ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION REVISIONS
BROWNS FERRY NUCLEAR PLANT
UNIT 1, 2, AND 3
(TVA BFNP TS 220)

PROPOSED CHANGES
UNIT 1

3.3.B. Control Rods

control rod directional control valves disarmed electrically. This requirement does not apply in the refuel condition when the reactor is vented. Two control rod drives may be removed as long as Specification 3.3.A.1 is met.

2. The control rod drive housing support system shall be in place during reactor power operation or when the reactor coolant system is pressurized above atmospheric pressure with fuel in the reactor vessel, unless all control rods are fully inserted and Specification 3.3.A.1 is met.

3.a Whenever the reactor is in the startup or run modes below 20% rated power the Rod Sequence Control System (RSCS) shall be operable, except that the RSCS constraints may be suspended by means of the individual rod bypass switches for

(1) special criticality tests, or
(2) control rod scram timing per 4.3.C.1.

When RSCS is bypassed on individual rods for these exceptions RWM must be operable per 3.3.B.3.b and a second party verification may not be used in lieu of RWM.

4.3.B Control Rods

a. Verify that the control rod is following the drive by observing a response in the nuclear instrumentation each time a rod is moved when the reactor is operating above the pre-set power level of the RSCS.

b. When the rod is fully withdrawn the first time after each refueling outage or after maintenance, observe that the drive does not go to the overtravel position.

2. The control rod drive housing support system shall be inspected after reassembly and the results of the inspection recorded.

3.a.1 The Rod Sequence Control System (RSCS) shall be demonstrated to be operable for a reactor startup by the following checks:

a. Performance of the comparator check of the group notch circuits within 8 hours prior to control rod withdrawal for the purpose of making the reactor critical.

b. Selecting and attempting to withdraw an out-of-sequence control rod after withdrawal of the first insequence control rod.

c. Attempting to withdraw a control rod more than one notch prior to other control rod movement after the group notch mode is automatically initiated.

3.3.B Control Rods

b. Whenever the reactor is in the startup or run modes below 20% rated power the Rod Worth Minimizer (RWM) shall be operable. With the RWM inoperable, verify control rod movement and compliance with the prescribed control rod pattern by a second licensed operator or other technically qualified member of the plant staff who is present at the reactor control console. Otherwise, control rod movement may be only by actuating the manual scram or placing the reactor mode switch in the shutdown position.

4.3.B Control Rods

2. The Rod Sequence Control System (RSCS) shall be demonstrated to be operable for a reactor shutdown by the following checks:

   a. Performance of the comparator check of the group notch circuits within 8 hours prior to automatic initiation of the group notch mode.

   b. Attempting to insert a control rod more than one notch prior to other control rod movement after the group notch mode is automatically initiated.

   c. Selecting and attempting to move an out-of-sequence control rod after insertion of the first insequence control rod after reaching a black and white rod pattern.

3.b.1 The Rod Worth Minimizer (RWM) shall be demonstrated to be operable for a reactor startup by the following checks:

   a. By demonstrating that the control rod patterns and sequence input to the RWM computer are correctly loaded following any loading of the program into the computer.

   b. Within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical, verify proper annunciation of the selection error of at least one out-of-sequence control rod.

   c. Within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical, the rod block function of the RWM shall be verified by moving an out-of-sequence control rod.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.3.B Control Rods	4.3.B Control Rods
	3.b.2. The Rod Worth Minimizer (RWM) shall be demonstrated to be operable for a reactor shutdown by the following checks: a. By demonstrating that the control rod patterns and sequence input to the RWM computer are correctly loaded following any loading of the program into the computer. b. Within 8 hours prior to RWM automatic initiation when reducing thermal power, verify proper annunciation of the selection error of at least one out-of-sequence control rod. c. Within one hour after RWM automatic initiation when reducing thermal power, the rod block function of the RWM shall be verified by moving an out-of-sequence control rod.
	3.b.3. When the RWM is not operable a second licensed operator or other technically qualified member of the plant staff shall verify that the correct rod program is followed except as specified in 3.3.B.3.a.

