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10 CFR 50.90

August 23, 2018

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

Limerick Generating Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: Application to Adopt TSTF-372, "Addition of LCO 3.0.8, Inoperability of Snubbers"

References:
1. TSTF-372, Revision 4, "Addition of LCO 3.0.8, Inoperability of Snubbers," dated April 23, 2004
2. Notice of Availability of Model Application Concerning Technical Specification Improvement to Modify Requirements Regarding the Addition of Limiting Condition for Operation 3.0.8 on the Inoperability of Snubbers Using the Consolidated Line Item Improvement Process, dated May 4, 2005 (70 FR 23252)

In accordance with the provisions of 10 CFR 50.90 "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (Exelon) is requesting approval for proposed changes to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively.

The proposed amendments would modify the TS requirements for inoperable dynamic restraints (snubbers) by adding a new Limiting Condition for Operation (LCO) 3.0.8. The change is consistent with the Nuclear Regulatory Commission (NRC) approved Revision 4 to Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-372, "Addition of LCO 3.0.8, Inoperability of Snubbers," (Reference 1). The availability of this TS improvement was announced in the *Federal Register* on May 4, 2005 (70 FR 23252), as part of the consolidated line item improvement process (Reference 2).

The proposed changes have been reviewed and recommended for approval by the Plant Operations Review Committee in accordance with the Exelon Quality Assurance Program.

Attachment 1 provides a description of the proposed changes, the requested confirmation of applicability, assessment, regulatory analysis, and environmental consideration of the proposed changes. Attachment 2 provides the existing TS pages marked up to show the proposed changes. Attachment 3 provides the existing TS Bases pages marked up to show the proposed changes (for information only).

Exelon requests approval of the proposed License Amendment by March 1, 2019, with the amendment being implemented no later than May 31, 2019.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), Exelon is notifying the Commonwealth of Pennsylvania of this application for license amendment by transmitting a copy of this letter and its attachments to the designated State Official.

If you should have any questions regarding this submittal, please contact Glenn Stewart at 610-765-5529.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 23rd day of August 2018.

Respectfully,

D. P. Helker

David P. Helker
Manager - Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachments:
1. Description and Assessment
2. Proposed Technical Specifications Changes (Mark-Ups)
3. Proposed Technical Specifications Bases Changes (Mark-Ups) (For Information Only)

cc:
USNRC Region I, Regional Administrator	w/ attachments
USNRC Project Manager, LGS	"
USNRC Senior Resident Inspector, LGS	"
Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental Protection	"

ATTACHMENT 1

License Amendment Request

Limerick Generating Station, Units 1 and 2
Docket Nos. 50-352 and 50-353

Application to Adopt TSTF-372,
"Addition of LCO 3.0.8, Inoperability of Snubbers"

Description and Assessment

1.0 DESCRIPTION

The proposed amendment would modify Technical Specifications (TS) requirements for inoperable snubbers by adding a new Limiting Condition for Operation (LCO) 3.0.8.

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) STS change TSTF-372, "Addition of LCO 3.0.8, Inoperability of Snubbers," Revision 4. The availability of this TS improvement was published in the *Federal Register* on May 4, 2005, as part of the consolidated line item improvement process (CLIIP).

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

Exelon Generation Company, LLC (Exelon) has reviewed the Model Safety Evaluation (SE) dated May 4, 2005, as part of the CLIIP. This review included a review of the NRC's evaluation, as well as the supporting information provided to support TSTF-372. Exelon has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC are applicable to Limerick Generating Station (LGS), Units 1 and 2, and justify this amendment for the incorporation of the changes into the LGS, Unit 1 and Unit 2 TS.

