can also be extended to 72 hours.

If the charging pumps are not restored to service within the specified time limit, the proposed Technical Specification requires that the plant be borated to the cold shutdown SDM within 6 hours. Although it does not require reducing the plant to the lower mode required currently, the plant will still be borated to the same level as in the current Technical Specification.

However, the revised requirement allows an extra time window for restoration of the system prior to a forced mode change, provided the ultimate boration system safety function (i.e, borate to cold shutdown) has been accomplished.

After borating to cold shutdown SDM, the only boration system function is make-up for loss in volume due to shrink. In the event that this capability is lost in this time interval, the plants ability to reduce modes as required is lost, but the safety aspect of maintaining the SDM is preserved. So, extending the time period to restore operability to the charging pumps does not result in an increase in the probability of or impact on the consequences of an accident previously evaluated.

Deleting the calibration of the charging pump flow channel has no impact on any previously evaluated accident because the flow signal is not used for any automatic or manual accident mitigation function. This change is also consistent with industry practice in that the calibration is not required by the Standard Technical Specifications.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed changes in the charging pump allowed outage time and flow channel calibration have no impact on any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.2.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: BORATED WATER SOURCE - SHUTDOWN

NO: 3/4.1.2.4

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Table 4.1-1 Item 14 and Table 4.1-2 Item 3.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO represents a new borated water source LCO for MODES 5 and 6.
2. The ACTION statement identifies operating restrictions to suspend CORE ALTERATIONS or reactivity increases if the LCO is violated.
3. The SURVEILLANCE REQUIREMENTS are more complete and include surveillance of the liquid volume and temperature.

c. The revision relaxes the following current requirements:

1. BAT boron concentration surveillance is relaxed from twice weekly to weekly.
2. The BAT level instrument weekly CHANNEL CHECK is deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide a BORATED WATER SOURCE LCO applicable to MODES 5 and 6, an ACTION statement to suspend CORE ALTERATIONS or positive reactivity changes if the LCO is not satisfied and SURVEILLANCE of borated water volume and temperature in addition to boron concentration.
- 3) The proposed changes to relax the BAT boron concentration surveillance frequency and the weekly BAT level instrument CHANNEL CHECK do not involve a significant hazards consideration because these changes would not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated. Past operating experience at Turkey Point indicates that surveillance of boron concentration in the BAT tanks once a week is adequate because boron concentration does not vary significantly over a one week time interval in MODES 5 and 6. This surveillance frequency is also consistent with industry practices as it is the required surveillance interval provided in the Standard Technical Specification. Therefore, surveillance of BAT boron concentration at once per week interval will assure adequate boron concentration is available.



The deletion of the weekly BAT level instrument CHANNEL CHECK has minimal impact because the stable reactivity condition of the core in MODES 5 and 6 makes the need for boration unlikely. Also, approximately 900 gallons (usable) remain in the BAT at the zero indicated level. This large margin ensures that sufficient boric acid will be available, even with significant instrument drift. The weekly surveillance of the BAT liquid volume itself serves as a CHANNEL CHECK because the most probable channel failures result in instrument readings pegged at the upper or lower range limit of the instrument. Either of these readings would be a change from the expected reading and alert the operator of a potential instrument problem. In addition, the BAT is not required to be OPERABLE for accident mitigation by the reactor trip or ESF actuation system.

Because the relaxed surveillances of the BAT boron concentration and level instrument CHANNEL CHECK have a minimal impact on the availability of the BORATED WATER SOURCE and the BAT is not required for accident mitigation, there is no significant increase in the probability of or consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the BAT and Borated Water Sources are not required for accidents previously evaluated. The weekly boron concentration surveillance is considered adequate as indicated above and the additional surveillances in the proposed technical specification 3/4.1.2.4 more than compensate for the deletion of the weekly BAT level instrument CHANNEL CHECK. The proposed BAT boron concentration surveillance relaxation may result in a relatively minor change in the BORATED WATER SOURCE availability but the new LCO and ACTION statements in total provide additional assurance that the BORATED WATER SOURCE will be available in MODES 5 and 6 to borate the RCS.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.2.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: BORATED WATER SOURCES - OPERATING

