Duke Power.
A Duke Energy Company

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June 4, 2004

U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ATTENTION: Document Control Desk

SUBJECT: Duke Energy Corporation

Oconee Nuclear Station Unit 2
Docket Nos. 50-270
License Amendment Request Applicable to Technical Specification 3.6.5, Reactor Building Spray and Cooling Systems
Technical Specification Change (TSC) 2004-05

In accordance with the provisions of 10 CFR 50.90, Duke Energy Corporation (Duke) is submitting a License Amendment Request (LAR) for the Facility Operating Licenses and Technical Specifications (TS) for Oconee Nuclear Station Unit 2. The proposed amendment would revise TS 3.6.5, Reactor Building Spray and Cooling Systems to add a Note to the ACTIONS which states that Limiting Condition for Operation (LCO) 3.0.4 is not applicable. This will allow an increase in MODE with inoperable equipment provided the risk is being assessed and managed. The proposed change adopts a Consolidated Line Item Improvement Process (CLIIP) change allowance for a limited application.

Attachment 1 provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications. Attachment 2 provides the existing TS and Bases pages marked up to show the proposed change. Attachment 3 provides retyped TS and Bases pages. Attachment 4 provides a summary of the regulatory commitments made in this submittal.

In conjunction with the adoption of the CLIIP, the Federal Register Notice[1] stated that TS requirements for a Bases

[1] 68 FR 16579, April 4, 2003, "Notice of Availability of Model Application Concerning Technical Specification Improvement to Modify Requirements Regarding Mode Change Limitations Using the Consolidated Line Item Improvement Process."

A001

Control Program, consistent with the TS Bases Control Program described in Section 5.5 of the applicable vendor's standard TS (STS), shall be incorporated into the licensee's TS, if not already in the TS. And similarly, the STS requirements of SR 3.0.1 and associated Bases shall have been adopted. Since Oconee has previously converted to the Improved Technical Specifications, these requirements are already in the currently approved TS. Consequently, it is not necessary to propose any additional changes to the Bases Control Program or to SR 3.0.1 and its associated Bases within this LAR.

Implementation of this proposed TS change to the TS will not require revision to the Oconee Updated Final Safety Analysis Reports (UFSAR). Duke is requesting NRC review and approval of this LAR by June 5, 2004 with implementation to occur immediately.

In accordance with Duke administrative procedures and the Quality Assurance Program Topical Report, the changes contained in this proposed amendment have been reviewed and approved by the Oconee Plant Operations Review Committee. This proposed amendment has also been reviewed and approved by the Duke Nuclear Safety Review Board. Pursuant to 10 CFR 50.91, a copy of this amendment request is being sent to the designated official of the State of South Carolina.

Inquiries on this matter should be directed to Reene Gambrell at 864-885-3364.

Very truly yours,

R. A. Jones, Vice President
Oconee Nuclear Site

xc w/Attachments:

L. A. Reyes
U. S. Nuclear Regulatory Commission
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R. A. Jones, affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.

R. A. Jones, Vice President

Subscribed and sworn to me: June 4, 2004
Date

Freda K. Crump, Notary Public

My commission expires: August 17, 2006
Date

SEAL

bxc w/Attachments:

R. L. Gill
L. A. Keller
C. J. Thomas
L. E. Nicholson
B. G. Davenport
N. T. Clarkson
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N. T. Clarkson
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NRIA File/ELL
Oconee Master File - ON03DM (File OS 801.01)

Attachment 1

Description and Assessment

1.0 DESCRIPTION

The proposed amendment adds a Note to the ACTION Table of Technical Specifications (TS) 3.6.5, Reactor Building Spray and Cooling Systems, indicating that Limited Condition for Operation (LCO) 3.0.4 is not applicable for Unit 2. This will allow an increase in MODE with inoperable equipment provided the risk is being assessed and managed. This is consistent with Technical Specification Task Force (TSTF) 359 as approved by the NRC.

TSTF-359 provides the flexibility to perform MODE changes with the LCO not met provided the risk of the MODE change is assessed and managed. TSTF-359 modifies the requirements for MODE change limitations contained in LCO 3.0.4, and the Surveillance Applicability Requirements (SR) contained in SR 3.0.4, and various additional TS that reference LCO 3.0.4 by means of Notes. The changes to TS 3.6.5 captures the TSTF change with this TS and are consistent with the industry approved Standard TS (STS) Traveler[1] as published in the Federal Register[2,3] and modified by NRC comments.[3] The referenced Federal Register notices announced the availability of this TS improvement through the Consolidated Line Item Improvement Process (CLIIP).

