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HL-2231  
003478

July 17, 1992

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

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:  
MISCELLANEOUS REFUELING SPECIFICATIONS

Gentlemen:

In accordance with the provisions of 10 CFR 50.90, as required by 10 CFR 50.59(c)(1), Georgia Power Company (GPC) hereby proposes changes to the Plant Hatch Units 1 and 2 Technical Specifications (TS), Appendix A to Operating Licenses DPR-57 and NPF-5.

The proposed changes involve revisions to several portions of the Plant Hatch Units 1 and 2 TS involving shutdown and refueling operations. The purpose of these revisions is to clarify existing specifications thereby preventing misinterpretation of requirements and to provide flexibility in shutdown operations by allowing these operations to be performed in different ways. In addition, a one time only special test exception is being removed because it is no longer applicable. Also, an index listing is being corrected. GPC requests these proposed changes be reviewed and approved prior to the Fall 1992 Unit 2 refueling outage currently scheduled to begin September 15, 1992.

Enclosure 1 provides a detailed description of the proposed changes and the reasons for the change request.

Enclosure 2 details the bases for our determination the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides page change instructions for incorporating the proposed changes. The proposed changed TS pages for Units 1 and 2 follow Enclosure 3. The markup of the proposed changes is also included.

To allow time for procedure revisions and orderly incorporation into copies of the TS, GPC requests the proposed amendment, once approved by the NRC, be issued with a required implementation date to be no later than 60 days from the date of issuance of the amendment.

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U.S. Nuclear Regulatory Commission

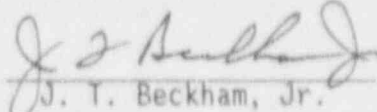
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Page Two

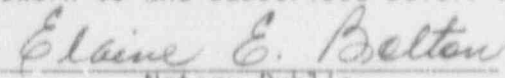
In accordance with the requirements of 10 CFR 50.91, a copy of this letter and all applicable enclosures will be sent to the designated state official of the Environmental Protection Division of the Georgia Department of Natural Resources.

J. T. Beckham, Jr. states he is duly authorized to execute this oath on behalf of Georgia Power Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

GEORGIA POWER COMPANY

BY:   
J. T. Beckham, Jr.

Sworn to and subscribed before me this 17<sup>th</sup> day of July 1992.

  
Notary Public

MCM/cr  
003478

Enclosure

cc: Georgia Power Company  
Mr. H. L. Sumner, General Manager - Nuclear Plant  
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. S. D. Ebnetter, Regional Administrator  
Mr. L. D. Wert, Senior Resident Inspector - Hatch

State of Georgia  
Mr. J. D. Tanner, Commissioner - Department of Natural Resources

ENCLOSURE 1

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:  
MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

Since this submittal involves various changes affecting several different specifications, this discussion will address each individual change separately.

PROPOSED CHANGE 1:

This proposed change will revise the definition of Core Alteration in Technical Specifications 1.0 for Unit 1 and 1.0 for Unit 2.

- 1.1) The ~~definition will~~ specify the movement of incore instruments, (source range monitors, local power range monitors, intermediate range monitors, traversing in-core probes, or special movable detectors), including undervessel replacement of these items, is not considered a Core Alteration.
- 1.2) The phrase "addition, removal, relocation, or movement" is being replaced with the word "movement."
- 1.3) The phrase "or other components affecting reactivity" is being added.

BASIS FOR PROPOSED CHANGE 1:

- 1.1) The purpose of the definition of Core Alterations is to identify operations which have the potential for adding positive reactivity to the core while the vessel head is removed and fuel is in the vessel. While such operations are in progress, special precautions must be taken to preclude the possibility of an inadvertent criticality. These precautions are comprised mainly of additional safety system operability requirements.

Incore instruments are being excluded from this definition because the amount of fissile material contained in the detectors is so small their movement does not result in any significant change in core reactivity. Therefore, movement of incore instruments does not involve an increase in the probability of an inadvertent criticality and no special precautions are needed to preclude such an event. Removing the requirement to maintain operability of additional safety systems during incore instrument movement will provide a great deal of flexibility to the outage planning process. Systems which were previously required to be operable during

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

incore instrument movement can now be made inoperable to perform required surveillance testing or preventative maintenance.

- 1.2) Listing the specific types of "movement" is unnecessary. Removal of the redundant words "addition", "removal", and "relocation" has no impact on the meaning of the definition.
- 1.3) Addition of the new phrase "or other components affecting reactivity" will key TS users into considering how a new incore operation may impact core reactivity.