NO: 3/4.1.2.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.4.1.a.1, 3.6.b.3, 3.6.b.6, 3.6.c.3, 3.6.c.6, and Table 4.1-2 Items 2 and 3.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. APPLICABILITY REQUIREMENTS are more restrictive because they apply to more modes (MODES 3 and 4).
2. ACTION limits are more restrictive, with explicit time limits to restore LCO's. (72 hours for BAT, 1 hour for RWST).
3. SURVEILLANCE REQUIREMENTS are more complete and include minimum liquid volume, and temperature in the BAT and RWST and a maximum RWST temperature.

c. The revision relaxes the following current requirements:

1. BAT boron concentration surveillance is relaxed from twice weekly to weekly.
2. Primary water storage tank minimum volume requirement is deleted.
3. There is no ACTION statement in the current Technical Specifications for restoring the Boric Acid Storage System to OPERABLE, so the time allowed to restore the system is guided by the provisions of 3.0.1. The revised requirement allows 72 hours to restore the operable status, then requires placing the plant in hot standby and borating to 1% delta-k/k at 200°F within the next 6 hours and requires restoring the Boric Acid Storage System to operable status within the next 72 hours or be in cold shutdown within the next 30 hours.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that the borated water source LCO is applied to more MODES (3 and 4), the ACTION limit identifies explicit time limits for restoring the LCO (72 hours for the BAT and 1 hour for the RWST), and the SURVEILLANCE REQUIREMENTS include the liquid volume and temperature in addition to the boron concentration.
- 3) The proposed changes to relax the current requirements identified in 2.c above do not involve a significant hazards consideration because these changes will not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

1. The first part of the document is a list of names and addresses of the members of the committee. The names are listed in alphabetical order, and the addresses are listed below each name. The list is as follows:

Mr. J. H. Smith
123 Main Street
New York, N. Y.

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123 Main Street
New York, N. Y.

The Boric Acid Tanks store sufficient boron to bring the unit to COLD SHUTDOWN and are a backup source of negative reactivity for the reactor trip and safety injection systems which are used for accident mitigation. The proposed SURVEILLANCE REQUIREMENT reduces the frequency of boron concentration surveillance from twice weekly to weekly, but adds a weekly surveillance of the boric acid volume and temperature. The proposed BAT SURVEILLANCE REQUIREMENTS therefore represent a more complete surveillance of the BAT as a source of borated water than the current requirements and in this sense are more restrictive.

Past operating experience at Turkey Point indicates that surveillance of boron concentration in the BAT tanks once a week is adequate because boron concentration does not vary significantly over a one week time interval. This surveillance frequency is also consistent with industry practices as it is the required surveillance interval provided in the Standard Technical Specifications. Therefore, surveillance of BAT boron concentration, boric acid volume, and temperature at a once per week interval will assure an adequate borated water source is available from the BAT.

The primary water storage tank serves as a source of make-up water for the RCS but is not required to be OPERABLE for any safety function. Normally primary water is blended with boric acid to reduce the boron concentration prior to makeup injection into the RCS. However fully concentrated boric acid from the BAT can be used for makeup using the normal flow path through the boric acid blender or through the emergency boration flow path. The RWST can also be used for RCS make-up through the charging pumps.

The Standard Technical Specifications also do not require the primary water storage tank to be OPERABLE. The deletion of the primary water storage tank (PWST) Technical Specification is therefore justified because it is not assumed to be OPERABLE for accident mitigation in the safety analysis.

In summary, the relaxations of the current Technical Specification requirements identified in Item 2.c.1 and 2.c.2 will not increase the probability of or consequences of an accident previously evaluated. The relaxations of the BAT and PWST requirements have no impact on the safety analysis because these components are not required to be OPERABLE for accident mitigation by the safety analysis.

The Boric Acid Storage System allowed outage time relaxation in Item 2.c.3 represents no increase in the probability of or consequences of an accident previously evaluated because the system is not assumed to be operable for accident mitigation in the safety analyses. The proposed revision is consistent with industry practices in that the Standard Technical Specifications allow a 72 hour outage time for one Boric Acid Storage System.