On June 2, 2004, while in MODE 3, Oconee Unit 2 experienced an unexpected failure on the 2A Reactor Building Cooling Unit (RBCU). This failure prevents the resumption of operation following the current refueling outage as Oconee TS require that all three RBCU's be operable in MODES 1 and 2. Oconee Unit 2 is currently holding in MODE 3 due to this unexpected component inoperability. This proposed TS change will allow continued startup while the 2A RBCU is being repaired. This proposed amendment is being requested as an emergency change because the current TS do not permit a MODE change with an LCO not met; thereby preventing resumption of operation for Oconee Unit 2.

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[1] TSTF-359, Revision 9, entitled "Increase Flexibility in MODE Restraints."
[2] 67 FR 50475, August 2, 2002, "Notice of Opportunity to Comment on Model Safety Evaluation on Technical Specification Improvement to Modify Requirements Regarding Mode Change Limitations Using the Consolidated Line Item Improvement Process."
[3] 68 FR 16579, April 4, 2003, "Notice of Availability of Model Application Concerning Technical Specification Improvement to Modify Requirements Regarding Mode Change Limitations Using the Consolidated Line Item Improvement Process."

Attachment 1

Description and Assessment

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

Duke Energy Corporation (Duke) has reviewed the safety evaluation published[2] on August 2, 2002 as part of the CLIIP. This review included a review of the NRC Staff's evaluation as well as the supporting information for the TSTF[1]. Duke has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC Staff are applicable to Oconee Unit 2. Further, Duke has determined these discussions justify this amendment for incorporation into the Oconee TS.

2.2 Optional Changes and Variations

Duke is proposing major variations or deviations from the TS changes described in the TSTF[1] or from the NRC's model safety evaluation and CLIIP notice as published in the Federal Register.[2,3] Duke will only adopt the MODE change flexibility for TS 3.6.5 for Unit 2 only at this time. Duke will consider pursuit of the TSTF in its entirety at a later date.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

Duke has reviewed the proposed No Significant Hazards Consideration Determination (NSHCD) published in the Federal Register[3] as part of the CLIIP. Duke has concluded that the proposed NSHCD presented in the Federal Register notice is applicable to Oconee and is hereby incorporated by reference to satisfy the applicable regulations.[4]

3.2 Verification and Commitments

As discussed in the notice of availability published in the Federal Register,[3] for this TS improvement, plant-specific verifications were performed as follows:

[4] 10 CFR 50.92, "Issuance of amendment."

Attachment 1

Description and Assessment

1. Duke has established TS 3.6.5 Bases for the Note regarding LCO 3.0.4 not being applicable that state that use of the MODE change limitation flexibility is not to be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to operable status before entering an associated MODE or other specified condition in the TS Applicability.

2. The modification also includes changes to the Bases for TS 3.6.5 that provide details on how to implement the new requirements. The Bases changes provide guidance for changing MODES or other specified conditions in the Applicability when an LCO is not met. The Bases changes describe how TS 3.6.5 allows entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate.

The Bases is being revised to state that the risk assessment may use quantitative, qualitative, or blended approaches, and the risk assessment will be conducted using the plant program, procedures, and criteria in place to implement 10 CFR 50.65(a)(4), which requires that risk impacts of maintenance activities to be assessed and managed. The risk assessment must take into account all inoperable Technical Specifications equipment regardless of whether the equipment is included in the normal 10 CFR 50.65(a)(4) risk assessment scope. The risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.182 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions. These include actions to plan and conduct other activities in a manner that controls overall risk, increased risk awareness by shift and management personnel,

actions to reduce the duration of the condition, actions to minimize the magnitude of risk increases (establishment of backup success paths or compensatory measures), and determination that the proposed MODE change is acceptable. Consideration should also be given to the probability of completing restoration such that the requirements of the LCO would be met prior to the expiration of ACTIONS Completion Times that would require exiting the Applicability.

There is a small subset of systems and components that have been determined (Ref: B&W owners group generic qualitative risk assessments- attachment to TSTF-359, Rev. 9, "B&W owners group Qualitative Risk Assessment for Increased Flexibility in MODE Restraints," Framatome Technologies BAW-2383, October 2001.) to be of higher risk significance for which an LCO 3.0.4 exemption would not be allowed. For Oconee these are the Decay Heat Removal System (DHR) entering MODES, 5 and 4; Keowee Hydro Units entering MODES 1-5; and the emergency feedwater system (EFW) entering MODE 1. The Reactor Spray and Cooling System is not one of the higher risk significant systems noted.