PROPOSED CHANGE 2:

This proposed change will revise the definitions of Cold Shutdown Condition and Refuel Mode in Unit 1 TS section 1.0, and the Operational Conditions Table 1.2 in Unit 2 TS.

- 2.1) The definition of Cold Shutdown Condition in Unit 1 TS will allow the mode switch to be placed in REFUEL per newly proposed Specification 3.10.E.3.
- 2.2) The definition of Refuel Mode in Unit 1 TS will specify the head closure bolts are less than fully tensioned or the head is removed, and the mode switch may be in Shutdown or Refuel.
- 2.3) In Unit 2 Table 1.2, the existing footnote designated as "\*" to Condition 5 will be relabeled as footnote "a" and will be applicable to all conditions. This footnote will specify in Conditions 1 through 4 the reactor vessel head closure bolts are fully tensioned and in Condition 5 the head closure bolts are less than fully tensioned or the head is removed.
- 2.4) In Unit 2 Table 1.2, "Shutdown" will be added as an allowable mode switch position for Condition 5.
- 2.5) In Unit 2 Table 1.2, a new footnote, designated as "d", will be added to allow the mode switch to be placed in Refuel per newly proposed Specification 3.10.5.

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

BASIS FOR PROPOSED CHANGE 2:

- 2.1) The addition of this allowance is necessary to allow moving a single control rod/drive in the Cold Shutdown condition (see proposed change 5 on page 7 of this enclosure).
- 2.2) This rewording will specify the condition of the head closure bolts corresponding to the Refuel Mode to remove any uncertainty as to exactly when the Reactor Mode changes. This will help ensure the operability requirements of the existing mode are met.

The sequence of events for entering the Refuel Mode should be as follows:

- The reactor is shut down and cooled until the Cold Shutdown condition is reached. The mode switch is in Shutdown.
- When the first head closure bolt is detensioned, the reactor will be in the Refuel Mode per the proposed definition of Refuel Mode.
- At that point, the control room operator will be notified the head closure bolts are no longer fully tensioned, and the mode switch may be placed in Refuel.

The addition of Shutdown as an allowable mode switch position for the Refuel Mode will preclude confusion by ensuring no undefined condition is entered during the normal evolution of entering the Refuel Mode. Having the mode switch in Shutdown under these conditions will represent no reduction in safety for the following reasons:

- 1) The reactor manual control system interlocks associated with the Shutdown position are more restrictive than those for the Refuel position. Specifically, with the mode switch in the Refuel position, the one-rod-out interlock allows no more than one control rod to be withdrawn at a time. However, with the mode switch in the Shutdown position, a rod block is enforced at all times so that no control rods may be withdrawn.
- 2) Specification 3.10.A.1 (Specification 3.9.1 for Unit 2) requires the mode switch to be locked in the Refuel position with the refueling interlocks operable during Core Alterations.

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

- 2.3) See the above discussion for the first part of change 2.2.
- 2.4) See the above discussion for the second part of change 2.2.
- 2.5) The addition of this footnote is necessary to facilitate use of the new Specification 3.10.5. Revision of this section is identified later as part of Proposed Change 5. The justification for Proposed Change 5 applies to the addition of this footnote.

PROPOSED CHANGE 3:

This proposed change will revise the action statement for the residual heat removal service water (RHRSW) system shutdown cooling mode in Unit 2 Specification 3.7.1.1.

Existing Unit 2 Specification 3.7.1.1.b provides actions for inoperability of RHRSW pumps and/or subsystems required to support RHR shutdown cooling subsystems. However, this specification is written such that actions will be overly conservative in some situations and inadequate in other situations. This change will tie operability of an RHRSW subsystem directly to the operability of the RHR shutdown cooling subsystem which it supports. In addition, this specification will state only one RHRSW pump must be operable in order to consider the RHRSW subsystem operable.

BASIS FOR PROPOSED CHANGE 3:

The design of the Hatch RHRSW system includes two separate RHRSW subsystems A and B, supporting RHR subsystems A and B respectively. Each RHRSW subsystem is comprised of two RHRSW pumps, a flowpath and a heat exchanger for transferring heat from the associated RHR subsystem. RHRSW subsystem A contains RHRSW pumps A and C, and RHRSW subsystem B contains RHRSW pumps B and D. An additional feature is the ability to crosstie the RHRSW subsystems such that the pumps in one RHRSW subsystem can provide flow through the heat exchanger in the other RHRSW subsystem and thereby support the opposite RHR subsystem. In the following discussions, no credit is taken for this crosstie feature because there are no operability requirements for this equipment. However, if the crosstie feature is operable and is being used to supply RHRSW flow to support the opposite loop of RHR in shutdown cooling, there is no need to declare the supported RHR loop inoperable for shutdown cooling because the function is being successfully performed.

