Entergy

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Michael A. Balduzzi
Site Vice President

December 27, 2006

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

SUBJECT: Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
Docket No. 50-293
License No. DPR-35

License Amendment Request for Adoption of TSTF-484 Revision 0, "Use of TS 3.10.1 for Scram Time Testing Activities"

LETTER NUMBER: 2.06.102

Dear Sir or Madam:

In accordance with the provisions of 10 CFR 50.90, Entergy Nuclear Operations, Inc. (Entergy) is submitting a request for an amendment to the Technical Specifications (TS) for Pilgrim Nuclear Power Station.

The proposed amendment would revise Limiting Condition for Operation (LCO) 3.14.A to adopt the provisions of Nuclear Regulatory Commission (NRC) approved Technical Specification Task Force (TSTF) change TSTF-484, Revision 0, "Use of TS 3.10.1 for Scram Time Testing Activities". The Notice of Availability of this TS improvement was published in the Federal Register on October 27, 2006 (71 FR 63050) as part of the Consolidated Line Item Improvement Process (CLIIP).

Attachment 1 provides an evaluation of the proposed change. Attachment 2 provides the existing TS and Bases pages marked up to show the proposed change. Attachment 3 provides the proposed TS pages in final typed format. Proposed TS Bases are provided for information only.

This letter contains no regulatory commitments. Once approved, the amendment shall be implemented within 60 days.

Entergy requests approval of the proposed License Amendment by April 1, 2007 to support the upcoming refueling outage at Pilgrim Station scheduled to begin April 6, 2007.

A001

If you have any questions or require additional information, please contact Bryan Ford at (508) 830-8403.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 27th of December 2006.

Sincerely,

Kevin H. Bronson For MAB.

Michael A. Balduzzi

ERS/dl
Attachments:
1. Evaluation of Proposed Change (2 pages)
2. Marked Up Technical Specification and Bases Pages (7 pages)
3. Proposed TS and Bases pages (Retyped) (6 pages)

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Attachment 1 to 2.06.102

Evaluation of Proposed Change

License Amendment Request to Adopt TSTF-484 Revision 0, "Use of TS 3.10.1 for Scram Time Testing Activities"

Evaluation of Proposed Change

1.0 DESCRIPTION

The proposed amendment would revise Special Operations Limiting Condition for Operation (LCO) 3.14.A, and the associated Bases, to expand its scope to include provisions for temperature excursions greater than 212 degrees F as a consequence of inservice leak and hydrostatic testing, and as a consequence of scram time testing initiated in conjunction with an inservice leak or hydrostatic test while considering operational conditions to remain in Cold Shutdown. Pilgrim custom technical specification (CTS) LCO 3.14.A is equivalent to the improved standard technical specification (ITS) LCO 3.10.1.

This change is consistent with Nuclear Regulatory Commission (NRC) approved Technical Specification Task Force (TSTF) change traveler TSTF-484, Revision 0, "Use of TS 3.10.1 for Scram Time Testing Activities". The availability of this TS 3.10.1 revision was announced in the Federal Register on October 27, 2006 (71 FR 63050) as part of the Consolidated Line Item Improvement Process (CLIIP) (Reference 1).

2.0 PROPOSED CHANGE

Consistent with the NRC approved Revision 0 of TSTF-484, the proposed TS changes include a revised TS 3.14.A "Inservice Hydrostatic and Leak Testing Operation". Proposed revisions to the TS Bases are also included in this application. Adoption of the TS Bases associated with TSTF 484, Revision 0 is an integral part of implementing this TS amendment. The changes to the affected TS Bases will be incorporated in accordance with the TS Bases Control Program.