In addition, the existing Bases state that upon entry into a MODE or other specified Condition in the Applicability with the LCO not met, LCO 3.0.1 and LCO 3.0.2 require entry into the applicable Conditions and Required Actions for no more than the duration of the applicable Completion Time or until the LCO is met or the unit is not within the Applicability of the TS.

Finally, Duke has a Bases Control Program consistent with Section 5.5 of the STS, and the equivalent of STS SR 3.0.1 and associated bases.

4.0 ENVIRONMENTAL CONSIDERATION

Duke has reviewed the environmental consideration included in the model safety evaluation dated August 2, 2002 as part of the CLIIP. Duke has determined that the NRC Staff's findings presented in that discussion are applicable to Oconee and the environmental consideration is hereby incorporated by reference for this application.

Attachment 2

Oconee Units 1, 2, and 3

Proposed Technical Specifications Changes and Bases
(Mark-up)

3.6 CONTAINMENT SYSTEMS

3.6.5 Reactor Building Spray and Cooling Systems

LCO 3.6.5 Two reactor building spray trains and three reactor building cooling trains shall be OPERABLE.

---NOTE---
Only one train of reactor building spray and two trains of reactor building cooling are required to be OPERABLE during MODES 3 and 4.

APPLICABILITY: MODES 1, 2, 3, and 4.

NOTE
LCO 3.0.4 is not applicable for Unit 2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One reactor building spray train inoperable in MODE 1 or 2.	A.1 Restore reactor building spray train to OPERABLE status.	7 days AND 14 days from discovery of failure to meet the LCO
B. One reactor building cooling train inoperable in MODE 1 or 2.	B.1 Restore reactor building cooling train to OPERABLE status.	7 days AND 14 days from discovery of failure to meet the LCO

(continued)

BASES

LCO (continued)

Each reactor building spray train shall include a spray pump, spray headers, nozzles, valves, piping, instruments, and controls to ensure an OPERABLE flow path capable of taking suction from the BWST (via the LPI System) upon an Engineered Safeguards Protective System signal and manually transferring suction to the reactor building sump. The OPERABILITY of RBS train flow instrumentation is not required for OPERABILITY of the corresponding RBS train because system resistance hydraulically maintains adequate NPSH to the RBS pumps and manual throttling of RBS flow is not required. However, TS 3.3.8, Required Action F.1 requires the affected RBS train to be declared inoperable when the RBS flow instrument is inoperable. A license amendment is being processed to eliminate this requirement. During an event, LPI train flow must be monitored and controlled to support the RBS train pumps to ensure that the NPSH requirements for the RBS pumps are not exceeded. If the flow instrumentation or the capability to control the flow in a LPI train is unavailable then the associated RBS train's OPERABILITY is affected until such time as the LPI train is restored or the associated LPI pump is placed in a secured state to prevent actuation during an event.

Each reactor building cooling train shall include cooling coils, fusible dropout plates, an axial vane flow fan, instruments, valves, and controls to ensure an OPERABLE flow path. Valve LPSW-108 shall be locked open to support system OPERABILITY.

APPLICABILITY

In MODES 1, 2, 3, and 4, an accident could cause a release of radioactive material to containment and an increase in containment pressure and temperature, requiring the operation of the reactor building spray trains and reactor building cooling trains.

In MODES 5 and 6, the probability and consequences of these events are reduced due to the pressure and temperature limitations of these MODES. Thus, the Reactor Building Spray System and the Reactor Building Cooling System are not required to be OPERABLE in MODES 5 and 6.

ACTIONS

← Add attached Insert.

A.1

With one reactor building spray train inoperable in MODE 1 or 2, the inoperable reactor building spray train must be restored to OPERABLE status within 7 days. In this Condition, the remaining OPERABLE spray and cooling trains are adequate to perform the iodine removal and containment cooling functions. The 7 day Completion Time takes into account the redundant heat removal capability afforded by the OPERABLE

Insert the following into the ACTIONS Bases:

The Actions are modified by a Note indicating that the provisions of LCO 3.0.4 do not apply for Unit 2 only. As a result, this allows entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate.