3.3.B Control Rods

c. If Specifications 3.3.B.3.a through .b cannot be met the reactor shall not be started, or if the reactor is in the run or startup modes at less than 20% rated power, control rod movement may be only by actuating the manual scram or placing the reactor mode switch in the shutdown position.

4. Control rods shall not be withdrawn for startup or refueling unless at least two source range channels have an observed count rate equal to or greater than three counts per second.

5. During operation with limiting control rod patterns, as determined by the designated qualified personnel, either :

a. Both RBM channels shall be operable or

b. Control rod withdrawal shall be blocked.

C. Scram Insertion Times

1. The average scram insertion time, based on the deenergization of the scram pilot valve solenoids as time zero, of all operable control rods in the reactor power operation conditions shall be no greater than:

% Inserted From Fully Withdrawn	Avg. Scram Insertion Times (net)
5	0.375
20	0.90
50	2.0
90	3.500

4.3.B Control Rods

4. Prior to control rod withdrawal for startup or during refueling, verify that at least two source range channels have an observed count rate of at least three counts per second.

5. When a limiting control rod pattern exists, an instrument functional test of the RBM shall be performed prior to withdrawal of the designated rod(s) and at least once per 24 hours thereafter.

C. Scram Insertion Times

1. After each refueling outage all operable rods shall be scram time tested from the fully withdrawn position with the nuclear system pressure above 800 psig. This testing shall be completed prior to exceeding 40% power. Below 20% power, only rods in those sequences (A_{12} and A_{34} or B_{12} and B_{34}) which were fully withdrawn in the region from 100% rod density to 50% rod density shall be scram time tested. The sequence restraints imposed upon the control rods in the 100-50 percent rod density groups to the preset power level may be removed by use of the individual bypass switches associated with those control rods which are fully or partially withdrawn and are not within the 100-50 percent rod density groups. In order to bypass a rod, the actual rod axial position must by known; and the rod must be in the correct in-sequence position. As required by 3.3.B.3.a a second licensed operator may not be used in lieu of RWM for this testing.

PROPOSED CHANGES
UNIT 2

3.3.B. Control Rods

control rod directional control valves disarmed electrically. This requirement does not apply in the refuel condition when the reactor is vented. Two control rod drives may be removed as long as Specification 3.3.A.1 is met.

2. The control rod drive housing support system shall be in place during reactor power operation or when the reactor coolant system is pressurized above atmospheric pressure with fuel in the reactor vessel, unless all control rods are fully inserted and Specification 3.3.A.1 is met.

3.a Whenever the reactor is in the startup or run modes below 20% rated power the Rod Sequence Control System (RSCS) shall be operable, except that the RSCS constraints may be suspended by means of the individual rod bypass switches for

(1) special criticality tests,
or
(2) control rod scram timing per 4.3.C.1.

When RSCS is bypassed on individual rods for these exceptions RWM must be operable per 3.3.B.3.b and a second party verification may not be used in lieu of RWM.

4.3.B Control Rods

a. Verify that the control rod is following the drive by observing a response in the nuclear instrumentation each time a rod is moved when the reactor is operating above the pre-set power level of the RSCS.

b. When the rod is fully withdrawn the first time after each refueling outage or after maintenance, observe that the drive does not go to the overtravel position.

2. The control rod drive housing support system shall be inspected after reassembly and the results of the inspection recorded.

3.a.1 The Rod Sequence Control System (RSCS) shall be demonstrated to be operable for a reactor startup by the following checks:

a. Performance of the comparator check of the group notch circuits within 8 hours prior to control rod withdrawal for the purpose of making the reactor critical.

b. Selecting and attempting to withdraw an out-of-sequence control rod after withdrawal of the first insequence control rod.

c. Attempting to withdraw a control rod more than one notch prior to other control rod movement after the group notch mode is automatically initiated.