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

The existing Unit 2 Action Statement 3.7.1.1.b specifies actions to be taken in Condition 5 for certain situations involving RHRSW inoperability. The action statement requires RHR shutdown cooling to be declared inoperable if up to three RHRSW pumps or one RHRSW subsystem are inoperable for greater than 7 days. These actions are inappropriate for the following reasons.

The first problem with the current specification is the lack of required actions for situations which are more degraded than the ones specified. This would be the case if four RHRSW pumps or both RHRSW subsystems were inoperable. Generally, Specification 3.0.3 provides direction under circumstances which exceed those detailed in the TS. However, Specification 3.0.3 requires unit shutdown assuming the subject situation occurs during power operation. Therefore, Specification 3.0.3 does not apply in Condition 5. The proposed wording of this specification will alleviate this problem because it will define RHRSW subsystem operability and will delineate actions to be taken if a subsystem is inoperable. If both RHRSW subsystems are inoperable, then both RHR subsystems will be declared inoperable for shutdown cooling. This is the most degraded situation possible.

The second problem with the current specification is the fact that inoperability of one RHRSW subsystem for greater than 7 days requires the shutdown cooling mode of both RHR subsystems to be declared inoperable. Under these circumstances, the RHR and RHRSW subsystems opposite to the inoperable RHRSW subsystem may both be operable and fully capable of performing the required shutdown cooling function. The proposed specification will link RHRSW subsystem operability directly to operability of the associated RHR subsystem.

The third problem with this requirement is the inclusion of a time period (7 days) during which the RHRSW pumps or subsystem can be inoperable without declaring RHR shutdown cooling inoperable. If the RHRSW subsystem is incapable of removing decay heat from the RHR subsystem, then the RHR subsystem is incapable of removing decay heat from the core and must be declared inoperable immediately. An allowable outage time for shutdown cooling is inappropriate because the reactor coolant begins to heat up immediately upon loss of shutdown cooling. The proposed specification will include no grace period. When an RHRSW subsystem is declared inoperable, the associated RHR subsystem will be considered inoperable for shutdown cooling immediately.

The fourth problem with this specification is the wording of the restoration requirement. The requirement states, "... restore both subsystems with at least one pump in each system to OPERABLE status..." This implies only one operable pump is required for the subsystem to be considered operable. This conflicts with the definition of an operable subsystem as specified in the LCO section of the specification. However, Specification 3.9.12 for RHR shutdown

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

cooling supports this interpretation because it states only one RHR pump and one RHR heat exchanger are required to be operable in order to consider the RHR system operable for shutdown cooling. Therefore, it follows the RHRSW system would be capable of supporting the shutdown cooling function of the RHR system if it contained one operable RHRSW pump and flowpath in the subsystem corresponding to the operable RHR pump. A sentence is being added to Action Statement 3.7.1.1.b which states one RHRSW pump may be inoperable without declaring the RHRSW subsystem inoperable.

PROPOSED CHANGE 4:

This proposed change will alter the wording of Unit 2 Specification 3.9.3. This specification currently requires all control rods to be fully inserted during Core Alterations. The proposed change will require all control rods to be fully inserted when moving fuel assemblies or startup sources in the core, rather than during all Core Alterations.

This proposed change will also revise the wording of the bases for Specification 3.9.3. The phrase "during CORE ALTERATIONS" is being replaced with the phrase "during fuel or startup source movement."

BASIS FOR PROPOSED CHANGE 4:

Specification 3.9.3 is being revised because it is self-contradicting. Per the definition of CORE ALTERATION in TS Section 1.0, movement of reactivity controls within the reactor pressure vessel with the vessel head removed and fuel in the vessel is considered a Core Alteration. Since a control rod is a reactivity control, movement of a control rod under the above circumstances would qualify as a Core Alteration. Therefore, upon commencement of control rod withdrawal, Core Alterations would begin, and simultaneously all control rods would no longer be fully inserted. Taking this literally would result in conditions which violate Specification 3.9.3.