The 72 hour outage time limit is discussed in a letter from Mr. V. Stello, Jr. Assistant Director for Reactor Safety, NRC to Mr. R. Vollmer, Chief, Quality Assurance Branch, RL, dated 12/75. This letter summarizes a study performed by Science Applications, Inc. (SAI) entitled "The Impact of Component Outages on ECCS Unavailability", SAI-75-550-WA, funded by the NRC. This study concluded that the increase in outage time from 48 to 72 hours has only a slight impact on the system average unreliability even if such an outage were to occur each month. Mr. Stello went on to recommend that the PWR Standard Technical Specifications be revised to permit a single train of ECCS to be OOS for 72 hours rather than 48 hours. Since the Boric Acid Storage System is less critical than the ECCS trains, it can be concluded that its allowed outage time can also be extended to 72 hours.

If the Boric Acid Storage System is not restored to service within the specified time limit, the proposed Technical Specification requires that the plant be borated to the COLD SHUTDOWN SDM within 6 hours. Although it does not require reducing the plant to the lower mode as required currently, the plant will still be borated to the same level as in the current Technical Specification.

However, the revised requirement allows an extra time window for restoration of the system prior to a forced mode change, provided the ultimate boration system safety function (i.e., borate to COLD SHUTDOWN) has been accomplished.

After borating to COLD SHUTDOWN SDM, the only boration system function is make-up for loss in volume due to shrink. In the event that this capability is lost due to inoperability of the single remaining boration subsystem, the plants ability to reduce modes as required is lost, but the safety aspect of maintaining the SDM is preserved. So, extending the time period to restore operability to the pumps does not result in an increase in the probability of or impact on the consequences of an accident previously evaluated.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed changes introduce no new mode of plant operation nor involve a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety. The proposed relaxations of the current BAT and PWST Technical Specification requirements do not reduce any safety margin because they have no impact on any safety analysis assumption. Relaxing the time require to restore the Boric Acid Storage System to OPERABLE status does not significantly reduce any margin of safety because the requirements do not affect any system or component required to be operable for

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accident mitigation. Also, the plant is required to borate to the specified SDM prior to extending the allowed outage time, so the potential loss of the system during this time interval has no immediate impact on the plant or on its ability to maintain the current mode.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.2.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: HEAT TRACING

NO: 3/4.1.2.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.6.b.5, 3.6.c.5, 3.6.d, and 4.18, Table 4.18-1, Item 8.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. APPLICABILITY REQUIREMENTS are more restrictive because they apply to more MODES (MODES 3 and 4) and (MODES 5 and 6 when the boric acid storage tank is the borated water source per Specification 3.1.2.4).

2. SURVEILLANCE REQUIREMENTS are more complete and include a temperature check of the heat traced lines.

c. The revision relaxes the following current requirement:

The allowed outage time for one channel of heat tracing is relaxed from 24 hours to 30 days provided a temperature check is done every 8 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they require two OPERABLE channels of heat tracing in MODES 3 and 4, and MODES 5 and 6 (when the boric acid storage tank is the borated water source per Specification 3.1.2.4) as well as in MODES 1 and 2 as currently required and they include a weekly surveillance of the boric acid flow path temperature.
- 3) The proposed change to relax the allowed outage time for one channel of heat tracing does not involve a significant hazards consideration because this change would not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated. The purpose of heat tracing the boric acid flow path is to ensure that the temperature of the boric acid in the flow path is maintained above its solubility limit. One channel of heat tracing is sufficient for maintaining the temperature above this limit. Therefore the ACTION statement requirement to perform an 8 hour temperature surveillance when one heat trace channel is not OPERABLE is sufficient to ensure the heat tracing function is being performed. Also, the boric acid flow path is not required to be OPERABLE for accident mitigation in the safety analysis. Therefore the proposed allowed outage time relaxation involves no increase in the probability of or consequences of an accident previously evaluated.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed relaxation in allowed outage time is countered by a required increase in a temperature surveillance frequency which ensures that the heat tracing function is being performed. Also, the proposed relaxation in allowed outage time is consistent with Industry practice in that 30 days in the allowed outage time for one channel of heat tracing in the Standard Technical Specifications. Therefore the proposed relaxation involves no significant reduction in a margin of safety.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.2.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: MOVABLE CONTROL ASSEMBLIES - GROUP HEIGHT