This application is being made in accordance with the CLIIP. Entergy is not proposing variations or deviations from the TS changes described in TSTF-484, Revision 0. The NRC staff's model safety evaluation (SE) published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability refers to scram time testing performed in accordance with LCO 3.10.4, "Single Control Rod Withdrawal – Cold Shutdown." Scram time testing at Pilgrim is currently performed in accordance with Pilgrim CTS 3/4.3.C and others. Additionally, by Reference 2, Entergy (Pilgrim) previously submitted a license amendment request to adopt Special Operations LCO 3.10.4, "Single Control Rod Withdrawal – Cold Shutdown" as Pilgrim CTS 3/4.14.D. The adoption of this Special Operations LCO will make the presentation of Pilgrim's CTS more consistent with NUREG-1433, Rev. 3, STS, GE Plants BWR/4. This difference in TS presentation does not constitute a technical difference from the conclusions of the NRC staff's model safety evaluation (SE) published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability that would preclude Pilgrim from adopting the provisions of TSTF-484, Rev. 0.

3.0 BACKGROUND

The background for this application is adequately addressed by the NRC Notice of Availability published on October 27, 2006 (71 FR 63050).

4.0 TECHNICAL ANALYSIS

Entergy has reviewed the safety evaluation published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. Entergy has concluded that the technical justifications presented in the SE prepared by the NRC staff are applicable to Pilgrim Nuclear Power Station and therefore justify this amendment for the incorporation of the proposed changes to the Pilgrim TS.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Determination

Entergy has reviewed the no significant hazards determination published on August 21, 2006 (71 FR 48561) as part of the CLIIP Notice for Comment. The no significant hazards determination was made available on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. Entergy has concluded that the determination presented in the notice is applicable to Pilgrim and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

5.2. Applicable Regulatory Requirements/Criteria

A description of the proposed TS change and its relationship to applicable regulatory requirements was provided in the NRC Notice of Availability published on October 27, 2006 (71 FR 63050).

6.0 ENVIRONMENTAL CONSIDERATION

Entergy has reviewed the environmental evaluation included in the safety evaluation (SE) published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. Entergy has concluded that the staff's findings presented in that evaluation are applicable to Pilgrim and the evaluation is hereby incorporated by reference for this application.

7.0 REFERENCES

1. Federal Register Notice, "Notice of Availability of Model Safety Evaluation on Technical Specification Improvement To Modify Requirements Regarding LCO 3.10.1, Inservice Leak and Hydrostatic Testing Operation Using the Consolidated Line Item Improvement Process," published October 27, 2006 (71 FR 63050).

2. Entergy letter to NRC, ENO 2.05.072, "Technical Specifications Amendment Request for Single Control Rod Withdrawal Allowances, TS 3/4.14 "Special Operations", dated October 18, 2005 (TAC MC9018).

Attachment 2 to 2.06.102

Marked Up Technical Specification and Bases Pages

(7 pages)

206102 marked-up pages

Technical Specification Pages

3/4.14-1
3/4.14-2

Bases Pages

B3/4.14-1
B3/4.14-2
B3/4.14-3

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.14 SPECIAL OPERATIONS

4.14 SPECIAL OPERATIONS

A. Inservice Hydrostatic and Leak Testing Operation

A. Inservice Hydrostatic and Leak Testing Operation

Specification

The average reactor coolant temperature specified in the definition of "Cold Shutdown" and "Cold Condition" may be considered "NA", and operation considered not to be in "Hot Shutdown" ~~or >212° F to allow performance of an inservice hydrostatic test or leak test provided that the following requirements are met:~~

>212°F or

INSERT 1

Perform the applicable surveillance requirements for the required LCOs at the frequency specified by the applicable surveillance requirements.

Table 3.2A	Reactor Low Water Instrumentation
LCO 3.7.B.1	Standby Gas Treatment System (SGTS)
LCO 3.7.C.1	Secondary Containment

Applicability

During performance of inservice hydrostatic testing and system leakage pressure tests of the reactor coolant system with average coolant temperature >212° F.

Actions

NOTE: Separate Condition entry is allowed for each requirement of the LCO.

A. One or more of the above requirements not met:

1. **NOTE:** Required Actions to be in Cold Shutdown/Cold Condition include reducing average reactor coolant temperature to ≤ 212° F.

   Immediately enter the applicable Condition of the affected LCO.