When the vessel head is removed, the reactor mode switch will be in either Refuel or Shutdown. In Refuel, the one-rod-out interlock prevents more than one control rod from being withdrawn at a time. In Shutdown, a control rod block is in effect at all times preventing the withdrawal of even a single control rod. Since Specification 3.1.1, Shutdown Margin, requires the core to be subcritical by at least .38% delta k/k at all times with the highest worth control rod withdrawn, the above mode switch interlocks will ensure the reactor does not become critical. Therefore, it is acceptable to allow control rod withdrawal as long as no other Core Alterations are taking place.



ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

The operations which are being specified have the potential for adding positive reactivity to the core. The proposed change would specify the Core Alterations of concern such that no positive reactivity additions could occur unless all control rods are fully inserted. This will ensure no unplanned criticality occurs.

The discussion of Specification 3.9.3 contained in the bases section is not being changed. Only the wording is being changed to match the wording of the specification.

PROPOSED CHANGE 5:

This proposed change will add new Unit 1 Specification 3.10.E.3, "Requirements for Withdrawal of a Control Rod in the Cold Shutdown Condition" and new Unit 2 Specification 3.10.5, "Single Control Rod Withdrawal - Cold Shutdown", which will permit the withdrawal of a single control rod for testing while in Cold Shutdown (Unit 2 Mode 4) by imposing certain restrictions.

In addition, this proposed change will add bases for these new specifications for both units and will include a reference to new Unit 2 Specification 3.10.5 and its bases in the Unit 2 index. The current Unit 2 Specification 3.10.5, "High Pressure Coolant Injection System," is being deleted along with its listing in the index. Also, the title of Unit 2 Specification 3/4 10.2 was changed by Amendment 121 from "Rod Sequence Control System" to "Rod Worth Minimizer," but the corresponding index listing was not changed. This listing is now being corrected.

BASIS FOR PROPOSED CHANGE 5:

Currently, in Cold Shutdown, the reactor mode switch is in the Shutdown position, and all control rods are inserted and blocked from withdrawal. Many systems and functions are not required in these conditions due to the installed interlocks associated with the reactor mode switch in the Shutdown position. Circumstances will arise while in Cold Shutdown, however, which present the need to withdraw a single control rod for various tests (e.g., friction tests, control rod timing, and coupling integrity checks). Certain situations may also require the removal of a control rod drive (CRD). This proposed change would allow single control rod withdrawals and possible subsequent removals by selecting the Refuel position for the reactor mode switch.

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

With the reactor mode switch in the Refuel position, the analyses for control rod withdrawal during refueling are applicable and, provided the assumptions of these analyses are satisfied in Cold Shutdown, these analyses will bound the consequences of a postulated accident. Explicit safety analyses in the FSAR (Section 15.1.13) demonstrate the functioning of the refueling interlocks and adequate Shutdown Margin (SDM) will preclude unacceptable reactivity excursions.

Meeting the requirements of the following LCOs will provide the same protection against inadvertent criticality which normally exists in the Refuel mode:

<u>FUNCTION</u>	<u>U1 LCO</u>	<u>U2 LCO</u>
One-rod-out interlock	3.10.A.1	3.9.1
Control rod position indication	NA	3.1.3.7
RPS instrumentation	Table 3.1-1	Table 3.3.1-1
Mode switch in SHUTDOWN	Scram 1	Function 11
Manual scram	Scram 2	Function 12
IRM high-high flux	Scram 3	Function 1.a
IRM inoperative	Scram 3	Function 1.b
APRM 15% flux	Scram 8	Function 2.a
APRM inoperative	Scram 8	Function 2.d
Electric power monitoring for RPS	3.9.D	3.8.2.7
Control rod operability	3.3	3.1.3.1
Shutdown margin	3.3.A	3.1.1

Refueling interlocks restrict the movement of control rods to reinforce operational procedures which prevent the reactor from becoming critical. These interlocks prevent the withdrawal of more than one control rod. Under these conditions, since only one control rod can be withdrawn, the core will always be subcritical even with the highest worth control rod withdrawn since adequate SDM exists. At the time CRD removal begins, the disconnection of the position indication probe will cause the control rod position indication LCO and, therefore, the one-rod-out interlock LCO, to fail to be met. At this time, a control rod withdrawal block will be inserted to ensure no additional control rods can be withdrawn and compliance with this proposed LCO is maintained.

