March 17, 2003

Mr. Mike Bellamy
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

SUBJECT: PILGRIM NUCLEAR POWER STATION - ISSUANCE OF AMENDMENT RE: RELOCATION OF CONTROL ROD BLOCK FUNCTIONS (TAC NO. MB6215)

Dear Mr. Bellamy:

The Commission has issued the enclosed Amendment No. 196 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated August 16, 2002.

This amendment relocates certain Control Rod Block functions from Technical Specifications 3/4.2.C, "Control Rod Block Actuation," Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the Updated Final Safety Analysis Report. The instrumentation functions being relocated are those functions that provide information to the operators to help prevent unnecessary automatic reactor protection system actuation. They are used to monitor core reactivity but they are not relied upon in the accident analysis to ensure specified fuel design limits are met for postulated transients or accidents. The associated Bases pages are also revised to reflect this change.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register Notice.

Sincerely,

/RA/

Travis L. Tate, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures: 1. Amendment No. 196 to License No. DPR-35
2. Safety Evaluation

cc w/encls: See next page

March 17, 2003

Mr. Mike Bellamy
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

SUBJECT: PILGRIM NUCLEAR POWER STATION - ISSUANCE OF AMENDMENT RE: RELOCATION OF CONTROL ROD BLOCK FUNCTIONS (TAC NO. MB6215)

Dear Mr. Bellamy:

The Commission has issued the enclosed Amendment No. 196 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated August 16, 2002.

This amendment relocates certain Control Rod Block functions from Technical Specifications 3/4.2.C, "Control Rod Block Actuation," Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the Updated Final Safety Analysis Report. The instrumentation functions being relocated are those functions that provide information to the operators to help prevent unnecessary automatic reactor protection system actuation. They are used to monitor core reactivity but they are not relied upon in the accident analysis to ensure specified fuel design limits are met for postulated transients or accidents. The associated Bases pages are also revised to reflect this change.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register Notice.

Sincerely,
/RA/
Travis L. Tate, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-293
Enclosures: 1. Amendment No. 196 to License No. DPR-35
2. Safety Evaluation
cc w/encls: See next page
DISTRIBUTION:

J. Clifford	C. Anderson, RI	PUBLIC	C. Raynor
PDI-2 Reading	T. Tate	OGC	G. Hill (2), T-5C3
ACRS	R. Dennig	S. Richards	F. Arner, RI
J. Bobiak, RI	E. Marinos	R. Pulsifer	

Accession Numbers: Letter: ML030570710, Text Spec: ML , Package: ML
*See previous concurrence

OFFICE	PDI-2/PM	PDI-2/PM	PDI-2/LA	EEIB	RTSB	OGC	PDI-2/SC
NAME	RPulsifer	TTate	SLittle for CRaynor, CRaynor - changes only	EMarinos*	CSchulten for RDennig*	RHoefling*	JBoska for JClifford
DATE	3/13/03	3/13/03	2/15/03, 3/13/03	2/10/03	2/12/03	2/20/03	3-14-03

OFFICIAL RECORD COPY

Pilgrim Nuclear Power Station

cc:

Resident Inspector
U. S. Nuclear Regulatory Commission
Pilgrim Nuclear Power Station
Post Office Box 867
Plymouth, MA 02360

Chairman, Board of Selectmen
11 Lincoln Street
Plymouth, MA 02360

Chairman, Duxbury Board of Selectmen
Town Hall
878 Tremont Street
Duxbury, MA 02332

Office of the Commissioner
Massachusetts Department of
Environmental Protection
One Winter Street
Boston, MA 02108

Office of the Attorney General
One Ashburton Place
20th Floor
Boston, MA 02108

Dr. Robert M. Hallisey, Director
Radiation Control Program
Commonwealth of Massachusetts
Executive Offices of Health and
Human Services
174 Portland Street
Boston, MA 02114

Regional Administrator, Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

John M. Fulton
Assistant General Counsel
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Mr. Mike Bellamy
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