LIMITING CONDITIONS FOR OPERATION (continued)

SURVEILLANCE REQUIREMENTS

OR

2.1 Immediately suspend activities that could increase the average reactor coolant temperature or pressure.

AND

2.2 Reduce average reactor coolant temperature to $\leq$ 212° F within 24 hours

BASES:

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION

Background

The purpose of this Special Operations LCO is to allow certain reactor coolant pressure tests to be performed in Cold Shutdown/Cold Condition when the metallurgical characteristics of the reactor pressure vessel (RPV) require the pressure testing at reactor coolant temperatures close to, or greater than 212°F (normally corresponding to Hot Shutdown). INSERT 2

Inservice hydrostatic testing and system leakage pressure tests required by Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code are performed prior to the reactor going critical after a refueling outage. Recirculation pump operation and a water solid RPV (except for an air bubble for pressure control) are used to achieve the necessary temperatures and pressures required for these tests. The minimum temperatures (at the required pressures) allowed for these tests are determined from the RPV pressure and temperature (P/T) limits required by LCO 3.6.A.2, "Primary System Boundary - Thermal and Pressurization Limitations." These limits are conservatively based on the fracture toughness of the reactor vessel, taking into account anticipated vessel neutron fluence.

With increased reactor vessel fluence over time, the minimum allowable vessel temperature increases at a given pressure. Periodic updates to the RPV P/T limit curves are performed as necessary, based upon the results of analyses of irradiated surveillance specimens removed from the vessel. In the future it is expected that hydrostatic and leak testing ~~will~~ may eventually be required with minimum reactor coolant temperatures exceeding 212°F. ~~Even with minimum temperature requirements below 212°F, the margin between the minimum test temperature and 212°F is not great enough for the operators to perform the test without a challenge to their ability to maintain temperature below 212°F due to lack of exact control over test temperatures.~~ INSERT 3

Applicable Safety Analyses

INSERT 4

Allowing the reactor to be considered in Cold Shutdown/Cold Condition ~~during hydrostatic or leak testing,~~ when the reactor coolant temperature is > 212°F, effectively provides an exception to Hot Shutdown requirements, including OPERABILITY of primary containment and the full complement of redundant Emergency Core Cooling Systems. Since the ~~hydrostatic or leak~~ tests are performed nearly water solid, at low decay heat values, and near Cold Shutdown/Cold Condition, the stored energy in the reactor core will be very low. Under these conditions, the potential for failed fuel and a subsequent increase in coolant activity above the LCO 3.6.B.1, "Coolant Chemistry," limits are minimized. In addition, the secondary containment will be OPERABLE, in accordance with this Special Operations LCO, and will be capable of handling any airborne radioactivity or steam leaks that could occur during the performance of hydrostatic or leak testing. The required pressure testing conditions provide adequate assurance that the consequences of a steam leak will be conservatively bounded by the consequences of the postulated main steam line break outside of primary containment described in Reference 2. Therefore, these requirements will conservatively limit radiation releases to the environment.

BASES:

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION (continued)

Applicable Safety Analyses (continued)

In the event of a large primary system leak, the reactor vessel would rapidly depressurize, allowing the low-pressure core cooling systems to operate. The capability of the low-pressure coolant injection and core spray subsystems, as required in Cold Shutdown/Cold Condition by LCO 3.5.A.5, "Core Spray and LPCI Systems," are more than adequate to keep the core flooded under this low decay heat load condition. Small system leaks would be detected by leakage inspections before significant inventory loss occurred.

For the purposes of this test, the protection provided by normally required Cold Shutdown/Cold Condition applicable LCOs, in addition to the secondary containment requirements, required by this Special Operations LCO, will ensure acceptable consequences during normal hydrostatic test conditions and during postulated accident conditions.

As described in LCO 3.0.7, compliance with Special Operations LCOs is optional, and therefore, no criteria of 10 CFR 50.36(c)(2)(ii) apply. Special Operations LCOs provide flexibility to perform certain operations by appropriately modifying requirements of other LCOs.