3.3.B Control Rods

b. Whenever the reactor is in the startup or run modes below 20% rated power the Rod Worth Minimizer (RWM) shall be operable. With the RWM inoperable, verify control rod movement and compliance with the prescribed control rod pattern by a second licensed operator or other technically qualified member of the plant staff who is present at the reactor control console. Otherwise, control rod movement may be only by actuating the manual scram or placing the reactor mode switch in the shutdown position.

4.3.B Control Rods

2. The Rod Sequence Control System (RSCS) shall be demonstrated to be operable for a reactor shutdown by the following checks:

   a. Performance of the comparator check of the group notch circuits within 8 hours prior to automatic initiation of the group notch mode.

   b. Attempting to insert a control rod more than one notch prior to other control rod movement after the group notch mode is automatically initiated.

   c. Selecting and attempting to move an out-of-sequence control rod after insertion of the first insequence control rod after reaching a black and white rod pattern.

3.b.1 The Rod Worth Minimizer (RWM) shall be demonstrated to be operable for a reactor startup by the following checks:

   a. By demonstrating that the control rod patterns and sequence input to the RWM computer are correctly loaded following any loading of the program into the computer.

   b. Within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical, verify proper annunciation of the selection error of at least one out-of-sequence control rod.

   c. Within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical, the rod block function of the RWM shall be verified by moving an out-of-sequence control rod.

3.3.B Control Rods

4.3.B Control Rods

3.b.2. The Rod Worth Minimizer (RWM) shall be demonstrated to be operable for a reactor shutdown by the following checks:

a. By demonstrating that the control rod patterns and sequence input to the RWM computer are correctly loaded following any loading of the program into the computer.

b. Within 8 hours prior to RWM automatic initiation when reducing thermal power, verify proper annunciation of the selection error of at least one out-of-sequence control. rod.

c. Within one hour after RWM automatic initiation when reducing thermal power, the rod block function of the RWM shall be verified by moving an out-of-sequence control rod.

3.b.3. When the RWM is not operable a second licensed operator or other technically qualified member of the plant staff shall verify that the correct rod program is followed except as specified in 3.3.B.3.a.

3.3.B Control Rods

c. If Specifications 3.3.B.3.a through .b cannot be met the reactor shall not be started, or if the reactor is in the run or startup modes at less than 20% rated power, control rod movement may be only by actuating the manual scram or placing the reactor mode switch in the shutdown position.

4. Control rods shall not be withdrawn for startup or refueling unless at least two source range channels have an observed count rate equal to or greater than three counts per second.

5. During operation with limiting control rod patterns, as determined by the designated qualified personnel, either :

a. Both RBM channels shall be operable or

b. Control rod withdrawal shall be blocked.

C. Scram Insertion Times

1. The average scram insertion time, based on the deenergization of the scram pilot valve solenoids as time zero, of all operable control rods in the reactor power operation conditions shall be no greater than:

% Inserted From Fully Withdrawn	Avg. Scram Insertion Times (net)
5	0.375
20	0.90
50	2.0
90	3.500

4.3.B Control Rods

4. Prior to control rod withdrawal for startup or during refueling, verify that at least two source range channels have an observed count rate of at least three counts per second.

5. When a limiting control rod pattern exists, an instrument functional test of the RBM shall be performed prior to withdrawal of the designated rod(s) and at least once per 24 hours thereafter.

C. Scram Insertion Times

1. After each refueling outage all operable rods shall be scram time tested from the fully withdrawn position with the nuclear system pressure above 800 psig. This testing shall be completed prior to exceeding 40% power. Below 20% power, only rods in those sequences (A_{12} and A_{34} or B_{12} and B_{34}) which were fully withdrawn in the region from 100% rod density to 50% rod density shall be scram time tested. The sequence restraints imposed upon the control rods in the 100-50 percent rod density groups to the preset power level may be removed by use of the individual bypass switches associated with those control rods which are fully or partially withdrawn and are not within the 100-50 percent rod density groups. In order to bypass a rod, the actual rod axial position must by known; and the rod must be in the correct in-sequence position. As required by 3.3.B.3.a a second licensed operator may not be used in lieu of RWM for this testing.