The risk assessment may use quantitative, qualitative, or blended approaches, and the risk assessment will be conducted using the plant program, procedures, and criteria in place to implement 10 CFR50.65(a)(4), which requires that risk impacts of maintenance activities to be assessed and managed. The risk assessment must take into account all inoperable Technical Specifications equipment regardless of whether the equipment is included in the normal 10 CFR 50.65(a)(4) risk assessment scope. The risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.1 82 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions. These include actions to plan and conduct other activities in a manner that controls overall risk, increased risk awareness by shift and management personnel, actions to reduce the duration of the condition, actions to minimize the magnitude of risk increases (establishment of backup success paths or compensatory measures), and determination that the proposed MODE change is acceptable. Consideration should also be given to the probability of completing restoration such that the requirements of the LCO would be met prior to the expiration of ACTIONS Completion Times that would require exiting the Applicability.

The provisions of this Note should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

Attachment 3

Oconee Units 1, 2, and 3

Revised Technical Specifications and Bases Pages

REMOVE	INSERT
3.6.5-1	3.6.5-1
B 3.6.5-4	B 3.6.5-4
B 3.6.5-5	B 3.6.5-5
B 3.6.5-6	B 3.6.5-6
B 3.6.5-7	B 3.6.5-7
B 3.6.5-8	B 3.6.5-8
B 3.6.5-9	B 3.6.5-9
---	B 3.6.5-10

3.6 CONTAINMENT SYSTEMS

3.6.5 Reactor Building Spray and Cooling Systems

LCO 3.6.5 Two reactor building spray trains and three reactor building cooling trains shall be OPERABLE.

----------NOTE----------
Only one train of reactor building spray and two trains of reactor building cooling are required to be OPERABLE during MODES 3 and 4.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

----------NOTE----------
LCO 3.0.4 is not applicable for Unit 2.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One reactor building spray train inoperable in MODE 1 or 2.	A.1 Restore reactor building spray train to OPERABLE status.	7 days AND 14 days from discovery of failure to meet the LCO
B. One reactor building cooling train inoperable in MODE 1 or 2.	B.1 Restore reactor building cooling train to OPERABLE status.	7 days AND 14 days from discovery of failure to meet the LCO

(continued)

BASES

LCO (continued)

Each reactor building spray train shall include a spray pump, spray headers, nozzles, valves, piping, instruments, and controls to ensure an OPERABLE flow path capable of taking suction from the BWST (via the LPI System) upon an Engineered Safeguards Protective System signal and manually transferring suction to the reactor building sump. The OPERABILITY of RBS train flow instrumentation is not required for OPERABILITY of the corresponding RBS train because system resistance hydraulically maintains adequate NPSH to the RBS pumps and manual throttling of RBS flow is not required. However, TS 3.3.8, Required Action F.1 requires the affected RBS train to be declared inoperable when the RBS flow instrument is inoperable. A license amendment is being processed to eliminate this requirement. During an event, LPI train flow must be monitored and controlled to support the RBS train pumps to ensure that the NPSH requirements for the RBS pumps are not exceeded. If the flow instrumentation or the capability to control the flow in a LPI train is unavailable then the associated RBS train's OPERABILITY is affected until such time as the LPI train is restored or the associated LPI pump is placed in a secured state to prevent actuation during an event.

Each reactor building cooling train shall include cooling coils, fusible dropout plates, an axial vane flow fan, instruments, valves, and controls to ensure an OPERABLE flow path. Valve LPSW-108 shall be locked open to support system OPERABILITY.

APPLICABILITY

In MODES 1, 2, 3, and 4, an accident could cause a release of radioactive material to containment and an increase in containment pressure and temperature, requiring the operation of the reactor building spray trains and reactor building cooling trains.

In MODES 5 and 6, the probability and consequences of these events are reduced due to the pressure and temperature limitations of these MODES. Thus, the Reactor Building Spray System and the Reactor Building Cooling System are not required to be OPERABLE in MODES 5 and 6.

ACTIONS

The Actions are modified by a Note indicating that the provisions of LCO 3.0.4 do not apply for Unit 2 only. As a result, this allows entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate.

BASES

ACTIONS (continued)

The risk assessment may use quantitative, qualitative, or blended approaches, and the risk assessment will be conducted using the plant program, procedures, and criteria in place to implement 10 CFR 50.65(a)(4), which requires that risk impacts of maintenance activities to be assessed and managed. The risk assessment must take into account all inoperable Technical Specifications equipment regardless of whether the equipment is included in the normal 10 CFR 50.65(a)(4) risk assessment scope. The risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.1 82 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions. These include actions to plan and conduct other activities in a manner that controls overall risk, increased risk awareness by shift and management personnel, actions to reduce the duration of the condition, actions to minimize the magnitude of risk increases (establishment of backup success paths or compensatory measures), and determination that the proposed MODE change is acceptable. Consideration should also be given to the probability of completing restoration such that the requirements of the LCO would be met prior to the expiration of ACTIONS Completion Times that would require exiting the Applicability.