6

LCO

As described in LCO 3.0.7, compliance with this Special Operations LCO is optional. Operation at reactor coolant temperatures > 212°F can be in accordance with the other Technical Specifications without meeting this Special Operations LCO or its ACTIONS. This option may be required due to P/T limits, however, which require testing at temperatures > 212°F, and performance of inservice leak and hydrostatic testing would also necessitate the inoperability of some subsystems normally required to be OPERABLE when the reactor coolant temperatures is > 212°F. INSERT 5

If it is desired to perform these tests while complying with this Special Operations LCO, then the Cold Shutdown/Cold Condition applicable LCOs and the additional LCOs specified by LCO 3.14.A must be met. The additional requirements for secondary containment, Standby Gas Treatment system, and reactor low water level instrumentation that initiates Reactor Building Isolation and Control system will provide sufficient protection for operations at reactor coolant temperatures >212°F for the purpose of performing ~~either~~ an inservice leak or hydrostatic test, INSERT 6

This LCO allows primary containment to be open for frequent unobstructed access to perform inspections, and for outage activities on various systems to continue consistent with the Cold Shutdown/Cold Condition applicable requirements~~, that are in effect prior to and after this operation.~~

BASES:

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION (continued)

Applicability

INSERT 8

The Cold Shutdown/Cold Condition definition may only be modified for the performance of inservice leak or hydrostatic tests so that special operation LCO 3.14.A can be considered as in Cold Shutdown/Cold Condition, even though the reactor coolant temperature is > 212°F. The additional operability requirements for secondary containment, Standby Gas Treatment system, and reactor low water level instrumentation that initiates Reactor Building Isolation and Control system when reactor coolant temperature is above 212°F provides conservatism in the response of the unit to any event that may occur. Operations in all other MODES are unaffected by this LCO.

INSERT 7

Actions

A Note has been provided to modify the ACTIONS related to inservice leak and hydrostatic testing operation. A Note has been provided that allows separate Condition entry for each requirement of the LCO.

A.1
If an LCO specified in LCO 3.14.A is not met, the ACTIONS applicable to the stated requirements are entered immediately and complied with. Required Action A.1 has been modified by a Note that clarifies the intent of another LCO's Required Action to be in Cold Shutdown/Cold Condition includes reducing the average reactor coolant temperature to < 212°F.

A.2.1 and A.2.2
Required Action A.2.1 and Required Action A.2.2 are alternate Required Actions that can be taken instead of Required Action A.1 to restore compliance with the normal Technical Specification requirements, and thereby exit this Special Operation LCO's Applicability. Activities that could further increase reactor coolant temperature or pressure are suspended immediately, in accordance with Required Action A.2.1, and the reactor coolant temperature is reduced to establish normal Cold Shutdown/Cold Condition requirements. The allowed Completion Time of 24 hours for Required Action A.2.2 is based on engineering judgment and provides sufficient time to reduce the average reactor coolant temperature from the highest expected value to < 212°F with normal cooldown procedures.

Surveillance Requirements (SR)

SR 4.14.A
The LCOs made applicable are required to have their Surveillances met to establish that this LCO is being met. A discussion of the applicable Surveillance Requirements is provided in their respective Bases.

References:
1. NUREG 1433, Standard Technical Specifications for General Electric Plants, BWR/4, Revision 2
2. Pilgrim Nuclear Power Station Updated Final Safety Analysis Report, Section 14.5.4 "Main Steam Line Break Accident"

INSERT 1

to allow reactor coolant temperature >212° F:

- For performance of an inservice hydrostatic test or leak test.
- As a consequence of maintaining adequate pressure for an inservice hydrostatic test or leak test.
- As a consequence of maintaining adequate pressure for control rod scram time testing initiated in conjunction with an inservice hydrostatic test or leak test.

Provided the following requirements are met:

INSERT 2

or to allow completing these reactor coolant pressure tests when the initial conditions do not require temperatures greater than 212°F. Furthermore, the purpose is to allow continued performance of control rod scram time testing required by SR 4.3.C.1 if reactor coolant temperatures exceed 212°F when the control rod scram time testing is initiated in conjunction with an inservice hydrostatic or leak test.