2.2 Optional Changes and Variations

Exelon is proposing the following variations from the TS changes described in the TSTF-372 Revision 4 and the NRC's model safety evaluation dated May 4, 2005:

2.2.1 Exelon proposes the following variations from the TS changes described in the TSTF-372, Revision 4:

- The current LGS, Units 1 and 2, TS 3.7.4, "Snubbers," allows a delay time before declaring supported TS systems inoperable when the associated snubber(s) cannot perform its required safety function. The proposed TS 3.0.8 provides the same allowance. Because of adding LCO 3.0.8 in accordance with adopting TSTF-372, there is no longer a need to retain the current LGS TS 3.7.4; therefore, Exelon is proposing to delete TS 3.7.4 and its associated TS Bases from the LGS, Units 1 and 2, TS. The snubbers will continue to be maintained, tested, inspected and monitored in accordance with the Snubber Program specified in LGS TS 6.8.4.k. In addition, the impact of inoperable snubbers on supported systems will continue to be evaluated and governed by the proposed LCO 3.0.8.

- The model application provided in the Notice of Availability for TSTF-372 published in the Federal Register on May 4, 2005, includes an attachment for typed, camera-ready (revised) TS pages reflecting the proposed changes. LGS is not including such an attachment due to the straightforward nature of the proposed changes. Providing only mark-ups of the proposed TS changes satisfies the requirements of 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," in that the mark-ups fully describe the changes desired. This is an

administrative deviation from TSTF-372 with no impact on the NRC's model safety evaluation dated May 4, 2005. Because of this deviation, the contents and numbering of the attachments for this amendment request differ from the attachments specified in the model application.

2.2.2 Exelon proposes the following minor variations from the TS Bases changes described in the TSTF-372, Revision 4:

- The Model SE, Section 3.1.2 provided in the Notice of Availability published in the Federal Register on May 4, 2005, contains restrictions, applicable to Boiling Water Reactor (BWR) plants, to prevent potentially high-risk configurations. The specific configuration restrictions identified in the Model SE are being added to the proposed TS Bases for LCO 3.0.8.

- The Model SE, Section 3.2, Item 1(e) provided in the Notice of Availability published in the Federal Register on May 4, 2005, contains the statement "LCO 3.0.8 does not apply to non-seismic snubbers." This does not appear to be captured in the implementation process of the approved TSTF-372, Revision 4. Therefore, Exelon proposes to include this statement in the LCO 3.0.8 Bases (i.e., Attachment 3, Insert 2). Further guidance associated with the intent of this statement, as discussed in Section 3.0 of the Model SE and in TSTF-IG-05-03, "Implementation Guidance for TSTF-372, Revision 4, 'Addition of LCO 3.0.8, Inoperability of Snubbers,'" is also included in the proposed TS Bases insert for LCO 3.0.8.

These variations are insignificant relative to ensuring the proper application of the intent of TSTF-372, Revision 4.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

Exelon Generation Company, LLC (Exelon) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment for Limerick Generating Station (LGS), Units 1 and 2; by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed change allows a delay time before declaring supported Technical Specification (TS) systems inoperable when the associated snubber(s) cannot perform its required safety function. Entrance into Actions or delaying entrance into Actions is not an initiator of any accident previously evaluated. Consequently, the probability of an accident previously evaluated is not significantly increased. The consequences of an accident while relying on the delay time allowed before declaring a TS supported system inoperable and taking its Actions are no different than the consequences of an accident under the same

plant conditions while relying on the existing TS supported system Actions. Therefore, the consequences of an accident previously evaluated are not significantly increased by this change. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No

   The proposed change allows a delay time before declaring supported TS systems inoperable when the associated snubber(s) cannot perform its required safety function. The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No

   The current LGS TS 3.7.4 allows a delay time before declaring supported TS systems inoperable when the associated snubber(s) cannot perform its required safety function. The proposed TS 3.0.8 provides a similar allowance. The current LGS TS 3.7.4 provides adequate margin of safety for plant operation, as does TS 3.0.8. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Exelon concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of no significant hazards consideration is justified.

In conclusion, based on the considerations discussed above, (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 proposed change will not be inimical to the common defense and security or to the health and safety of the public.