PROPOSED CHANGES
UNIT 3

3.3 Reactivity Control

2. The control rod drive housing support system shall be in place during reactor power operation or when the reactor cooling system is pressurized above atmospheric pressure with fuel in the reactor vessel, unless all control rods are fully inserted and Specification 3.3.A.1 is met.

3.a Whenever the reactor is in the startup or run modes below 20% rated power the Rod Sequence Control System (RSCS) shall be operable, except that the RSCS constraints may be suspended by means of the individual rod bypass switches for

(1) special criticality tests, or
(2) control rod scram timing per 4.3.C.1.

When RSCS is bypassed on individual rods for these exceptions RWM must be operable per 3.3.B.3.b and a second party verification may not be used in lieu of RWM.

4.3 Reactivity Control

2. The control rod drive housing support system shall be inspected after reassembly and the results of the inspection recorded.

3.a.1 The Rod Sequence Control System (RSCS) shall be demonstrated to be operable for a reactor startup by the following checks:

a. Performance of the comparator check of the group notch circuits within 8 hours prior to control rod withdrawal for the purpose of making the reactor critical.

b. Selecting and attempting to withdraw an out-of-sequence control rod after withdrawal of the first insequence control rod.

c. Attempting to withdraw a control rod more than one notch prior to other control rod movement after the group notch mode is automatically initiated.

3.3. Reactivity Control

b. Whenever the reactor is in the startup or run modes below 20% rated power the Rod Worth Minimizer (RWM) shall be operable. With the RWM inoperable, verify control rod movement and compliance with the prescribed control rod pattern by a second licensed operator or other technically qualified member of the plant staff who is present at the reactor control console. Otherwise, control rod movement may be only by actuating the manual scram or placing the reactor mode switch in the shutdown position.

4.3. Reactivity Control

2. The Rod Sequence Control System (RSCS) shall be demonstrated to be operable for a reactor shutdown by the following checks:

a. Performance of the comparator check of the group notch circuits within 8 hours prior to automatic initiation of the group notch mode.

b. Attempting to insert a control rod more than one notch prior to other control rod movement after the group notch mode is automatically initiated.

c. Selecting and attempting to move an out-of-sequence control rod after insertion of the first insequence control rod after reaching a black and white rod pattern.

3.b.1 The Rod Worth Minimizer (RWM) shall be demonstrated to be operable for a reactor startup by the following checks:

a. By demonstrating that the control rod patterns and sequence input to the RWM computer are correctly loaded following any loading of the program into the computer.

b. Within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical, verify proper annunciation of the selection error of at least one out-of-sequence control rod.

c. Within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical, the rod block function of the RWM shall be verified by moving an out-of-sequence control rod.

3.3. Reactivity Control

4.3. Reactivity Control

3.b.2. The Rod Worth Minimizer (RWM) shall be demonstrated to be operable for a reactor shutdown by the following checks:

a. By demonstrating that the control rod patterns and sequence input to the RWM computer are correctly loaded following any loading of the program into the computer.

b. Within 8 hours prior to RWM automatic initiation when reducing thermal power, verify proper annunciation of the selection error of at least one out-of-sequence control rod.

c. Within one hour after RWM automatic initiation when reducing thermal power, the rod block function of the RWM shall be verified by moving an out-of-sequence control rod.

3.b.3. When the RWM is not operable a second licensed operator or other technically qualified member of the plant staff shall verify that the correct rod program is followed except as specified in 3.3.B.3.a.

3.3. Reactivity Control

c. If Specifications 3.3.B.3.a through .b cannot be met the reactor shall not be started, or if the reactor is in the run or startup modes at less than 20% rated power, control rod movement may be only by actuating the manual scram or placing the reactor mode switch in the shutdown position.

4.3.B Reactivity Control

ENCLOSURE 2
Description and Justification
Browns Ferry Nuclear Plant (BFN)
Units 1, 2, and 3

Description of Change

Section 3.3.B.3.a is being revised to improve readability and to change a reference to be consistent with the new numbering scheme (page 122 unit 1, page 123 unit 3).