INSERT 3

However, even with required minimum temperature requirements below 212°F, maintaining RCS temperature within a small band during the test can be impractical. Removal of the heat addition from recirculation pump operation and reactor core decay heat is coarsely controlled by control rod drive hydraulic system flow and reactor water cleanup system non-regenerative heat exchanger operation. Test conditions are focused on maintaining a steady state pressure, and tightly limited temperature control poses an unnecessary burden on the operator and may not be achievable in certain instances.

Other testing may be performed in conjunction with the allowances for inservice hydrostatic or leak tests and control rod scram time tests.

INSERT 4

during, or as a consequence of, hydrostatic or leak testing, or as a consequence of control rod scram time testing initiated in conjunction with an inservice hydrostatic or leak test,

INSERT 5

Additionally, even with required minimum reactor coolant temperatures < 212°F, RCS temperatures may drift above 212°F during performance of inservice hydrostatic or leak testing or during subsequent control rod scram time testing, which is typically performed in conjunction with inservice hydrostatic or leak testing. While this Special Operations LCO is provided for inservice hydrostatic or leak testing, and for control rod scram time testing initiated in conjunction with an inservice hydrostatic or leak test, parallel performance of other tests and inspections is not precluded.

INSERT 6

and for control rod scram time testing initiated in conjunction with an inservice hydrostatic or leak test.

INSERT 7

, or as a consequence of,

INSERT 8

, or as a consequence of control rod scram time testing initiated in conjunction with an inservice leak or hydrostatic test,

Attachment 3 to 2.06.102

Proposed TS and Bases Pages (Retyped)

(6 pages)

Technical Specification Pages

3/4.14-1
3/4.14-2

Bases Pages

B3/4.14-1
B3/4.14-2
B3/4.14-3
B3/4.14-3a

LIMITING CONDITIONS FOR OPERATION

3.14 SPECIAL OPERATIONS

A. Inservice Hydrostatic and Leak Testing Operation

Specification

The average reactor coolant temperature specified in the definition of "Cold Shutdown" and "Cold Condition" may be considered "NA", and operation considered not to be >212° F or in "Hot Shutdown" to allow reactor coolant temperature >212° F:

- For performance of an inservice hydrostatic test or leak test,
- As a consequence of maintaining adequate pressure for an inservice hydrostatic test or leak test, or
- As a consequence of maintaining adequate pressure for control rod scram time testing initiated in conjunction with an inservice hydrostatic test or leak test.

Provided the following requirements are met:

Table 3.2A	Reactor Low Water Instrumentation
LCO 3.7.B.1	Standby Gas Treatment System (SGTS)
LCO 3.7.C.1	Secondary Containment

Applicability

During performance of inservice hydrostatic testing and system leakage pressure tests of the reactor coolant system with average coolant temperature >212° F.

SURVEILLANCE REQUIREMENTS

4.14 SPECIAL OPERATIONS

A. Inservice Hydrostatic and Leak Testing Operation

Perform the applicable surveillance requirements for the required LCOs at the frequency specified by the applicable surveillance requirements.

LIMITING CONDITIONS FOR OPERATION (continued)

SURVEILLANCE REQUIREMENTS

Actions

NOTE: Separate Condition entry is allowed for each requirement of the LCO.

A. One or more of the above requirements not met:

1. **NOTE:** Required Actions to be in Cold Shutdown/Cold Condition include reducing average reactor coolant temperature to $\leq 212^{\circ}$ F.

   Immediately enter the applicable Condition of the affected LCO.

   OR

2.1 Immediately suspend activities that could increase the average reactor coolant temperature or pressure.

   AND

2.2 Reduce average reactor coolant temperature to $\leq 212^{\circ}$ F within 24 hours

BASES:

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION

Background

The purpose of this Special Operations LCO is to allow certain reactor coolant pressure tests to be performed in Cold Shutdown/Cold Condition when the metallurgical characteristics of the reactor pressure vessel (RPV) require the pressure testing at reactor coolant system (RCS) temperatures greater than 212° F (normally corresponding to Hot Shutdown) or to allow completing these reactor coolant pressure tests when the initial conditions do not require temperatures greater than 212° F. Furthermore, the purpose is to allow continued performance of control rod scram time testing required by SR 4.3.C.1 if reactor coolant temperatures exceed 212° F when the control rod scram time testing is initiated in conjunction with an inservice hydrostatic or leak test.