The provisions of this Note should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified Condition in the Applicability.

BASES

ACTIONS (continued)

A.1

With one reactor building spray train inoperable in MODE 1 or 2, the inoperable reactor building spray train must be restored to OPERABLE status within 7 days. In this Condition, the remaining OPERABLE spray and cooling trains are adequate to perform the iodine removal and containment cooling functions. The 7 day Completion Time takes into account the redundant heat removal capability afforded by the OPERABLE reactor building spray train, reasonable time for repairs, and the low probability of an accident occurring during this period.

The 14 day portion of the Completion Time for Required Action A.1 is based upon engineering judgment. It takes into account the low probability of coincident entry into two Conditions in this LCO coupled with the low probability of an accident occurring during this time. Refer to Section 1.3, Completion Times, for a more detailed discussion of the purpose of the "from discovery of failure to meet the LCO" portion of the Completion Time.

B.1

With one of the reactor building cooling trains inoperable in MODE 1 or 2, the inoperable reactor building cooling train must be restored to OPERABLE status within 7 days. The components in this degraded condition provide iodine removal capabilities and are capable of providing at least 100% of the heat removal needs after an accident. The 7 day Completion Time was developed taking into account the redundant heat removal capabilities afforded by combinations of the Reactor Building Spray System and Reactor Building Cooling System and the low probability of an accident occurring during this period.

The 14 day portion of the Completion Time for Required Action B.1 is based upon engineering judgment. It takes into account the low probability of coincident entry into two Conditions in this LCO coupled with the low probability of an accident occurring during this time. Refer to Section 1.3 for a more detailed discussion of the purpose of the "from discovery of failure to meet the LCO" portion of the Completion Time.

C.1

With one reactor building spray train and one reactor building cooling train inoperable in MODE 1 or 2, at least one of the inoperable trains must be restored to OPERABLE status within 24 hours. In this Condition, the remaining OPERABLE spray and cooling trains are adequate to provide iodine removal capabilities and are capable of providing at least 100% of the heat removal needs after an accident. The 24 hour Completion Time

BASES

ACTIONS

C.1 (continued)

takes into account the heat removal capability afforded by the remaining OPERABLE spray train and cooling trains, reasonable time for repairs, and the low probability of an accident occurring during this period.

D.1

If the Required Action and associated Completion Time of Condition A, B or C are not met, the unit must be brought to a MODE in which the LCO, as modified by the Note, does not apply. To achieve this status, the unit must be brought to at least MODE 3 within 12 hours. The allowed Completion Time is reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

E.1

With one of the required reactor building cooling trains inoperable in MODE 3 or 4, the required reactor building cooling train must be restored to OPERABLE status within 24 hours.

The 24 hour Completion Time is reasonable based on engineering judgement taking into account the iodine and heat removal capabilities of the remaining required train of reactor building spray and cooling.

F.1

With one required reactor building spray train inoperable in MODE 3 or 4, the required reactor building spray train must be restored to OPERABLE status within 24 hours. The 24 hour Completion Time is reasonable based on engineering judgement taking into account the heat removal capabilities of the remaining required trains of reactor building cooling.

G.1

If the Required Actions and associated Completion Times of Condition E or F of this LCO are not met, the unit must be brought to a MODE in which the LCO does not apply. To achieve this status, the unit must be brought to MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit

BASES

ACTIONS

G.1 (continued)

conditions from full power conditions in an orderly manner and without challenging unit systems.

H.1

With two reactor building spray trains, two reactor building cooling trains or any combination of three or more reactor building spray and reactor building cooling trains inoperable in MODE 1 or 2, the unit is in a condition outside the accident analysis. Therefore, LCO 3.0.3 must be entered immediately.

With any combination of two or more required reactor building spray and reactor building cooling trains inoperable in MODE 3 or 4, the unit is in a condition outside the accident analysis. Therefore, LCO 3.0.3 must be entered immediately.