3.2 Verification and Commitments

As discussed in the Model Application, Section 3.2, provided in the Notice of Availability published in the *Federal Register* on May 4, 2005, for this TS improvement, plant-specific verifications were performed as follows:

- Exelon proposes in this amendment request for LGS, Units 1 and 2, TS Bases for LCO 3.0.8 which provide guidance and details on how to implement the new requirements (see Attachment 3, Insert 2). LCO 3.0.8 will require that risk be managed and assessed. The proposed TS Bases state that while the Industry and NRC guidance on implementation of 10 CFR 50.65(a)(4), the Maintenance Rule, does not address seismic risk, LCO 3.0.8

should be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on any unaffected train or subsystem is properly controlled, and emergent issues are properly addressed. The risk assessment need not be quantified, but may be a qualitative assessment of the vulnerability of systems and components when one or more snubbers are not able to perform their associated support function. Exelon will revise the TS Bases as proposed above with implementation of the amendment.

- LGS, Units 1 and 2 have a TS Bases Control Program consistent with Section 5.5 of the Standard Technical Specifications.

In addition, as discussed in the Model SE, Section 3.1.2 provided in the Notice of Availability published in the *Federal Register* on May 4, 2005, the following restrictions, applicable to BWR plants, are provided to prevent potentially high-risk configurations (hereafter referred to as the Tier 2 restrictions). The specific information which describes how Exelon proposes to ensure that operation at LGS, Units 1 and 2 will be in accordance with the Tier 2 requirements is provided below:

1. For BWR plants, one of the following two means of heat removal must be available when LCO 3.0.8.a is used:

   a. At least one high pressure makeup path (e.g., using high pressure coolant injection (HPCI) or reactor core isolation cooling (RCIC) or equivalent) and heat removal capability (e.g., suppression pool cooling), including a minimum set of supporting equipment, not associated with the inoperable snubber(s), or

   b. At least one low pressure makeup path (e.g., low pressure coolant injection (LPCI) or core spray (CS)) and heat removal capability (e.g., suppression pool cooling or shutdown cooling), including a minimum set of supporting equipment, not associated with the inoperable snubber(s).

2. When LCO 3.0.8.b is used at BWR plants, it must be verified that at least one success path exists, using equipment not associated with the inoperable snubber(s), to provide makeup and core cooling needed to mitigate Loss of Offsite Power (LOOP) accident sequences (i.e., initiated by a seismically-induced LOOP event with concurrent loss of all safety system trains supported by the out-of-service snubbers).

To ensure the above requirements are satisfied, they are being included in the proposed TS Bases (Attachment 3, Insert 2) and will be implemented through the appropriate plant procedures and administrative controls upon implementation of the amendment.

In addition to the Tier 2 restrictions discussed above, Section 3.2, Item 1(e), of the Model SE requires that appropriate plant procedures and administrative controls be used to implement the following restriction, described, and responded to by Exelon below:

- Every time the provisions of LCO 3.0.8 are used licensees will be required to confirm that at least one train (or subsystem) of systems supported by the inoperable snubbers would remain capable of performing their required safety or support functions for postulated design

loads other than seismic loads. LCO 3.0.8 does not apply to non-seismic snubbers. In addition, a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any applicable Tier 2 restrictions, and the associated plant configuration shall be available on a recoverable basis for staff inspection.

To ensure the above requirement is satisfied, it is being included in the proposed TS Bases (Attachment 3, Insert 2) and will be implemented through the appropriate plant procedures and administrative controls upon implementation of the amendment.

The inclusion of these configuration restrictions in the TS Bases will ensure that they are retained and controlled in accordance with the TS Bases Control Program as defined in Administrative Controls TS Section 6.8, "Procedures and Programs" of the LGS TS.