Inservice hydrostatic testing and system leakage pressure tests required by Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code are performed prior to the reactor going critical after a refueling outage. Recirculation pump operation and a water solid RPV (except for an air bubble for pressure control) are used to achieve the necessary temperatures and pressures required for these tests. The minimum temperatures (at the required pressures) allowed for these tests are determined from the RPV pressure and temperature (P/T) limits required by LCO 3.6.A.2, "Primary System Boundary - Thermal and Pressurization Limitations." These limits are conservatively based on the fracture toughness of the reactor vessel, taking into account anticipated vessel neutron fluence.

With increased reactor vessel fluence over time, the minimum allowable vessel temperature increases at a given pressure. Periodic updates to the RPV P/T limit curves are performed as necessary, based upon the results of analyses of irradiated surveillance specimens removed from the vessel. In the future it is expected that hydrostatic and leak testing may eventually be required with minimum reactor coolant temperatures exceeding 212° F. However, even with required minimum temperature requirements below 212° F, maintaining RCS temperature within a small band during the test can be impractical. Removal of the heat addition from recirculation pump operation and reactor core decay heat is coarsely controlled by control rod drive hydraulic system flow and reactor water cleanup system non-regenerative heat exchanger operation. Test conditions are focused on maintaining a steady state pressure, and tightly limited temperature control poses an unnecessary burden on the operator and may not be achievable in certain instances.

Other testing may be performed in conjunction with the allowances for inservice hydrostatic or leak tests and control rod scram time tests.

Applicable Safety Analyses

Allowing the reactor to be considered in Cold Shutdown/Cold Condition when the reactor coolant temperature is > 212° F, during, or as a consequence pf control rod scram time testing initiated in conjunction with an inservice hydrostatic or leak test effectively provides an exception to Hot Shutdown requirements, including OPERABILITY of primary containment and the full complement of redundant Emergency Core Cooling Systems. Since the tests are performed nearly water solid, at low decay heat values,

BASES:

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION (continued)

Applicable Safety Analyses (continued)

and near Cold Shutdown/Cold Condition, the stored energy in the reactor core will be very low. Under these conditions, the potential for failed fuel and a subsequent increase in coolant activity above the LCO 3.6.B.1, "Coolant Chemistry," limits are minimized. In addition, the secondary containment will be OPERABLE, in accordance with this Special Operations LCO, and will be capable of handling any airborne radioactivity or steam leaks that could occur during the performance of hydrostatic or leak testing. The required pressure testing conditions provide adequate assurance that the consequences of a steam leak will be conservatively bounded by the consequences of the postulated main steam line break outside of primary containment described in Reference 2. Therefore, these requirements will conservatively limit radiation releases to the environment.

In the event of a large primary system leak, the reactor vessel would rapidly depressurize, allowing the low-pressure core cooling systems to operate. The capability of the low-pressure coolant injection and core spray subsystems, as required in Cold Shutdown/Cold Condition by LCO 3.5.A.5, "Core Spray and LPCI Systems," are more than adequate to keep the core flooded under this low decay heat load condition. Small system leaks would be detected by leakage inspections before significant inventory loss occurred.

For the purposes of this test, the protection provided by normally required Cold Shutdown/Cold Condition applicable LCOs, in addition to the secondary containment requirements, required by this Special Operations LCO, will ensure acceptable consequences during normal hydrostatic test conditions and during postulated accident conditions.

As described in LCO 3.0.7, compliance with Special Operations LCOs is optional, and therefore, no criteria of 10 CFR 50.36(c)(2)(ii) apply. Special Operations LCOs provide flexibility to perform certain operations by appropriately modifying requirements of other LCOs.