NO: 3/4.1.3.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.2.2, 3.2.4a, 3.2.4b, 3.2.5 and Table 4.1-2 Item 5.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current Technical Specification as follows:
 1. Continued power operation with an inoperable rod is only permitted if the rod is trippable.
 2. APPLICABILITY REQUIREMENTS are more restrictive because they apply to more MODES (MODE 2).
 3. The ACTION time limit to restore the LCO is more restrictive (1 hour vs 8 hours).
- c. The revision relaxes the following current requirements:
 1. The requirement that limits the potential reactivity insertion from inoperable control rods to 0.3% is deleted.
 2. The requirement to reduce the hi-flux trip setpoint when both rod deviation and power range channel deviation alarms are inoperable is deleted.
 3. The requirement for logging rod position once per shift when the Power Range Channel Deviation Alarm is inoperable is changed to calculating Quadrant Power Tilt Ratio once per 12 hours.
 4. Surveillance intervals for determining OPERABLE rods are relaxed from 14 days to 31 days.
 5. Figure 3.2-4 was deleted.

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B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that added restrictions are placed on continued power operation with an INOPERABLE control rod. Continued power operation is allowed only if the rod is still able to perform its safety function (i.e. trippable). The proposed changes also are more restrictive because they apply to more modes (MODE 2) and the ACTION time allowed to evaluate a potential inoperable rod condition is shorter (1 hour vs. 8 hours).
- 3) The proposed change to relax the requirements in Item 2.c above, does not involve a significant hazards consideration because these changes do not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated.



The reactivity limit in the current Technical Specification is not needed to preserve any rod ejection analysis design assumption. Other restrictions in the proposed Technical Specification for MOVABLE CONTROL ASSEMBLIES ensure that the normal rod insertion and alignment limits are preserved thereby preserving the original safety analysis limiting assumptions related to rod position.

The current Technical Specification requirement to reduce the hi-flux trip setpoint when both the rod deviation and the power range channel deviation alarm are inoperable is replaced with more frequent surveillances. The rod position surveillance is increased from once per 12 hours to once per 4 hours when the rod deviation alarm is inoperable. In the quadrant power tilt Technical Specification, the power tilt surveillance is increased from once per 7 days to once per 12 hours when the power range deviation alarm is inoperable. The increased surveillances will adequately compensate for an INOPERABLE rod position deviation or power range channel deviation alarm and are consistent with industry practice in that these are the same SURVEILLANCE REQUIREMENTS as in the Standard Technical Specifications.

Relaxing the rod OPERABILITY test surveillance from 14 to 30 days has no impact on control rod availability because of the insignificant number of control rod drive failures determined by the current bi-weekly surveillance test. The proposed surveillance reduction will also have the benefit of decreasing the likelihood of inadvertently dropping a rod during the test and reducing wear on the rod drive mechanism from the surveillance test. The proposed 30 day test interval is also consistent with industry practice in that 30 days is the Standard Technical Specification surveillance interval.

Figure 3.2-4 is obsolete, is not referenced in any current Technical Specification and has no impact on the operation of the plant. Its deletion does not increase the probability or consequences of an accident previously evaluated.

In summary, the proposed relaxations of current Technical Specification requirements do not significantly increase the probability of or consequences of a previously evaluated accident because: The 0.3% reactivity limit is not necessary to preserve any Safety Analysis margin, setpoint reduction is not as appropriate a requirement to compensate for an INOPERABLE rod position deviation and flux deviation alarm as the increased surveillance, the 30 day surveillance to verify rod OPERABILITY, combined with other rod position surveillance requirements will adequately verify rod OPERABILITY.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

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- c. Involve a significant reduction in a margin of safety. As discussed in item 3a above, the 0.3% reactivity limit is not a restriction based on any safety analysis assumption, the hi-flux setpoint reduction is not necessary to compensate for any adverse impact of an INOPERABLE rod position and flux deviation alarm in the safety analysis, and the 31 day OPERABLE rod surveillance is consistent with industry practice and the Standard Technical Specifications. Figure 3.2-4 has no effect on the accident analysis or the normal operation of the plant and therefore its deletion does not reduce the margin of safety.