Mr. C. Stephen Brennion
Licensing Superintendent
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Mr. Jack Alexander
Manager, Reg. Relations and
Quality Assurance
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Mr. David F. Tarantino
Nuclear Information Manager
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Ms. Jane Perlov
Secretary of Public Safety
Executive Office of Public Safety
One Ashburton Place
Boston, MA 02108

Mr. Stephen J. McGrail, Director
Attn: James Muckerheide
Massachusetts Emergency Management
Agency
400 Worcester Road
Framingham, MA 01702-5399

Chairman
Nuclear Matters Committee
Town Hall
11 Lincoln Street
Plymouth, MA 02360

cc: continued

Mr. William D. Meinert
Nuclear Engineer
Massachusetts Municipal Wholesale
Electric Company
P.O. Box 426
Ludlow, MA 01056-0426

ENTERGY NUCLEAR GENERATION COMPANY

ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 196
License No. DPR-35

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:

   A. The application for amendment filed by the Entergy Nuclear Operations, Inc. (the licensee) dated August 16, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-35 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 196, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 60 days. The implementation of this amendment shall include the relocation of certain Technical Specification requirements to the Pilgrim Nuclear Power Station Updated Final Safety Analysis Report in accordance with 10 CFR 50.71(e), as described in the licensee's application dated August 16, 2002, and evaluated in the staff's Safety Evaluation attached to this amendment.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by JBoska for/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 17, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 196

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove	Insert
3/4.2-19	3/4.2-19
3/4.2-20	3/4.2-20
3/4.2-21	3/4.2-21
3/4.2-22	3/4.2-22
3/4.2-23	3/4.2-23
3/4.2-35	3/4.2-35
3/4.2-41	3/4.2-41
B3/4.2-3	B3/4.2-3
B3/4.2-4	B3/4.2-4
B3/4.2-11	B3/4.2-11

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 196 TO FACILITY OPERATING LICENSE NO. DPR-35

ENTERGY NUCLEAR GENERATION COMPANY

ENTERGY NUCLEAR OPERATIONS, INC.

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

1.0 INTRODUCTION

By letter dated August 16, 2002, Entergy Nuclear Operations, Inc. (the licensee) submitted a request for changes to the Pilgrim Nuclear Power Station (Pilgrim) Technical Specifications (TSs). The requested changes would relocate certain Control Rod Block functions from TS 3/4.2.C, "Control Rod Block Actuation," Tables 3.2.C.1, 3.2.C-2, and 4.2.C, to the Updated Final Safety Analysis Report (UFSAR). The instrumentation functions being relocated are those functions that provide information to the operators to help prevent unnecessary automatic reactor protection system (RPS) actuation and are used to monitor core reactivity but which are not relied upon in the accident analysis to ensure specified fuel design limits are met for postulated transients or accidents.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act requires applicants for nuclear power plant operating licenses to include TSs as part of the license. In Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR 50.36), the Commission established the regulatory requirements related to the content of TSs. That regulation requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in TSs.

The Nuclear Regulatory Commission (NRC) developed criteria, as described in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58 FR 39132), to determine which of the design conditions and associated surveillances should be located in the TSs as LCOs. Four criteria were subsequently incorporated into the regulations by an amendment to 10 CFR 50.36 (60 FR 36953):

1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;

2. A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;

3. A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; or

4. A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

The Commission's Final Policy Statement and documentation related to the revision of 10 CFR 50.36 acknowledged that implementation of these criteria may permit some requirements presently in the TSs to be moved out of existing TSs to documents and programs controlled by licensees.

The changes proposed in this license amendment request apply to TS 3/4.2.C, "Control Rod Block Actuation," Tables 3.2.C.1, 3.2.C-2, and 4.2.C. The proposed license amendment relocates certain Control Rod Block instrument functions to the UFSAR. The NRC staff reviewed the Pilgrim TSs proposed for relocation for compliance with 10 CFR 50.36 and agreement with the precedent as established in NUREG-1433, "Standard Technical Specifications (STS) General Electric Plants, BWR/4, Rev. 2." The NRC staff review also ensured that future changes to relocated TSs requirements will receive appropriate regulatory control.