SURVEILLANCE REQUIREMENTS

SR 3.6.5.1

Verifying the correct alignment for manual and non-automatic power operated valves in the reactor building spray flow path provides assurance that the proper flow paths will exist for Reactor Building Spray System operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since these were verified to be in the correct position prior to locking, sealing, or securing. Similarly, this SR does not apply to automatic valves since automatic valves actuate to their required position upon an accident signal. This SR also does not apply to valves that cannot be inadvertently misaligned, such as check valves. This SR does not require any testing or valve manipulation. Rather, it involves verification, through a system walkdown, that those valves outside containment and capable of potentially being mispositioned are in the correct position.

SR 3.6.5.2

Operating each required reactor building cooling train fan unit for ≥ 15 minutes ensures that all trains are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, fan or motor failure, or excessive vibration can be detected for corrective action. The 31 day Frequency was developed considering the known reliability of the fan units and controls, the three train redundancy available, and the low

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.5.2 (continued)

probability of a significant degradation of the reactor building cooling trains occurring between surveillances and has been shown to be acceptable through operating experience.

SR 3.6.5.3

Verifying that each required Reactor Building Spray pump's developed head at the flow test point is greater than or equal to the required developed head ensures that spray pump performance has not degraded during the cycle. Flow and differential pressure are normal tests of centrifugal pump performance required by Section XI of the ASME Code (Ref. 4). Since the Reactor Building Spray System pumps cannot be tested with flow through the spray headers, they are tested on recirculation flow. This test confirms one point on the pump design curve and is indicative of overall performance. Such inservice tests confirm component OPERABILITY, trend performance, and may detect incipient failures by indicating abnormal performance. The Frequency of this SR is in accordance with the Inservice Testing Program.

SR 3.6.5.4

Verifying the containment heat removal capability provides assurance that the containment heat removal systems are capable of maintaining containment temperature below design limits following an accident. This test verifies the heat removal capability of the Low Pressure Injection (LPI) Coolers and Reactor Building Cooling Units. The 18 month Frequency was developed considering the known reliability of the low pressure service water, reactor building spray and reactor building cooling systems and other testing performed at shorter intervals that is intended to identify the possible loss of heat removal capability.

SR 3.6.5.5 and SR 3.6.5.6

These SRs require verification that each automatic reactor building spray valve actuates to its correct position and that each reactor building spray pump starts upon receipt of an actual or simulated actuation signal. The test will be considered satisfactory if visual observation and control board indication verifies that all components have responded to the actuation signal properly; the appropriate pump breakers have closed, and all valves have completed their travel. This SR is not required for valves that are

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.5.5 and SR 3.6.5.6 (continued)

locked, sealed, or otherwise secured in position under administrative controls. The 18 month Frequency is based on the need to perform these Surveillances under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillances were performed with the reactor at power. Operating experience has shown that these components usually pass the Surveillances when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

SR 3.6.5.7

This SR requires verification that each required reactor building cooling train actuates upon receipt of an actual or simulated actuation signal. The test will be considered satisfactory if control board indication verifies that all components have responded to the actuation signal properly, the appropriate valves have completed their travel, and fans are running at half speed. The 18 month Frequency is based on engineering judgment and has been shown to be acceptable through operating experience. See SR 3.6.5.5 and SR 3.6.5.6, above, for further discussion of the basis for the 18 month Frequency.

SR 3.6.5.8

With the reactor building spray header isolated and drained of any solution, station compressed air is introduced into the spray headers to verify the availability of the headers and spray nozzles. Performance of this Surveillance demonstrates that each spray nozzle is unobstructed and provides assurance that spray coverage of the containment during an accident is not degraded. Due to the passive nature of the design of the nozzles, a test at 10 year intervals is considered adequate to detect obstruction of the spray nozzles.

REFERENCES

1. UFSAR, Section 3.1.

2. UFSAR, Section 6.2.

3. 10 CFR 50.36.

4. ASME, Boiler and Pressure Vessel Code, Section XI.

Attachment 4

List of Regulatory Commitments

The following table identifies those actions committed to by Duke Energy Corporation (Duke) in this document. Any other statements in this submittal are provided for informational purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to R. V. Gambrell at (864) 885-3364.

REGULATORY COMMITMENTS	Due Date/Event
Duke will implement the approved amendment and associated Bases at Oconee Nuclear Station Unit 2.	Immediately.
Duke will establish a Bases control program at Oconee Nuclear Station consistent with the Technical Specifications (TS) Bases Control Program described in Section 5.5 of the applicable vendor's Standard TS (STS).	Completed.
Duke will establish the equivalent of STS SR 3.0.1 at Oconee Nuclear Station.	Completed.