Based on the above considerations the changes included in the development of proposed Technical Specifications 3/4.1.3.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: POSITION INDICATING SYSTEM - OPERATING

NO: 3/4.1.3.2

A. DESCRIPTION OF CHANGES

1) Present condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.5, and Table 4.1-1 items 9 and 10.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. A new LCO is added which defines the position indication system OPERABILITY requirement of determining rod position within ± 12 steps.
 2. The MODE applicability is expanded to include MODE 2.
- c. The revision relaxes the following current requirement:
 1. Surveillance intervals for rod position indicators are relaxed from 8 to 12 hours.
 2. The surveillance requirement for rod position indicators after $\geq 10\%$ load change has been deleted in the revised Technical Specifications.



B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The standards used to arrive at a proposed determination that the changes described above no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1. and 2.b.2, are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by including an LCO defining rod position OPERABILITY requirements (± 12 steps), and by including MODE 2 in the MODE APPLICABILITY requirement.
- 3) The proposed change to relax the rod position indication system surveillance from shiftly to 12 hours and to delete the surveillance requirement after $\geq 10\%$ load change does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

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The rod position indication system surveillance is relaxed from 8 hours to 12 hours. Manual surveillance of control rod position supplements the continuous surveillance of rod position by the rod deviation monitor which actuates an annunciator when any rod exceeds a rod misalignment limit. The proposed requirement includes increasing the periodic surveillance to once per 4 hours whenever the rod deviation monitor is inoperable. Because the rod deviation monitor provides continuous surveillance of rod position and the periodic surveillance is increased if this alarm is inoperable, relaxing the rod surveillance to 12 hours has no impact on any previously evaluated accident.

The rod position indication system surveillance after $\geq 10\%$ load change is deleted. The 12 hr. surveillance is performed. Also the load change would not affect the continuous surveillance of rod position by the rod deviation monitor. Because the rod deviation monitor provides continuous surveillance and the manual surveillance of the system is performed every 12 hours, the relaxation has no impact on any previously evaluated accident.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the rod position indication system surveillance is only relaxed to the interval required by the group step demand position Technical Specification (12 hours). The surveillance interval is also consistent with industry practice in that 12 hours is the rod position indication system surveillance interval allowed by the Standard Technical Specifications, and the Standard Technical Specifications do not require a surveillance following a load change.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: POSITION INDICATION SYSTEM - SHUTDOWN

NO: 3/4.1.3.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

There is no corresponding LCO requirement in the current Turkey Point Technical Specifications. A related Surveillance Requirement is contained in Table 4.1-1, item 9.

2) Proposed Condition of License:

- a. The amendment adds a new Technical Specification that specifies the LCO, APPLICABLE MODES, ACTION statements and SURVEILLANCE REQUIREMENTS for the POSITION INDICATION SYSTEM in MODES 3, 4 and 5.
- b. The revision is more complete than the current Technical Specification as follows:
 1. A new LCO is added which contains the POSITION INDICATION SYSTEM REQUIREMENTS applicable to MODE 3 thru 5 (with the Reactor Trip System breakers closed).
 2. An explicit ACTION statement is included which requires that the Reactor Trip System breakers be opened when the required POSITION INDICATION SYSTEM is inoperable.
 3. A SURVEILLANCE REQUIREMENT is added to demonstrate the GROUP DEMAND POSITION INDICATION SYSTEM OPERABILITY.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1., 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide a new LCO defining DEMAND POSITION INDICATION SYSTEM requirements for MODES 3, 4, and 5, an ACTION statement to open the reactor trip system breakers when the DEMAND POSITION INDICATION SYSTEM is inoperable, and a SURVEILLANCE REQUIREMENT that demonstrates that the DEMAND POSITION INDICATION SYSTEM is OPERABLE.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.3.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ROD DROP TIME