3.0 TECHNICAL EVALUATION

The Pilgrim TSs require the control rod block instrumentation that initiates a control rod block given in Table 3.2.C.1, "Instrumentation That Initiates Rod Blocks," including associated table notes, to be operable with their trip setpoints set consistent with the values shown in Table 3.2.C-2, "Control Rod Block Instrumentation Setpoints." The Pilgrim TSs also specify that control rod block instrumentation shall be functionally tested, calibrated and checked as required by Table 4.2.C, "Minimum Test and Calibration Frequency for Control Rod Blocks Actuation," including associated table notes. The Pilgrim TS relocation changes are summarized in the table that follows and discussed in more detail below.

Control Rod Block Instrumentation Relocations			
Affected TS	Summary of Relocated Requirements	Location of Relocated Requirements	Change Control Process for Relocated Requirements
Table 3.2.C.1	The Average Power Range Monitor (APRM), Intermediate Range Monitor (IRM), Source Range Monitor (SRM), Scram Discharge Volume (SDV) and Recirculation Flow Converter Trip Functions that initiates control rod blocks including requirements for Minimum and Available Operable Channels per Trip Function, Required Operational Conditions, and Table 3.2.C.1 Notes (1), (3), (4), and (6).	UFSAR	10 CFR 50.59
Table 3.2.C-2	The APRM, IRM, SRM, SDV and Recirculation Flow Converter Control Rod Block Trip Functions Trip Setpoints (if applicable) and note (2).	UFSAR	10 CFR 50.59
Table 4.2.C	The APRM, IRM, SRM, Scram Discharge Volume and Recirculation Flow Converter Instrument Channel minimum test and calibration frequency for control rod block actuation, including Table 4.2.C Note (3).		

3.1 Technical Background

The current licensing basis for TS 3/4.2.C includes installed instruments that perform a safety function and installed process monitoring instruments for the rod block monitor (RBM), rod worth minimizer (RWM) and for the reactor manual control system (RMCS). The control rod block instrumentation functions being relocated are those functions that provide information to the operators to help prevent unnecessary automatic RPS actuation and are used to monitor core reactivity but which are not relied upon in the accident analysis to ensure specified fuel design limits are met for postulated transients or accidents.

3.1.1 Rod Block Monitor

The purpose of the RBM rod block function is to limit control rod withdrawal if localized neutron flux exceeds a predetermined setpoint during control rod manipulations. It is assumed to function to block further control rod withdrawal to preclude a minimum critical power ratio safety limit violation. The RBM supplies a trip signal to the RMCS to appropriately inhibit control rod withdrawal during power operation above the low power range setpoint. The RBM instrumentation also functions to provide information to operators to monitor core reactivity during control rod movement. The RBM rod block function satisfies criterion 3 of 10 CFR 50.36(c)(2)(ii). Therefore, the requirements associated with the RBM will remain in TSs and will continue to be controlled by TS 3/4.2.C and are not affected by these proposed TSs changes.

3.1.2 Rod Worth Minimizer

The purpose of the RWM is to control rod patterns during startup, such that only specified control rod sequences and relative positions are allowed over the operating range from all control rods inserted to 20% rated thermal power. The sequences effectively limit the potential amount and rate of reactivity increase during a control rod drop accident. Prescribed control rod sequences are stored in the RWM, which will initiate control rod withdrawal and insert blocks when the actual sequence deviates beyond allowances from the stored sequence. The RWM satisfies criterion 3 of 10 CFR 50.36(c)(2)(ii). The licensee stated that the requirements associated with the RWM function will remain in the TSs and will continue to be controlled by TS 3/4.3.F and are not affected by these proposed TS changes.