4.0 ENVIRONMENTAL EVALUATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

ATTACHMENT 2

License Amendment Request

Limerick Generating Station, Units 1 and 2
Docket Nos. 50-352 and 50-353

Application to Adopt TSTF-372,
"Addition of LCO 3.0.8, Inoperability of Snubbers"

Proposed Technical Specification Changes (Mark-Ups)

Unit 1	Unit 2
xiv	xiv
xxi	xxi
3/4 0-1	3/4 0-1
3/4 0-1a	3/4 0-1a
3/4 7-11	3/4 7-11

INSERT 1

3.0.7 Not Used

3.0.8 When one or more required snubbers are unable to perform their associated support function(s), any affected supported Limiting Condition(s) for Operation are not required to be declared not met solely for this reason if risk is assessed and managed, and:

a. the snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or

b. the snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period, the required snubbers must be able to perform their associated support function(s), or the affected supported system Limiting Condition(s) for Operation shall be declared not met.

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

SECTION PAGE

PLANT SYSTEMS (Continued)

3/4.7.2 CONTROL ROOM EMERGENCY FRESH AIR SUPPLY SYSTEM - COMMON SYSTEM 3/4 7-6

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM 3/4 7-9

3/4.7.4 ~~SNUBBERS~~ 3/4 7-11

DELETED ~~Figure 4.7.4-1 Sample Plan 2) For Snubber Functional Test ..... 3/4 7-16~~ delete

3/4.7.5 SEALED SOURCE CONTAMINATION 3/4 7-17

3/4.7.6 DELETED; Refer to note on page 3/4 7-19

3/4.7.7 DELETED; Refer to note on page 3/4 7-19

3/4.7.8 MAIN TURBINE BYPASS SYSTEM 3/4 7-33

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

A.C. Sources - Operating 3/4 8-1

Table 4.8.1.1.2-1 DELETED 3/4 8-8

A.C. Sources - Shutdown 3/4 8-9

3/4.8.2 D.C. SOURCES

D.C. Sources - Operating 3/4 8-10

BASES

SECTION ..... PAGE

CONTAINMENT SYSTEMS (Continued)

3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES ..... B 3/4 6-4

3/4.6.4 VACUUM RELIEF ..... B 3/4 6-4

3/4.6.5 SECONDARY CONTAINMENT ..... B 3/4 6-5

3/4.6.6 PRIMARY CONTAINMENT ATMOSPHERE CONTROL ..... B 3/4 6-6

3/4.7 PLANT SYSTEMS

3/4.7.1 SERVICE WATER SYSTEMS - COMMON SYSTEMS ..... B 3/4 7-1

3/4.7.2 CONTROL ROOM EMERGENCY FRESH AIR SUPPLY SYSTEM - COMMON SYSTEM ..... B 3/4 7-1a

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM ..... B 3/4 7-1c

3/4.7.4 ~~SNUBBERS~~ (Deleted) ..... B 3/4 7-2

3/4.7.5 SEALED SOURCE CONTAMINATION ..... B 3/4 7-3

3/4.7.6 (Deleted) ..... B 3/4 7-4

3/4.7.7 (Deleted) ..... B 3/4 7-4

3/4.7.8 MAIN TURBINE BYPASS SYSTEM ..... B 3/4 7-5

3/4.8 ELECTRICAL POWER SYSTEM

3/4.8.1, 3/4.8.2, and 3/4.8.3 A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS ..... B 3/4 8-1

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES ..... B 3/4 8-3

3/4.9 REFUELING OPERATIONS

3/4.9.1 REACTOR MODE SWITCH ..... B 3/4 9-1

3/4.9.2 INSTRUMENTATION ..... B 3/4 9-1

3/4.9.3 CONTROL ROD POSITION ..... B 3/4 9-1

3/4.9.4 DECAY TIME ..... B 3/4 9-1

3/4.9.5 COMMUNICATIONS ..... B 3/4 9-1

3/4.0 APPLICABILITY

LIMITING CONDITION FOR OPERATION

except as provided in Specification 3.0.8.

3.0.1 Compliance with the Limiting Conditions for Operation contained in the succeeding Specifications is required during the OPERATIONAL CONDITIONS or other conditions specified therein; ~~except that~~ upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met, except as provided in Specifications 3.0.5 and 3.0.6.