NO: 3/4.1.3.4

A. DESCRIPTION OF CHANGES.

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.3 and Table 4.1.-2, item 5.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more restrictive than the current requirements as follows:
 1. All control rods are required to meet the rod drop time limit prior to power operation.
 2. The revision measures rod drop time from the "beginning of decay of stationary gripper coil voltage to dashpot entry" versus the current requirement to measure rod drop time from the beginning of rod motion to dash pot entry.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.



- 1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that an additional limitation is included to require all control rod drop times to be equal to or less than the rod drop time limit prior to power operation and the measured rod drop times will be longer because of the rod drop initiation timing. This is a standard method of measuring rod drop time and should not significantly increase the chance of a rod exceeding the drop time limit.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.3.4 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: SHUTDOWN ROD INSERTION LIMIT

NO: 3/4.1.3.5

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.1.a.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The MODE APPLICABILITY includes MODE 2.
 2. The ACTION statement requires corrective action within 1 hour, when the SHUTDOWN ROD INSERTION LCO is violated.
 3. The SURVEILLANCE REQUIREMENTS verify that the SHUTDOWN RODS are fully withdrawn at least once per 12 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1, 2.b.2, and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls by including SHUTDOWN ROD INSERTION LIMITS in MODE 2, an ACTION statement time limit of 1 hour for corrective action and a 12 hour SURVEILLANCE REQUIREMENT of the SHUTDOWN ROD INSERTION LIMIT.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.3.5 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: CONTROL ROD INSERTION LIMIT

NO: 3/4.1.3.6

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specifications 3.2.1.b., c, d, and g.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision is more complete than the current Technical Specification as follows:
 1. The CONTROL ROD INSERTION LIMIT LCO is applied in MODE 2.
 2. The control rod bank position surveillance is required at least once per 12 hours.
- c. The current specification requires action within 1 hour (3.0.1) when the rod insertion limit is violated. The revision would relax the action time to 2 hours.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

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- 1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2, are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls including CONTROL ROD INSERTION LIMITS in MODE 2, and a 12 hour control rod bank position SURVEILLANCE to ensure that the LCO limit is not violated.
- 3) The proposed change to relax the action time to 2 hours does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed requirement includes a specific allowed outage time limit to restore the control rods to within prescribed insertion limits. The two hour limit, derived from the Standard Technical Specifications, has been determined by the NRC to be a necessary and acceptable time limit to allow for the orderly restoration of a group of control rods without imposing a forced mode reduction on the plant.

The time limit allowed for the group rod insertion limit restoration is acceptable because the probability of an accident in that interval which requires the control rods to be within their insertion limits for accident mitigation is acceptably small. In addition, the mispositioned rod group can be presumed to be trippable. Also, overall plant safety is enhanced when unnecessary mode reductions are avoided. For the above reasons, the 2 hour ACTION time limit will not significantly increase the probability of or consequences of any previously evaluated accident.
 - b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
 - c. Involve a significant reduction in a margin of safety because the proposed relaxation of the action time has no impact on any safety analysis assumption.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.1.3.6 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: AXIAL FLUX DIFFERENCE (AFD)

NO: 3/4.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.6.c thru 3.2.6g and 3.2.8

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. Explicit time limits are allowed for corrective action.

2. The surveillance interval for monitoring the AXIAL FLUX DIFFERENCE is explicitly defined.

c. The revision relaxes the following current requirement.

The AFD mode applicability is restricted to MODE 1, above 15% power.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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 previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.