Unit 2 only, page 122 section 3.3.B.3.a is being revised to specify when the Rod Sequence Control System (RSCS) constraints may be bypassed for individual control rods. This provision is already included in units 1 and 3 technical specifications (TS).

Sections 4.3.B.3.a and 4.3.B.3.b for units 1 and 3, and section 4.3.B.3.a for unit 2, are being revised to require a more suitable surveillance to prove RSCS operability for a startup or shutdown, respectively (pages 122 and 123 for units 1 and 2, pages 123 and 124 for unit 3).

Section 3.3.B.3.b is being deleted (page 123 units 1 and 2, page 124 unit 3).

Section 3.3.B.3.c is being reidentified as 3.3.B.3.b, and is being revised to more clearly specify acceptable alternatives when the Rod Worth Minimizer (RWM) is not operable (page 123 units 1 and 2, page 124 unit 3).

Sections 4.3.B.3.c is being re-identified as 4.3.B.3.b for units 1 and 3, and all units are being revised to require a more suitable surveillance to prove RWM operability for a startup or shutdown, respectively (pages 123 and 123a units 1 and 2, pages 124 and 125 unit 3).

Section 4.3.B.3.d for units 1 and 3, and section 4.3.B.3.c for unit 2, are being reidentified as 4.3.B.3.b.3, and are being revised to more clearly specify surveillance requirements for continued rod movement with the RWM inoperable (page 123a units 1 and 2 page 125 unit 3).

Section 3.3.B.3.d is being reidentified as 3.3.B.3.c, and is being revised to change actions to be taken if 3.3.B.3.a & b cannot be met (page 124 units 1 and 2, page 126 unit 3).

To improve the readability of sections 3.3.B.3 and 4.3.B.3, it has been necessary to introduce a new page, number 123a, for units 1 and 2 only.

Reason for Change

This change is a general revision to the TS sections 3.3.B.3 and 4.3.B.3 in order to:

1. Incorporate administrative changes to present RSCS and RWM surveillance requirements in a more orderly fashion, and to clarify the limiting condition for operation (LCO) existent with the RWM inoperable (as requested by the NRC letter to TVA from J. M. Taylor, dated August 5, 1985).

2. Achieve consistency between units.

3. Adopt Standard Technical Specification requirements for RSCS and RWM operability.

Justification of Changes

The RWM and RSCS are monitoring systems which ensure that the reactor operator adheres to a predetermined sequence of control rod withdrawals or insertions when the reactor is operating at low power levels. The rod withdrawal and insert sequence (insertions are made in a reverse order of withdrawals) is designed to limit the worth of any single control rod so that a postulated rod drop accident will not result in peak fuel enthalpies greater than 280 calories/gram.

1. Administrative Changes

   The proposed revision to section 3.3.B.3.a of units 1 and 3 is purely administrative in nature to correct a sentence grammatically and to re-number a section. The proposed revision to section 3.3.B.3.b is administrative because it clarifies the LCO with the RWM inoperable. This clarification is consistent with the wording found in Standard Technical Specifications.

2. Changes to Achieve Consistency Between Units

   The proposed revision to section 3.3.B.3.a of the unit 2 TS will allow suspension of RSCS constraints for individual rods to allow special criticality testing and scram timing, provided that the RWM remains operable. This is consistent with the LCO for units 1 and 3, and ensures that an automatic constraint on control rod patterns remains in place at low power conditions when RSCS constraints are reduced. The scram timing provision is already allowed by Technical Specification 4.3.C.1 and the criticality test provision is supported by the safety evaluation report for Amendment No. 76 to the BFN unit 1 TS.

3. Changes to Adopt Standard Technical Specification Requirements

   The proposed revision to section 4.3.B.3.a and 4.3.B.3.b affects the startup and shutdown surveillance requirements for RSCS and RWM. These proposed requirements will demonstrate that each function of RSCS and RWM is operable prior to when that function is required to enforce rod movement constraints, hence ensuring system operability.