The control rod scram function provides backup protection to normal refueling procedures and the refueling interlocks (or the inserted control rod withdrawal block) which prevent inadvertent criticalities during refueling. Alternate backup protection can be obtained by assuring a five-by-five array of control rods, centered on the withdrawn control rod, are inserted and incapable of withdrawal. This alternate backup protection is required when removing a CRD because this removal renders the withdrawn control rod incapable of being scrambled.

ENCLOSURE 1 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

BASIS FOR CHANGE REQUEST

If one or more of the referenced LCOs or requirements of this proposed LCO are not met with the affected control rod insertable, Action 1 restores operation consistent with normal Cold Shutdown conditions (i.e., all rods inserted and the reactor mode switch in the Shutdown position).

Required Action 1 is specified based on the assumption the control rod is being withdrawn. If the control rod is still insertable, the action requires the control rod be inserted and the reactor mode switch placed in the Shutdown position. The 1 hour completion time for Action 1 provides sufficient time to normally insert the control rods.

If one or more of the referenced LCOs or requirements of this proposed LCO are not met with the affected control rod not insertable, withdrawal of the control rod and removal of the associated CRD must be immediately suspended. If the CRD has been removed such that the control rod is not insertable, the action requires the most expeditious action be taken to either restore the CRD and insert its control rod, or restore compliance with this proposed LCO.

The other LCOs made applicable by this proposed LCO are required to have the applicable portions of their associated surveillances met in order to assure this proposed LCO is being met. If the local array of control rods is inserted and disarmed while the scram function for the withdrawn rod is not available, periodic verification is required to ensure the possibility of criticality remains precluded. Also, all the control rods are verified to be inserted as well as the control rod withdrawal block. Verification that all the other control rods are fully inserted is required to meet the SDM requirements. Verification that a control rod withdrawal block has been inserted provides assurance that those control rods whose position indication instrumentation is inoperable are fully inserted. The 24 hour frequency is acceptable because of the administrative controls on control rod withdrawals, the protection afforded by the LCOs involved, and hardware interlocks to preclude an additional control rod withdrawal.

The bases being added will briefly explain the purpose of these proposed specifications and how they will ensure an inadvertent criticality is prevented.

The current Specification 3.10.5, "High Pressure Coolant Injection System," is being deleted along with its listing in the index. This specification includes a footnote which states it is only applicable from June 2-9, 1980. Since this time period has elapsed, this specification is no longer applicable and may be deleted.

The change to the index listing of Specification 3/4 10.2 is strictly an editorial correction.

ENCLOSURE 2

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:  
MISCELLANEOUS REFUELING SPECIFICATIONS

10 CFR 50.92 EVALUATION

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration 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, (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. Georgia Power Company has reviewed this proposed license amendment request and determined its adoption would not involve a significant hazards consideration. The bases for this determination are detailed below.

Since this submittal involves various changes affecting several different specifications, this discussion will address each individual change separately.

Basis for Proposed No Significant Hazards Consideration Determination:

PROPOSED CHANGE 1:

This proposed change will revise the definition of Core Alteration in Technical Specifications (TS) 1.C for Unit 1 and 1.0 for Unit 2.

- 1.1) The definition will specify the movement of incore instruments, (source range monitors, local power range monitors, intermediate range monitors, traversing in-core probes, or special movable detectors), including undervessel replacement of these items, is not considered a Core Alteration.
- 1.2) The phrase "addition, removal, relocation, or movement" is being replaced with the word "movement."
- 1.3) The phrase "or other components affecting reactivity" is being added.

EVALUATION OF PROPOSED CHANGE 1:

- 1.A) The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

10 CFR 50.92 EVALUATION

The purpose of the definition of Core Alterations is to identify operations which have the potential for adding reactivity to the core while the vessel head is removed and fuel is in the vessel. While such operations are in progress, special precautions must be taken to preclude the possibility of an inadvertent criticality. These precautions are comprised mainly of additional safety system operability requirements.

The Hatch Units 1 and 2 Final Safety Analysis Reports (FSARs) contain analyses for the following refueling accidents involving the possibility of an inadvertent criticality:

- \* Control Rod Removal Error During Refueling
  - Unit 1 FSAR section 14.3.3.3
  - Unit 2 FSAR section 15.1.13
  
- \* Fuel Assembly Insertion Error During Refueling
  - Unit 1 FSAR section 14.3.3.4
  - Unit 2 FSAR section 15.1.14

The movement of incore instruments does not apply to either of these analyses because the amount of fissile material contained in the detectors is so small their movement does not result in any significant change in core reactivity. Therefore, removal of incore instruments from the definition does not involve an increase in the probability of occurrence or consequences of an inadvertent criticality accident.