3.0.2 Noncompliance with a Specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals, except as provided in Specifications 3.0.5 and 3.0.6. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour action shall be initiated to place the unit in an OPERATIONAL CONDITION in which the Specification does not apply by placing it, as applicable, in:

a. At least STARTUP within the next 6 hours,
b. At least HOT SHUTDOWN within the following 6 hours, and
c. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

This Specification is not applicable in OPERATIONAL CONDITION 4 or 5.

3.0.4 When a Limiting Condition for Operation is not met, entry into an OPERATIONAL CONDITION or other specified condition in the Applicability shall only be made:

a. When the associated ACTION requirements to be entered permit continued operation in the OPERATIONAL CONDITION or other specified condition in the Applicability for an unlimited period of time; or

b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the OPERATIONAL CONDITION or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or

c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in OPERATIONAL CONDITIONS or other specified conditions in the Applicability that are required to comply with ACTION requirements or that are part of a shutdown of the unit.

LIMITING CONDITION FOR OPERATION (Continued)

3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONs may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to the second premise of Specification 3.0.1 and is an exception to Specification 3.0.2 (i.e., to not comply with the applicable ACTION(s)) for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

3.0.6 When a supported system Limiting Condition for Operation is not met solely due to a support system Limiting Condition for Operation not being met, the ACTIONs associated with this supported system are not required to be entered. Only the support system Limiting Condition for Operation ACTIONs are required to be entered. This is an exception to the second premise of Specification 3.0.1 and is an exception to Specification 3.0.2 (i.e., to not comply with the applicable ACTION(s)) for the supported system. In this event, an evaluation shall be performed in accordance with Specification 6.17, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate ACTIONs of the Limiting Condition for Operation in which the loss of safety function exists are required to be entered.

When a support system's ACTION directs a supported system to be declared inoperable or directs entry into ACTIONs for a supported system, the applicable ACTIONs shall be entered in accordance with Specification 3.0.1.

Insert 1

3/4.7.4 ~~SNUBBERS~~ DELETED

LIMITING CONDITION FOR OPERATION

3.7.4 ~~All~~ snubbers shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3. OPERATIONAL CONDITIONS 4 and 5 for snubbers located on systems required OPERABLE in those OPERATIONAL CONDITIONS.

ACTION:

With one or more snubbers inoperable on any system, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per the Snubber Program on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.4 Each snubber shall be demonstrated OPERABLE by performance of the Snubber Program.

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

SECTION — PAGE

PLANT SYSTEMS (Continued)

3/4.7.2 CONTROL ROOM EMERGENCY FRESH AIR SUPPLY SYSTEM - COMMON SYSTEM 3/4 7-6

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM 3/4 7-9

3/4.7.4 ~~SNUBBERS~~ 3/4 7-11

DELETED

~~Figure 4.7.4-1 (Sample Plan 2) For Snubber Functional Test ..... 3/4 7-16~~ delete