   The RSCS surveillance requirements prior to a reactor startup will consist of (1) a comparator check that meets the same intent as the current TS requirements to ensure operability of the group notch circuitry, (2) testing the sequence mode by attempting to withdraw an out-of-sequence rod after the first in-sequence rod move has been made, and (3) attempting to move a control rod beyond allowable group notch limits when the group notch mode is automatically initiated to test the operability of the group notch mode. The first testing requirement has not changed in intent and has only been reworded to meet Standard Technical Specification format. The second testing requirement is less extensive than current TS because it only demonstrates the capability of the sequence being used to apply a rod block to another sequence. The proposed requirement is consistent with Standard Technical Specifications and has therefore been found to be acceptable by NRC. The third test requirement is in addition to current TS requirements and is consistent with Standard Technical Specifications.

The RSCS surveillance requirements for reactor shutdown will consist of (1) a comparator check that meets the same intent as the current TS requirements to ensure operability of the group notch circuitry, (2) attempting to move a control rod beyond the group notch limits when the group notch mode is automatically initiated to test the operability of the group notch mode, and (3) testing the sequence mode by attempting to insert an out-of-sequence control rod after the first in-sequence rod is inserted during the sequence mode. The first testing requirement has not changed in intent and has only been reworded to meet Standard Technical Specification (STS) format. The second testing requirement is in addition to current TS requirements and is consistent with STS. The third testing requirement appears less extensive than the requirement as written in the current TS. The proposed testing requirement is consistent with STS and the current testing requirement cannot be performed as written. Therefore, the proposed testing requirement constitutes an improvement in safety.

The RWM surveillance requirements prior to a reactor startup will consist of (1) checking the input data to the RWM computer, (2) verifying that selection of one out-of-sequence control rod will generate a select error, and (3) moving an out-of-sequence control rod to demonstrate rod block capability. The first requirement has adopted STS wording to avoid confusion on how to interpret the requirement. Misinterpretation of this requirement has resulted in enforcement action in the past. The second and third requirements meet the intent of the existing TS. The proposed wording of these requirements is consistent with STS with exception of the third, which is worded to accommodate allowable insert and withdraw errors and alternate withdraw limits. The requirement of current TS to perform the RWM computer on-line diagnostic test is being eliminated in order to achieve consistency with STS which do not require such a test. Because the actual blocking functions of RWM are being tested, the capability of the RWM to perform its safety function is adequately demonstrated without the on-line diagnostic.

The RWM surveillance requirements for a reactor shutdown will consist of (1) checking the input data to the RWM computer, (2) verifying that selection of one out-of-sequence control rod will generate a select error, and (3) moving an out-of-sequence control rod to demonstrate rod block capability. The first requirement has adopted STS wording to avoid confusion on how to interpret the requirement. Misinterpretation of this requirement has resulted in enforcement action in the past. The second requirement meets the intent of the existing TS and the proposed wording is consistent with STS. The third requirement is in addition to the current TS and is consistent with STS with the exception that it accomodates allowable insert and withdraw errors and alternate insert limits. The current requirement to perform the RWM computer on-line diagnostic test is being deleted and is justified above. The current requirement of 4.3.B.3.b.5 to verify proper rod group latching and insert error annunciation is being eliminated because the need for these tests is obviated by the proposed new requirements.

ENCLOSURE 3
Determination of No Significant Hazards Consideration
Browns Ferry Nuclear Plant (BFN)
Units 1, 2, and 3

Description of Amendment Request

The proposed amendments to BFN units 1, 2, and 3 technical specifications (TS) would be a general revision to the sections covering limiting conditions for operation and surveillance requirements for the Rod Worth Minimizer (RWM) and the Rod Sequence Control System (RSCS). These changes are proposed to make BFN TS consistent with Standard Technical Specifications (NUREG 0123) in the area of control rod pattern constraints under low power conditions. Specific changes involve:

1. Surveillance testing requirements for RWM and RSCS are being changed to require more suitable tests to ensure system operability.

2. A limiting condition for operation (LCO) which serves no safety function is being deleted.

3. Actions required when RWM is inoperable are being clarified.

4. The action required when sufficient rod pattern controls are not operable is being changed to an action which is more appropriate for the conditions.