Removal of the redundant words "addition", "removal", and "relocation" from the definition has no impact on the meaning of the definition. Therefore, there is no impact on the probability of occurrence or consequences of any type of accident.

Addition of the new phrase "or other components affecting reactivity" will key TS users into considering how a new incore operation may impact core reactivity. Since this change concerns operations which have not been identified, there can be no effect on previously evaluated accidents.

Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

10 CFR 50.92 EVALUATION

- 1.B) The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The amount of fissile material contained in incore instruments is so small their movement does not result in any significant change in core reactivity. Therefore, this type operation could not cause an inadvertent criticality.

Removal of the redundant words "addition", "removal", and "relocation" from the definition has no impact on the meaning of the definition. Therefore, there is no impact on the probability of occurrence or consequences of any type of accident.

Addition of the new phrase "or other components affecting reactivity" will key TS users into considering how a new incore operation may impact core reactivity. This change could only reduce the probability of occurrence of a new type accident by alerting the TS user to be aware of how new operations may affect core reactivity.

Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- 1.C) The proposed amendment does not involve a significant reduction in the margin of safety.

Since the definition of Core Alteration has no impact on any safety limit or limiting safety system setting, this change has no effect on the margin of safety. Therefore, this change does not involve a significant reduction in the margin of safety.

PROPOSED CHANGE 2:

This proposed change will revise the definitions of Cold Shutdown Condition and Refuel Mode in Unit 1 TS section 1.0, and the Operational Conditions Table 1.2 in Unit 2 TS.

- 2.1) The definition of Cold Shutdown Condition in Unit 1 TS will allow the mode switch to be placed in Refuel per newly proposed Specification 3.10.E.3.
- 2.2) The definition of Refuel Mode in Unit 1 TS will specify the head closure bolts are less than fully tensioned or the head is removed, and the mode switch may be in Shutdown or Refuel.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

10 CFR 50.92 EVALUATION

- 2.3) In Unit 2 Table 1.2, the existing footnote designated as "\*" to Condition 5 will be relabeled as footnote "a" and will be applicable to all Conditions. This footnote will specify in Conditions 1 through 4 the reactor vessel head closure bolts are fully tensioned and in Condition 5 the head closure bolts are less than fully tensioned or the head is removed.
- 2.4) In Unit 2 Table 1.2, "Shutdown" will be added as an allowable mode switch position for Condition 5.
- 2.5) In Unit 2 Table 1.2, a new footnote, designated as "d", will be added to allow the mode switch to be placed in Refuel per newly proposed Specification 3.10.5.

EVALUATION OF PROPOSED CHANGE 2:

Allowing the mode switch to be placed in Refuel while in the Cold Shutdown condition is necessary to facilitate use of the new Specifications 3.10.E.3 in Unit 1 and 3.10.5 in Unit 2. These new sections are discussed later as part of Proposed Change 5. The evaluation for Proposed Change 5 applies to the addition of this allowance. Please see page 8 of this enclosure.

- 2.A) The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Specifying the reactor mode based on the condition of the vessel head closure bolts only serves to clarify exactly when certain modes are entered. This change will prevent confusion as to the applicability of certain requirements. This change will have no effect on the probability of occurrence or consequences of any type of accident.

The addition of Shutdown as an allowable mode switch position for the Refuel Mode will preclude confusion by ensuring no undefined condition is entered during the normal evolution of entering the Refuel Mode. Having the mode switch in Shutdown under these conditions will not increase the probability of occurrence or consequences of an accident for the following reasons:

- 1) The reactor manual control system interlocks associated with the Shutdown position are more restrictive than those for the Refuel position. Specifically, with the mode switch in the Refuel position

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

10 CFR 50.92 EVALUATION

the one-rod-out interlock allows no more than one control rod to be withdrawn at a time. However, with the mode switch in the Shutdown position a rod block is enforced at all times so that no control rods may be withdrawn.

- 2) Specification 3.10.A.1 (Specification 3.9.1 for Unit 2) requires the mode switch to be locked in the Refuel position with the refueling interlocks operable during Core Alterations.

Therefore, allowing the mode switch to be in the Shutdown position while in the Refuel mode will provide for conditions which are at least as conservative as the conditions assumed in the accident analyses concerning the possibility of inadvertent criticality during refueling. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 2.B) The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Changing operational mode definitions will only serve to clarify requirements and avoid confusion during mode changes. This change will not affect existing operations or create any new modes of operation of any safety systems. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- 2.C) The proposed amendment does not involve a significant reduction in the margin of safety.