3/4.7.5 SEALED SOURCE CONTAMINATION 3/4 7-17

3/4.7.6 DELETED; Refer to note on page 3/4 7-19

3/4.7.7 DELETED; Refer to note on page 3/4 7-19

3/4.7.8 MAIN TURBINE BYPASS SYSTEM 3/4 7-33

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

A.C. Sources - Operating 3/4 8-1

Table 4.8.1.1.2-1 DELETED 3/4 8-8

A.C. Sources - Shutdown 3/4 8-9

3/4.8.2 D.C. SOURCES

D.C. Sources - Operating 3/4 8-10

BASES

SECTION		PAGE
CONTAINMENT SYSTEMS (Continued)		
3/4.6.3	PRIMARY CONTAINMENT ISOLATION VALVES	B 3/4 6-4
3/4.6.4	VACUUM RELIEF	B 3/4 6-4
3/4.6.5	SECONDARY CONTAINMENT	B 3/4 6-5
3/4.6.6	PRIMARY CONTAINMENT ATMOSPHERE CONTROL	B 3/4 6-6
3/4.7 PLANT SYSTEMS		
3/4.7.1	SERVICE WATER SYSTEMS - COMMON SYSTEMS	B 3/4 7-1
3/4.7.2	CONTROL ROOM EMERGENCY FRESH AIR SUPPLY SYSTEM - COMMON SYSTEM	B 3/4 7-1
3/4.7.3	REACTOR CORE ISOLATION COOLING SYSTEM	B 3/4 7-1c
3/4.7.4	~~SNUBBERS~~ (Deleted)	B 3/4 7-2
3/4.7.5	SEALED SOURCE CONTAMINATION	B 3/4 7-3
3/4.7.6	(Deleted)	B 3/4 7-4
3/4.7.7	(Deleted)	B 3/4 7-4
3/4.7.8	MAIN TURBINE BYPASS SYSTEM	B 3/4 7-5
3/4.8 ELECTRICAL POWER SYSTEM		
3/4.8.1, 3/4.8.2, and 3/4.8.3	A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS	B 3/4 8-1
3/4.8.4	ELECTRICAL EQUIPMENT PROTECTIVE DEVICES	B 3/4 8-3
3/4.9 REFUELING OPERATIONS		
3/4.9.1	REACTOR MODE SWITCH	B 3/4 9-1
3/4.9.2	INSTRUMENTATION	B 3/4 9-1
3/4.9.3	CONTROL ROD POSITION	B 3/4 9-1
3/4.9.4	DECAY TIME	B 3/4 9-1
3/4.9.5	COMMUNICATIONS	B 3/4 9-1

3/4.0 APPLICABILITY

except as provided in Specification 3.0.8.

LIMITING CONDITION FOR OPERATION

3.0.1 Compliance with the Limiting Conditions for Operation contained in the succeeding Specifications is required during the OPERATIONAL CONDITIONS or other conditions specified therein; ~~except that~~ upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met, except as provided in Specifications 3.0.5 and 3.0.6.

3.0.2 Noncompliance with a Specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals, except as provided in Specifications 3.0.5 and 3.0.6. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour action shall be initiated to place the unit in an OPERATIONAL CONDITION in which the Specification does not apply by placing it, as applicable, in:

a. At least STARTUP within the next 6 hours,
b. At least HOT SHUTDOWN within the following 6 hours, and
c. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

This Specification is not applicable in OPERATIONAL CONDITION 4 or 5.

3.0.4 When a Limiting Condition for Operation is not met, entry into an OPERATIONAL CONDITION or other specified condition in the Applicability shall only be made:

a. When the associated ACTION requirements to be entered permit continued operation in the OPERATIONAL CONDITION or other specified condition in the Applicability for an unlimited period of time; or

b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the OPERATIONAL CONDITION or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or

c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in OPERATIONAL CONDITIONS or other specified conditions in the Applicability that are required to comply with ACTION requirements or that are part of a shutdown of the unit.

LIMITING CONDITION FOR OPERATION (Continued)

3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONs may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to the second premise of Specification 3.0.1 and is an exception to Specification 3.0.2 (i.e., to not comply with the applicable ACTION(s)) for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

3.0.6 When a supported system Limiting Condition for Operation is not met solely due to a support system Limiting Condition for Operation not being met, the ACTIONs associated with this supported system are not required to be entered. Only the support system Limiting Condition for Operation ACTIONs are required to be entered. This is an exception to the second premise of Specification 3.0.1 and is an exception to Specification 3.0.2 (i.e., to not comply with the applicable ACTION(s)) for the supported system. In this event, an evaluation shall be performed in accordance with Specification 6.17, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate ACTIONs of the Limiting Condition for Operation in which the loss of safety function exists are required to be entered.

When a support system's ACTION directs a supported system to be declared inoperable or directs entry into ACTIONs for a supported system, the applicable ACTIONs shall be entered in accordance with Specification 3.0.1.

Insert 1

3/4.7.4 ~~SNUBBERS~~ DELETED

LIMITING CONDITION FOR OPERATION

3.7.4 All snubbers shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3. OPERATIONAL CONDITIONS 4 and 5 for snubbers located on systems required OPERABLE in those OPERATIONAL CONDITIONS.