The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed changes as described in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide added restrictions and controls in the form of explicit time limits (30 minutes with power above 50% and 15 minutes with power above 90%) for corrective action when an LCO violation occurs, and explicit SURVEILLANCE REQUIREMENTS for monitoring the AXIAL FLUX DIFFERENCE (once per 7 days).
- 3) The proposed change to relax the AXIAL FLUX DIFFERENCE LCO to power levels above 15% does not involve a significant hazards consideration because this change would not:
 - a: Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The relaxed Technical Specification requirement described in 2.c above is justified because the core vendor has determined that at power levels below 15% no significant fission product inventory can be built into the core which could cause a perturbation to the power distribution when the plant returns to high power. Because this relaxation has no impact on any safety analysis assumption involving the core power distribution there is no impact on any previously evaluated accident. Further, the proposed MODE APPLICABILITY requirement is consistent with industry practice in that it is the same as the MODE APPLICABILITY in the Standard Technical Specifications.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because as explained above, the proposed relaxation has no impact on the safety analysis.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

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NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: HEAT FLUX HOT CHANNEL FACTOR - F_Q (Z)

NO: 3/4.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.6.a and b and Table 4.1.-1, Item 1b.

2) Proposed Condition of License:

- a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.
- b. The revision relaxes the current requirement to remeasure the HEAT FLUX HOT CHANNEL FACTOR F_Q within 24 hours whenever a measured value of F_Q exceeds its limit. The proposed requirement allows continued operation with reduced power and trip setpoints and requires F_Q to be demonstrated to be within its limit prior to increasing power above the reduced power limit.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature.



- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change to relax the time interval between F_Q Surveillances when the F_Q limit is violated, does not involve a significant hazards consideration because this change would not:

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

Both the current and proposed Technical Specification ACTIONS require an immediate reduction in power when an F_Q limit is violated. Because the F_Q limit increases as power decreases and the amount of power reduction is directly tied to the amount that the limit is exceeded, this required ACTION is sufficient to restore the F_Q dependent conditions assumed in the safety analysis. The second F_Q surveillance within 24 hours required by the current Technical Specification will only serve to confirm the results of the first F_Q surveillance. Because the proposed Technical Specification ACTION restriction to reduce power adequately preserves the safety analysis conditions that depend on F_Q the proposed relaxation has no impact on the probability of or consequences of any previously evaluated accidents.

Further, the proposed change is consistent with industry practice in that the same ACTION restrictions are contained in the Standard Technical Specification.

- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in the margin of safety because the proposed change includes an immediate ACTION to reduce power by 1% for each 1% that the F_Q limit is exceeded. This power reduction is adequate to compensate for any adverse impact of the F_Q limit violation on the safety analysis.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR

NO: 3/4.2.3

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Units 3 and 4 Technical Specification in Specification 3.2.6.a and b and Table 4.1-1, Item 1b.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

The ACTION statement requires a power reduction to 50% and the high flux trip setpoint reduced to 55% within 2 hours after F_H^N exceeds its limit. In the current requirements, power is reduced in proportion to the F_H^N limit violation.

c. The revision relaxes the following current requirement:

The current requirement to go to HOT STANDBY within 24 hours of a F_H^N limit violation is replaced with a power limit of 5%.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the 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, then a no significant hazards determination can be made.

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The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

- 1) The proposed changes as described in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a technical specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.
- 2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that a power restriction of 50% is more restrictive than a power reduction that is proportional to the F_H^N limit violation.
- 3) The proposed change to replace the required MODE reduction (to HOT STANDBY) with a 5% power limit, does not involve a significant hazards consideration because this change would not:
 - a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The proposed change does not represent any practical relaxation in requirements because a 5% power limit does not allow power operation in MODE 1. The only significant difference between the current requirements and the proposed requirements is that the proposed requirement may avoid a forced MODE reduction if an F_H^N limit violation occurs and cannot be corrected within 24 hours. The ACTION requirement in the proposed change to reduce power to 5% is sufficient to compensate for the adverse impact of any credible F_H^N limit violation and, therefore, the proposed change will not significantly increase the probability of or consequences of any previously evaluated accident.

Further, the proposed change is consistent with industry practice in that the same ACTION restrictions are contained in the Standard Technical Specifications.

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- b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.
- c. Involve a significant reduction in a margin of safety because the proposed change includes a power reduction to 5%, which is adequate to compensate for any adverse impact of the F_H^N limit violation on the safety analysis.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.2.3 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.



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