The proposed changes to the operational mode definitions will only enhance clarity. It will be easier for the TS user to determine when the reactor mode changes and which set of operability requirements are in effect. Some of these operability requirements concern limiting safety systems and therefore, safety limits. By simplifying identification of the current reactor mode, the TS user will be able to more easily determine limiting safety system operability requirements. Therefore, it is more likely the appropriate equipment will be operable and capable of fulfilling its safety function to prevent exceeding any safety limits. Therefore, this change does not involve a significant reduction in the margin of safety.



ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

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PROPOSED CHANGE 3:

This proposed change will revise the action statement for the residual heat removal service water (RHRSW) system shutdown cooling mode in Unit 2 Specification 3.7.1.1.

Existing Unit 2 Specification 3.7.1.1.b provides actions for inoperability of RHRSW pumps and/or subsystems required to support RHR shutdown cooling subsystems. However, this specification is written such that actions will be overly conservative in some situations and inadequate in other situations. This change will tie operability of a residual heat removal (RHR) shutdown cooling subsystem directly to the operability of the RHRSW subsystem which is used to support it. The only RHRSW subsystems which will be required to be operable will be those needed to support operable RHR shutdown cooling subsystems. In addition, this specification will state only one RHRSW pump must be operable in order to consider the RHRSW subsystem operable.

EVALUATION OF PROPOSED CHANGE 3:

- 3.A) The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The purpose of the RHRSW system is to remove decay heat from the RHR system which may be operating in one of several different modes. The mode of concern for Unit 2 Specification 3.7.1.1.b is the shutdown cooling mode in which the RHR and RHRSW systems remove decay heat from the primary coolant to reduce and maintain the coolant temperature below 212°F. Unit 2 Specification 3.9.12 covers operability requirements for RHR in the shutdown cooling mode. The proposed requirements for RHRSW in the shutdown cooling mode will ensure operability of an RHRSW subsystem capable of supporting operation of the RHR subsystem which satisfies the requirements of Specification 3.9.12. Since the RHR shutdown cooling specification serves to preclude a loss of shutdown cooling, and the proposed RHRSW specification will serve to ensure RHR is capable of performing this function, then the proposed change will not involve a significant increase in the probability of an accident previously evaluated. The shutdown cooling mode of RHR has no effect on the consequences of any type accident.

- 3.B) The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

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As stated above, the RHR system performs the shutdown cooling function and the RHRSW system supports the RHR system. This change will ensure the availability of the RHRSW system to perform this support function. This change will introduce no new operational modes of the RHR or RHRSW systems. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- 3.C) The proposed amendment does not involve a significant reduction in the margin of safety.

No safety limits or limiting safety system settings are affected by the shutdown cooling function of the RHR system or the supporting function of the RHRSW system. Therefore, this change does not involve a significant reduction in the margin of safety.

PROPOSED CHANGE 4:

This proposed change will alter the wording of Unit 2 Specification 3.9.3. This specification currently requires all control rods to be fully inserted during Core Alterations. The proposed change will require all control rods to be fully inserted when moving fuel assemblies or startup sources in the core, rather than during all Core Alterations.

This proposed change will also revise the wording of the bases for Specification 3.9.3. The phrase "during CORE ALTERATIONS" is being replaced with the phrase "during fuel or startup source movement."

EVALUATION OF PROPOSED CHANGE 4:

- 4.A) The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

This specification is being reworded to eliminate the self-contradictory nature of literal compliance with its present wording. This new wording will not change the intent of the specification which is preclusion of an inadvertent criticality during refueling. Unit 2 FSAR section 15.1.14 discusses a fuel assembly insertion error during refueling. This event involves loading a fuel assembly in an incorrect location with all control rods fully inserted and concludes no inadvertent criticality will occur.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

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The proposed wording of the specification will ensure the assumption that all rods are fully inserted is still valid during all fuel loading. Further assurance will be provided by Specification 3.9.1 which requires the reactor mode switch to be operable and locked in the Refuel position with the refueling interlocks operable during all Core Alterations. In the Refuel mode, the refueling interlocks will prevent movement of the refueling bridge over the core if the fuel grapple is loaded with a fuel bundle and any control rod is not fully inserted.

Since the proposed specification will continue to ensure the FSAR accident analysis assumptions are valid, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 4.B) The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

This change does not affect the intent of the specification. No new modes of operation will result. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- 4.C) The proposed amendment does not involve a significant reduction in the margin of safety.