ACTION:

With one or more snubbers inoperable on any system, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per the Snubber Program on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.4 Each snubber shall be demonstrated OPERABLE by performance of the Snubber Program.

ATTACHMENT 3

License Amendment Request

Limerick Generating Station, Units 1 and 2
Docket Nos. 50-352 and 50-353

Application to Adopt TSTF-372,
"Addition of LCO 3.0.8, Inoperability of Snubbers"

Proposed Technical Specification Bases Changes (Mark-Ups)
(For Information Only)

Unit 1	Unit 2
B 3/4 0-1	B 3/4 0-1
B 3/4 0-3e	B 3/4 0-3e
B 3/4 7-2	B 3/4 7-2
B 3/4 7-3	B 3/4 7-3

INSERT 2

Specification 3.0.7 - Not Used

Specification 3.0.8 establishes conditions under which systems are considered to remain capable of performing their intended safety function when associated snubbers are not capable of providing their associated support function(s). This Specification states that the supported system is not considered to be inoperable solely due to one or more snubbers not capable of performing their associated support function(s). This is appropriate because a limited length of time is allowed for maintenance, testing, or repair of one or more snubbers not capable of performing their associated support function(s) and appropriate compensatory measures are specified in the snubber requirements, which are located outside of the Technical Specifications (TS) under licensee control. The snubber requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii), and, as such, are appropriate for control by the licensee.

If the allowed time expires and the snubber(s) are unable to perform their associated support function(s), the affected supported system's Limiting Condition for Operation must be declared not met and the associated ACTION requirements shall be met in accordance with Specification 3.0.1.

Specification 3.0.8.a applies when one or more snubbers are not capable of providing their associated support function(s) to a single train or subsystem of a multiple train or subsystem supported system or to a single train or subsystem supported system. Specification 3.0.8.a allows 72 hours to restore the snubber(s) before declaring the supported system inoperable. The 72-hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function and due to the availability of the redundant train of the supported system.

Specification 3.0.8.b applies when one or more snubbers are not capable of providing their associated support function(s) to more than one train or subsystem of a multiple train or subsystem supported system. Specification 3.0.8.b allows 12 hours to restore the snubber(s) before declaring the supported system inoperable. The 12-hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function.

The following configuration restrictions shall be applied to the use of Specification 3.0.8:

(1) Specification 3.0.8.a can only be used if one of the following two means of heat removal is available:

   a. At least one high pressure makeup path (e.g., using High Pressure Coolant Injection (HPCI) or Reactor Core Isolation Cooling (RCIC) or its equivalent) and heat removal capability (e.g., suppression pool cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s), or

   b. At least one low pressure makeup path (e.g., Low Pressure Coolant Injection (LPCI) or Core Spray (CS)) and heat removal capability (e.g., suppression pool cooling or shutdown cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s).

(2) Specification 3.0.8.b can only be used following verification that at least one success path exists, using equipment not associated with the inoperable snubber(s), to provide makeup and core cooling needed to mitigate Loss of Offsite Power (LOOP) accident sequences (i.e., initiated by a seismically-induced LOOP event with concurrent loss of all safety system trains supported by the out-of-service snubbers).

Specification 3.0.8 only applies to the seismic function of snubbers; it does not apply to the non-seismic functions of snubbers. Therefore, each use of Specification 3.0.8 for seismic snubbers that also have non-seismic functions requires confirmation that at least one train (or subsystem) of systems supported by the inoperable snubbers would remain capable of performing their required safety or support functions for postulated design loads other than seismic loads. In addition, a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation and compliance with the configuration restrictions defined above, and the associated plant configuration shall be available on a recoverable basis for NRC inspection.

Specification 3.0.8 requires that risk be assessed and managed. Industry and NRC guidance on the implementation of 10 CFR 50.65(a)(4) (i.e., the Maintenance Rule) does not address seismic risk. However, use of Specification 3.0.8 should be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on

any unaffected train or subsystem is properly controlled, and emergent issues are properly addressed. The risk assessment need not be quantified, but may be a qualitative awareness of the vulnerability of systems and components when one or more snubbers are not able to perform their associated support function.