3.1.3 Reactor Mode Switch - Shutdown Position

With the reactor mode switch in the shutdown position, a control rod withdrawal block is applied to all control rods to ensure that the shutdown condition is maintained. This function prevents inadvertent criticality as the result of a control rod withdrawal when the reactor mode switch is required to be in the shutdown position. The reactor mode switch has two channels, each inputting into a separate RMCS rod block circuit. A rod block in either RMCS circuit will provide a control rod block to all control rods. The Reactor Mode Switch - Shutdown Position satisfies criterion 3 of 10 CFR 50.36(c)(2)(ii). The licensee stated that the requirements for the reactor mode switch associated with the RBM function will remain in the TSs and will continue to be controlled by TS 3/4.2.C and are not affected by these proposed TS changes.

3.2 Evaluation

The relocation of requirements related to APRMs, IRMs, SRMs, SDV and Recirculation Flow Converter control rod block instrumentation affects TS 3/4.2.C. The instrumentation functions being relocated are those functions that are used to provide information to the operators to help prevent unnecessary automatic RPS actuation and are used to monitor core reactivity. These monitoring activities are important to ensure reactor operations are within the bounds of the safety analysis, but the rod block instrumentation functions are neither used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary before a design-basis accident (DBA), nor do they function as a primary success path to mitigate events which assume a failure of or a challenge to the integrity of a fission product barrier. Thus, the NRC staff finds that the relocated TS requirements are not needed to obviate the possibility that an abnormal situation or event will give rise to an immediate threat to the public health and safety. The NRC staff concludes that the relocated requirements discussed in the evaluation below are not required to be in the TSs pursuant to 10 CFR 50.36.

In addition, the NRC staff finds that sufficient regulatory controls exist under the regulations with regard to the relocated provisions. The facility and procedures described in the UFSAR can only be revised in accordance with the provisions of 10 CFR 50.59, which ensures records are maintained and establishes appropriate control over changes to the requirements removed from TSs. The documentation of these changes will be maintained by the licensee as required by 10 CFR 50.59. The submittal of the updated licensee-controlled documents (e.g., UFSAR) to the Commission will be as required by, and in accordance with 10 CFR 50.71(e) for the updated UFSAR.

3.2.1 Average Power Range Monitor (APRM) TSs Changes

The licensee proposes to relocate APRM Upscale (Flow Biased) from Table 3.2.C.1, and APRM Upscale, APRM Inoperative and APRM Downscale instrumentation requirements from TS Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the UFSAR.

A. APRM Upscale (Flow Biased), APRM Upscale and APRM Inoperative

The APRM Upscale (Flow Biased) and APRM Upscale rod block functions are installed instrumentation used to avoid conditions that would require RPS action if allowed to proceed. The APRM Upscale rod block alarm setting is selected to initiate a rod block before the APRM high neutron flux scram setting is reached. The APRM Inoperative rod block alarm assures that no control rod is withdrawn unless the average power range neutron monitoring channels are either in service or properly bypassed.

B. APRM Downscale

The APRM Downscale rod block function assures that no control rod is withdrawn during power range operation unless the average power range neutron monitoring channels are operating properly or are correctly bypassed. This requires all un-bypassed APRMs to be on scale during reactor operations while in the Run MODE.

The APRM control rod block instrumentation is installed to prevent conditions that would otherwise require actuation of the RPS if plant conditions were allowed to persist, such as during a "control rod withdrawal error at power." The APRMs use Local Power Range Monitor (LPRM) signals to provide information about the average core power and to create the APRM rod block signal. The circuitry for APRM Upscale (Flow Biased), APRM Upscale and APRM Inoperative is arranged to initiate a rod block regardless of the position of the mode switch whereas, the circuitry for APRM Downscale is arranged to initiate a rod block with the mode switch in the run position. The APRM rod block functions; however, are not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, nor do they function as a primary success path to mitigate a DBA or transient.

3.2.2 Intermediate Range Monitor (IRM) TSs Changes

The licensee proposes to relocate IRM Downscale, IRM Detector not in Startup Position, IRM Upscale, and IRM Inoperative instrumentation requirements from TS Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the UFSAR.

A. IRM Upscale

The IRM Upscale rod block instrumentation assures no control rod is withdrawn unless the intermediate range neutron monitoring equipment is properly up-ranged during a reactor startup. This rod block also provides a means to stop rod withdrawal in time to avoid conditions requiring RPS action to scram the reactor in the event that a rod withdrawal error is made during low neutron flux level operations.