The proposed amendment to BFN unit 2 TS would add a provision for bypassing RSCS constraints for individual control rods for the purpose of certain tests.

Basis for Proposed No Significant Hazards Consideration Determination

The RWM and RSCS are systems which constrain control rod patterns under conditions of low reactor thermal power. The design basis of both systems is to mitigate the affects of a control rod drop accident by limiting the peak fuel pellet enthalpy in such an event to less than 280 calories/gram.

1. The proposed revisions to the surveillance requirements will adopt the Standard Technical Specification testing requirements. Because the actual system functions remain unchanged and the operability and testing requirements are consistent with NRC guidance, there is no increase in the consequences of the previously analyzed rod drop accident. These revisions do not create the possibility of an accident or malfunction of any different type, since the system will have the same function as before and the worst case accident under these conditions has been analyzed. There is no reduction in the margin of safety as defined in the basis of the TS since the RWM and RSCS will still restrict peak fuel pellet enthalpy to less than 280 calories/gram in the event of a rod drop accident.

2. The LCO being deleted required that no rod movement be permitted after testing RSCS restraints while shutting down and before reaching the RSCS enforcing region. This is not consistent with the proposed testing requirements, since they will test RSCS restraints after the enforcing region is reached. Because all restraints necessary for RSCS to perform its function are unchanged, the probability or consequences of any previously analyzed accident is not increased. Plant procedure in shutting down will not be changed in that RSCS restraints will control rod movement when required, so that no unanalyzed accident possibility is introduced. Finally, since RSCS system operation is unchanged, no margin to safety as defined in the bases for the TS is reduced.

3. The actions required when RWM is inoperable are being reworded to make clear when a second person verification may substitute for RWM control. This is unchanged in intent from the current LCO and so does not increase the probability or consequences of any previously analyzed accident. Since no change in plant configuration or procedure will occur, no unanalyzed accident condition is introduced. Because RWM functions are not being changed, no margin to safety as described in the bases of the TS is reduced.

4. The action required when sufficient rod pattern controls are not present is being changed to allow complete suspension of rod movement as an acceptable alternative to immediately shutting down the reactor. This change will not affect the probability or consequences of any previously analyzed accident. By not allowing rod movement after rod pattern controls are lost, no rod pattern may be generated which results in any new, unanalyzed accident. Finally, since no unanalyzed situation may develope, no margin to safety as described in the basis for the TS is reduced.

Based on these findings, it is proposed to determine that this license amendment request involves no significant hazards consideration.

The proposed revision to what is currently section 3.3.B.3.b will delete a limiting condition for operation (LCO) which relates to the RSCS. This LCO currently requires that no control rod movement be allowed after testing RSCS restraints and before reaching the RSCS enforcing region, and that alignment of rod groups be done prior to performing surveillance tests. These requirements do not appear to serve a purpose for two reasons.

1. Rod alignment must be achieved prior to initiation of RSCS restraints in order to avoid total inability to move control rods.

2. Most of the RSCS shutdown checks in the proposed amendment are to be done after the RSCS is enforcing.

Based on these findings, and because deletion of the LCO is consistent with NRC guidance as found in the Standard Technical Specifications, removal of this LCO is judged to be acceptable from a safety analysis viewpoint.

The proposed revision to what is currently section 3.3.B.3.d will change the LCO which applies when either both RWM and RSCS are inoperable, or when RWM is inoperable and a second licensed operator is not available to verify that the RWM sequence is adhered to. Under the proposed LCO, allowing no control rod movement becomes an acceptable alternative to immediately actuating the manual scram or placing the reactor mode switch in the shutdown position. In the event that all automatic constraints on control rod movement are lost, simply prohibiting subsequent control rod movement will ensure that rod patterns which result in high control rod worths cannot be generated, hence fulfilling the intended function of the RWM and the RSCS. Based on these findings, and because this proposed LCO is consistent with NRC guidance as found in the Standard Technical Specifications, this revision is acceptable from a safety analysis viewpoint.