No safety limits or limiting safety system settings are affected by Core Alterations or any other refueling activities. Therefore, this change does not involve a significant reduction in the margin of safety.

PROPOSED CHANGE 5:

This proposed change will add new Unit 1 Specification 3.10.E.3, "Requirements for Withdrawal of a Control Rod in the Cold Shutdown Condition" and new Unit 2 Specification 3.10.5, "Single Control Rod Withdrawal - Cold Shutdown", which will permit the withdrawal of a single control rod for testing while in Cold Shutdown (Unit 2 Mode 4) by imposing certain restrictions.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

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In addition, this proposed change will add bases for these new specifications for both units and will include a reference to new Unit 2 Specification 3.10.5 in the Unit 2 index.

The current Unit 2 Specification 3.10.5, "High Pressure Coolant Injection System," is being deleted along with its listing in the index.

The title of Unit 2 Specification 3/4 10.2, as listed in the index, is being corrected.

EVALUATION OF PROPOSED CHANGE 5:

- 5.A) The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

With the reactor mode switch in the Refuel position, the analyses for control rod withdrawal during refueling are applicable and, provided the assumptions of these analyses are satisfied in Cold Shutdown, these analyses will bound the consequences of an accident. Explicit safety analyses in the FSAR (Section 15.1.13) demonstrate the functioning of the refueling interlocks and adequate Shutdown Margin (SDM) will preclude unacceptable reactivity excursions.

Meeting the requirements of the specified LCOs or implementing the specified alternate conditions, along with the specified Actions and Surveillance Requirements, will provide the same protection against inadvertent criticality which normally exists in the Refuel mode. In addition, since this operation will be taking place in the Cold Shutdown condition, further protection from offsite releases will be provided by the fact that the vessel head will be installed with all head bolts fully tensioned. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Deletion of the current Specification 3.10.5, "High Pressure Coolant Injection System," will have no impact whatsoever because it is stated within the specification that it is for use during a one time test and is only applicable from June 2-9, 1980. Since this time period has elapsed, this specification is no longer applicable. Therefore, deletion of this specification does not involve a significant increase in the probability or consequences of an accident previously evaluated.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

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The correction of the title of Unit 2 Specification 3/4 10.2 in the index is strictly an editorial correction. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 5.B) The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Removal of one control rod and/or the associated control rod drive mechanism from the reactor pressure vessel is currently allowed in the Refuel mode by Unit 2 Specification 3.9.11.1. The proposed specification will allow the same operation in the Cold Shutdown mode provided the same protection is provided against inadvertent criticality which normally exists in the Refuel mode. Therefore, the proposed specification does not involve any new modes of operation, just performance of an existing operation in a different operational mode. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Deletion of the current Specification 3.10.5, "High Pressure Coolant Injection System," will have no impact whatsoever because it is stated within the specification that it is for use during a one time test and is only applicable from June 2-9, 1980. Since this time period has elapsed, this specification is no longer applicable. Therefore, deletion of this specification does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The correction of the title of Unit 2 Specification 3/4 10.2 in the index is strictly an editorial correction. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- 5.C) The proposed amendment does not involve a significant reduction in the margin of safety.

This specification does involve limiting safety system settings (LSSSs). The LSSSs which are normally required to be operable in the Refuel mode are also required to be operable in the Cold Shutdown mode while performing operations per the proposed specification. These requirements are intended to afford the same protection against inadvertent criticality as normally exist in the Refuel mode. By maintaining this level of protection, the margin of safety will be maintained at the same level which exists when this operation is being performed in the Refuel mode. Therefore, this change does not involve a significant reduction in the margin of safety.

ENCLOSURE 2 (Continued)

MISCELLANEOUS REFUELING SPECIFICATIONS

10 CFR 50.92 EVALUATION

Deletion of the current Specification 3.10.5, "High Pressure Coolant Injection System," will have no impact whatsoever because it is stated within the specification that it is for use during a one time test and is only applicable from June 2-9, 1980. Since this time period has elapsed, this specification is no longer applicable. Therefore, deletion of this specification does not involve a significant reduction in the margin of safety.

The correction of the title of Unit 2 Specification 3/4 10.2 in the index is strictly an editorial correction. Therefore, this change does not involve a significant reduction in the margin of safety.

ENCLOSURE 3

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:  
MISCELLANEOUS REFUELING SPECIFICATIONS  
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