B. IRM Detector not in Startup Position

Any IRM detector not fully inserted into the core, rod block function assures that no control rod is withdrawn during low neutron flux level operations unless required neutron monitoring capabilities are available by having all IRM detectors properly located.

C. IRM Inoperative

The IRM inoperative alarm rod block instrumentation function assures that no control rod is withdrawn during low neutron flux level operations unless required neutron monitoring capabilities are available by having all IRM channels in service or properly bypassed.

D. IRM Downscale

The IRM downscale alarm rod block instrumentation function assures that no control rod is withdrawn during low neutron flux level operations unless required neutron monitoring capabilities are available except when the IRM range switch is on the lowest range. This rod block prevents the continuation of a reactor startup if the operator up ranges the IRM too far for the existing flux level, thus, the rod block ensures that the IRM is on scale if control rods are to be withdrawn.

The IRM rod block instrumentation is installed to monitor the neutron flux levels during refueling, shutdown, and startup conditions. The IRM control rod block prevents a control rod withdrawal if the IRM reading exceeds a preset value, or if the IRM is inoperable. The circuitry for these functions is arranged to initiate a rod block with the mode switch in the Refuel or Shutdown positions. The rod block signals initiated by the IRM functions, however, are not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, nor do they function as a primary success path to mitigate a DBA or transient.

3.2.3 Source Range Monitor (SRM) TS Changes

The licensee proposes to relocate SRM Detector not in Startup Position, SRM Inoperative, SRM Downscale, and SRM Upscale instrumentation requirements from TS Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the UFSAR.

A. SRM Upscale

The SRM Upscale rod block instrumentation assures no control rod is withdrawn unless the source range neutron monitoring equipment is retracted and a RETRACT permissive signal is available during a reactor startup. This rod block setting is selected at the upper end of the range over which the SRM is designed to detect and measure neutron flux.

B. SRM Detector not in Startup Position

SRM Detector not in Startup Position occurs if any SRM detector is not fully inserted into the core when the SRM count level is below the retract permit level and the associated IRM range switches are on either of the two lowest ranges. This rod block instrument function assures that no control rod is withdrawn unless all required SRM detectors are properly inserted when they are relied upon to provide the operator with neutron flux level information.

C. SRM Inoperative

The SRM inoperative alarm rod block instrumentation function assures that no control rod is withdrawn during low neutron flux level operations unless required neutron monitoring capabilities are available by having all SRM channels in service or properly bypassed.

D. SRM Downscale

The SRM downscale alarm rod block instrumentation function assures that no control rod is withdrawn during low neutron flux level operations with any IRM range switch on any of the three lowest ranges unless the SRM count rate is above the minimum prescribed for low neutron flux level monitoring.

The SRM control rod block instrumentation is installed to monitor neutron flux during refueling, shutdown, and startup conditions. When IRMs are not above Range 2, the SRM control rod block prevents a control rod withdrawal if the count rate exceeds a preset value or falls below a preset limit. The circuitry for these functions is arranged to initiate a rod block with the mode switch in the Refuel or Shutdown positions. The rod block signals initiated by the SRM functions, however, are not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, nor do they function as a primary success path to mitigate a DBA or transient.

3.2.4 Scram Discharge Instrument Volume (SDV) TS Changes

The licensee proposes to relocate SDV Water Level High and SDV Scram Trip Bypassed instrumentation requirements from TS Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the UFSAR.

A. Scram Discharge Instrument Volume Water Level - High

This control rod block function assures that no control rod is withdrawn unless enough capacity is available in the scram discharge water volume to accommodate the discharge water from a reactor scram. The setting is selected to initiate a rod block well in advance of that level which produces a scram.

B. Scram Discharge Instrument Volume - Scram Trip Bypassed

This control rod block function assures no control rod is withdrawn while the scram discharge instrument volume high water level scram function is out of service.