BASES 3.0.8

Specifications 3.0.1 through ~~3.0.4~~ establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

> "Limiting Conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met."

Specification 3.0.1 establishes the Applicability statement within each individual specification as the requirement for when (i.e., in which OPERATIONAL CONDITIONS or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met. It is not intended that the shutdown ACTION requirement be used as an operational convenience which permits (routine) voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these actions are not completed within the allowable outage time limits, a shutdown is required to place the facility in an OPERATIONAL CONDITION or other specified condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point of time it is identified that a Limiting Condition for Operation is not met. The time limits of the ACTION requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed. When a shutdown is required to comply with ACTION requirements, the plant may have entered an OPERATIONAL CONDITION in which a new specification becomes applicable. In this case, the time limits of the ACTION requirements would apply from the point in time that the new specification becomes applicable if the requirements of the Limiting Condition for Operation are not met.

When loss of safety function is determined to exist, and the SFDP requires entry into the appropriate ACTIONs of the Limiting Condition for Operation in which the loss of safety function exists, consideration must be given to the specific type of function affected. Where a loss of function is solely due to a single Technical Specification support system (e.g., loss of automatic start due to inoperable instrumentation, or loss of pump suction source due to low tank level), the appropriate Limiting Condition for Operation is the Limiting Condition for Operation for the support system. The ACTIONs for a support system Limiting Condition for Operation adequately address the inoperabilities of that system without reliance on entering its supported system Limiting Condition for Operation. When the loss of function is the result of multiple support systems, the appropriate Limiting Condition for Operation is the Limiting Condition for Operation for the supported system.

Insert 2

Specification 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. SR 4.0.2 and SR 4.0.3 apply in Section 6, Administrative Controls, only when invoked by a Section 6 Specification. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that SRs must be met during the OPERATIONAL CONDITIONS or other specified conditions in the Applicability for which the requirements of the Limiting Condition for Operation apply, unless otherwise specified in the individual SRs. This Specification is to ensure that Surveillances are performed to verify the OPERABILITY of systems and components, and that variables are within specified limits. Failure to meet a Surveillance within the specified Surveillance time interval and allowed extension, in accordance with Specification 4.0.2, constitutes a failure to meet the Limiting Condition for Operation.

Systems and components are assumed to be OPERABLE when the associated SRs have been met. Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when:

a. The systems or components are known to be inoperable, although still meeting the SRs; or

b. The requirements of the Surveillance(s) are known to be not met between required Surveillance performances.

Surveillances do not have to be performed when the unit is in an OPERATIONAL CONDITION or other specified condition for which the requirements of the associated Limiting Condition for Operation are not applicable, unless otherwise specified. The SRs associated with a Special Test Exception Limiting Condition for Operation are only applicable when the Special Test Exception Limiting Condition for Operation is used as an allowable exception to the requirements of a Specification.

3/4.7.4 ~~SNUBBERS~~ DELETED

delete

The "Snubber Program" manages the requirement for demonstrating snubber operability (examination, testing and service life monitoring) as reflected in TS Section 6.8.4.k thereby ensuring the TS remains consistent with the ISI program. The program for in service testing of snubbers in accordance with ASME OM Code and the applicable addenda as required by 10 CFR 50.55a(g) is required to include evaluation of supported components/systems when snubbers are found to be inoperable.

~~SNUBBERS (Continued)~~ delete

3/4.7.5 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values. Sealed sources are classified into three groups according to their use, with surveillance requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism, i.e,, sealed sources within radiation monitoring devices, are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

BASES

Specifications 3.0.1 through ~~3.0.4~~ 3.0.8 establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

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There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these actions are not completed within the allowable outage time limits, a shutdown is required to place the facility in an OPERATIONAL CONDITION or other specified condition in which the specification no longer applies.

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3/4.7.4 ~~SNUBBERS~~ DELETED

delete

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