LCO

As described in LCO 3.0.7, compliance with this Special Operations LCO is optional. Operation at reactor coolant temperatures > 212° F can be in accordance with the other Technical Specifications without meeting this Special Operations LCO or its ACTIONS. This option may be required due to P/T limits, however, which require testing at temperatures > 212° F, and performance of inservice leak and hydrostatic testing would also necessitate the inoperability of some subsystems normally required to be OPERABLE when the reactor coolant temperatures is > 212° F. Additionally, even with required minimum reactor coolant temperatures < 212° F, RCS temperatures may drift above 212° F during performance of inservice hydrostatic or leak testing or during subsequent control rod scram time testing, which is typically performed in conjunction with inservice hydrostatic or leak testing. While this Special Operations LCO is provided for inservice hydrostatic or leak testing, and for control rod scram time testing initiated in conjunction with an inservice hydrostatic or leak test, parallel performance of other tests and inspections is not precluded.

BASES:

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION (continued)

LCO (continued)

If it is desired to perform these tests while complying with this Special Operations LCO, then the Cold Shutdown/Cold Condition applicable LCOs and the additional LCOs specified by LCO 3.14.A must be met. The additional requirements for secondary containment, Standby Gas Treatment system, and reactor low water level instrumentation that initiates Reactor Building Isolation and Control system will provide sufficient protection for operations at reactor coolant temperatures >212° F for the purpose of performing an inservice leak or hydrostatic test and for control rod scram time testing initiated in conjunction with an inservice hydrostatic or leak test.

This LCO allows primary containment to be open for frequent unobstructed access to perform inspections, and for outage activities on various systems to continue consistent with the Cold Shutdown/Cold Condition applicable requirements.

Applicability

The Cold Shutdown/Cold Condition definition may only be modified for the performance of, or as a consequence of, inservice leak or hydrostatic tests, or as a consequence of control rod scram time testing initiated in conjunction with an inservice leak or hydrostatic test, so that special operation LCO 3.14.A can be considered as in Cold Shutdown/Cold Condition, even though the reactor coolant temperature is > 212° F. The additional operability requirements for secondary containment, Standby Gas Treatment system, and reactor low water level instrumentation that initiates Reactor Building Isolation and Control system when reactor coolant temperature is above 212° F provides conservatism in the response of the unit to any event that may occur. Operations in all other MODES are unaffected by this LCO.

Actions

A Note has been provided to modify the ACTIONS related to inservice leak and hydrostatic testing operation. A Note has been provided that allows separate Condition entry for each requirement of the LCO.

A.1
If an LCO specified in LCO 3.14.1 is not met, the ACTIONS applicable to the stated requirements are entered immediately and complied with. Required Action A.1 has been modified by a Note that clarifies the intent of another LCOs Required Action to be in Cold Shutdown/Cold Condition includes reducing the average reactor coolant temperature to < 212° F.

A.2.1 and A.2.2
Required Action A.2.1 and Required Action A.2.2 are alternate Required Actions that can be taken instead of Required Action A.1 to restore compliance with the normal Technical Specification requirements, and thereby exit this Special Operation LCO's Applicability. Activities that could further increase reactor coolant temperature or pressure are suspended immediately, in accordance with Required Action A.2.1, and the reactor coolant temperature is reduced to establish normal Cold Shutdown/Cold

3/4.14.A INSERVICE HYDROSTATIC AND LEAK TESTING OPERATION (continued)

Actions (continued)

Condition requirements. The allowed Completion Time of 24 hours for Required Action A.2.2 is based on engineering judgment and provides sufficient time to reduce the average reactor coolant temperature from the highest expected value to < 212° F with normal cooldown procedures.

Surveillance Requirements (SR)

SR 4.14.A
The LCOs made applicable are required to have their Surveillances met to establish that this LCO is being met. A discussion of the applicable Surveillance Requirements is provided in their respective Bases.

References:
1. NUREG 1433, Standard Technical Specifications for General Electric Plants, BWR/4, Revision 2
2. Pilgrim Nuclear Power Station Updated Final Safety Analysis Report, Section 14.5.4 "Main Steam Line Break Accident"