The SDV control rod block instrumentation uses signals derived from SDV level monitors to prevent control rod withdrawals when accumulated water reaches a pre-set level in the SDV. This rod block signal provides an indication to the operator that water is accumulating in the SDV and prevents further rod withdrawals. With continued water accumulation, a RPS initiated scram signal will occur. Thus, the SDV water level rod block signal provides an opportunity for the operator to take action to avoid a reactor scram. The circuitry for these functions is arranged to initiate a rod block regardless of the position of the mode switch. The rod block signals initiated by the SDV instrumentation, however, are not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, nor do they function as a primary success path to mitigate a DBA or transient.

3.2.5 Recirculation Flow Converter TS Changes

The licensee proposes to relocate Recirculation Flow Converter Upscale, Recirculation Flow Converter Inoperative, and Recirculation Flow Converter Comparator Mismatch instrumentation requirements from TS Tables 3.2.C.1, 3.2.C-2, and 4.2.C to the UFSAR.

A. Recirculation Flow Converter - Upscale and Recirculation Flow Converter - Inoperative

These control rod block instrument functions assure that no control rod is withdrawn unless the difference between the outputs of the flow converters is within limits and the comparator is in service.

B. Recirculation Flow Converter - Comparator Mismatch

This control rod block instrument function assures that no control rod is withdrawn unless the recirculation flow converters are operable. Recirculation flow is used to bias the APRM upscale rod block trip.

The Recirculation Flow Converter control rod blocks provide a monitoring function to detect failure of the recirculation flow control system Recirculation Flow Converter. Failure(s) of a Recirculation Flow Converter can result in an increase or a mismatch in reactor recirculation flow. An increase in reactor recirculation flow causes an increase in neutron flux that results in an increase in neutron power. Neutron flux increases are monitored by the APRM RPS instrumentation while flow mismatches are controlled by Pilgrim TS 3.6.F. The circuitry for the Recirculation Flow Converter - Comparator Mismatch function is arranged to initiate a rod block regardless of the position of the mode switch. The Recirculation Flow Converter rod blocks, however, are not used to detect a significant abnormal degradation of the reactor coolant pressure boundary, nor do they function as a primary success path to mitigate a DBA or transient.

3.2.6 Additional Administrative Changes

The moving of the APRM, IRM, SRM, SDV, and Recirculation Flow Converter trip functions from Table 3.2.C.1 on pages 3/4.2-19, 3/4.2-20, and 3/4.2-21 to the UFSAR left blank spaces on these pages. The “Reactor Mode Switch in Shutdown” trip function was moved from page 3/4.2-21 to page 3/4.2-19. This left pages 3/4.2-20 and 3/4.2-21 blank so the words, “This page was left intentionally blank” were added to these pages.

Each of the revised TS pages had the word “Revision” with a number after it placed just above the listing of applicable amendment numbers that had changed each of the individual pages. This revision number reflected a licensee change process which will not be used on the pages in the future. The word “Revision” and the number is being deleted.

Adding the words “This page was left intentionally blank” on pages 3/4.2-20 and 3/4.2-21 and the deletion of the word “Revision” with its applicable revision number on all of the changed TS and Bases pages is strictly an administrative change and has no impact on safety, therefore, these changes are acceptable.

3.2.7 Bases Changes

The licensee has relocated the appropriate information from the Bases to the UFSAR to reflect the corresponding TS changes and the staff has no objection.

3.3 Evaluation Summary

The NRC staff concludes that the TS requirements being relocated to the UFSAR are appropriate for relocation under the criteria in 10 CFR 50.36. In addition, the staff finds that appropriate controls exist for all of the current specifications, requirements, and information that are being moved to licensee-controlled documents. The NRC staff also concludes that, in accordance with the Final Policy Statement, sufficient regulatory controls exist under the regulations, specifically 10 CFR 50.59 and 10 CFR 50.71(e). Accordingly, these changes in specifications, information, and requirements, as described in this evaluation, are acceptable and may be relocated from Pilgrim TSs and placed in the UFSAR.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Massachusetts State Official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 68735). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Schulten

Date: March 17, 2003