



January 26, 2007

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Serial No. 06-835B
NSS&L/DF R1
Docket No. 50-423
License No. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REGARDING POST MAINTENANCE/MODIFICATION SURVEILLANCE
REQUIREMENTS LICENSE AMENDMENT REQUEST

In a letter dated March 28, 2006, Dominion Nuclear Connecticut, Inc. (DNC) submitted a request deleting redundant surveillance requirements (SRs) from the Millstone Power Station Unit 3 (MPS3) Technical Specifications. These SRs pertain to post-maintenance/post-modification testing. In a facsimile dated December 19, 2006, the NRC staff forwarded a request for additional information (RAI) in order to complete its review of DNC's request. The response to the RAI for MPS3 is provided in the attachment to this letter.

The additional information provided in this letter does not affect the conclusions of the significant hazards consideration discussion in the DNC letter dated March 28, 2006.

In accordance with 10 CFR 50.91(b), a copy of this supplement to the license amendment request is being provided to the State of Connecticut.

If you have any questions in regard to the responses provided, or require additional information, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,


Gerald T. Bischof
Vice President – Nuclear Engineering

Commitments in this letter: None

Attachments: (1)

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ATTACHMENT

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In the submittal, dated March 28, 2006, DNC requested to amend SR 4.6.6.1.b, SR 4.7.7.c, and SR 4.7.9.b. The proposed amendment would be similar for all three SRs. The three SRs respectively, pertain to the Supplementary Leak Collection and Release Systems, the Control Room Emergency Air Filtration System, and the Auxiliary Building Filter Systems.

In each SR, the requirement to demonstrate the subject filter train "OPERABLE" following "(1) after any structural maintenance on the HEPA [high-efficiency (sic) particulate air] filter or charcoal adsorber housings..." would be removed from the Technical Specifications (TSs).

NRC Question No. 1.(a)

The licensee requested these proposed amendments to the TSs on the bases of:

- (a) indicating that the deleted post structural maintenance SR test requirements are bounded by and redundant to the generic requirement contained in SR 4.0.1 regarding performance of appropriate retest activities following maintenance or modification. SR 4.0.1 is generic in scope and reads:

4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the Limiting Condition for Operation. Failure to perform a Surveillance within the specified surveillance interval shall be failure to meet the Limiting Condition for Operation except as provided in Specification 4.0.3.

Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

Please provide additional information as to how SR 4.0.1 assures that the in-place bypass testing results obtained during the 24-month surveillance are still valid after structural maintenance on the filter housing if the test is not repeated.

DNC Response

- (a) The proposed change deletes only the specific language in the SR related to post-maintenance testing but retains the balance of the SR relating to periodic testing for filter bypass leakage/penetration, charcoal efficiency, and system flow. Additionally, the method of performance and the associated acceptance criteria for the specified tests are unaffected by the proposed change.

Guidance for implementation of TS 4.0.1 is contained in the associated MPS3 TS Bases. The MPS3 TS 4.0.1 Bases are consistent with the Bases contained in NUREG-1431. As stated therein:

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

- a. The systems or components are known to be inoperable, although still meeting the Surveillance Requirements or
- b. The requirements of the Surveillance(s) are known not to be met between required Surveillance performances.”

And,

“Surveillances have to be met and performed in accordance with Specification 4.0.2, prior to returning equipment to OPERABLE status.

Upon completion of maintenance, appropriate post-maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with Specification 4.0.2.”

Based on the above, DNC understands the requirement of TS 4.0.1 to apply any time a maintenance activity is conducted and the activity has the potential to impact a TS required system, structure or component's ability to meet the performance criteria specified in any SR. As such, any maintenance activity affecting the ability of the filter train to meet the bypass acceptance criteria specified in the modified SR would make the previous test results invalid and thereby require the associated SR to be re-performed to verify operability.

NRC Question No. 1.(b)

- (b) invoking verbiage pertaining to "Surveillance Requirements" from 10 CFR [Title 10 of the *Code of Federal Regulations*] 50.36(c)(3) and "stating" that the proposed SR changes... "will not impact requirements related to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained."

As the licensee indicates, 10CFR 50.36(c)(3)... "sets forth the requirements to be used in determining whether a surveillance requirement is required to be included in technical specifications. These requirements are: (1) ensure that the necessary quality of systems and components is maintained (2)..."

Structural maintenance on the subject filter trains' HEPA filters or charcoal filter housings potentially impacts the ability of the filter trains to meet or surpass "In-place Testing Criteria" of Regulatory Guide 1.52, Revision 2, Sections C.5.c and C.5.d. Therefore, this activity potentially impacts the necessary quality of the subject systems and components.

Please explain in more detail how the necessary quality of the system is being maintained if an in-place bypass leakage test is not performed after structural maintenance, since the maintenance may have increased the bypass leakage rate.

DNC Response

- (b) The response to part (b) of this question is identical to the response given to part (a) above.

NRC Question No. 1.(c)

- (c) crediting compliance with 10 CFR [Part] 50 Appendix B, Criterion XI, Test Control.

Please provide information on how compliance with 10 CFR Appendix B, Criterion XI Test Control assures that increases in the bypass leakage rate as a result of structural modifications will be detected.

In summary, the leakage detected in the in-place bypass leakage test is an unfiltered release to the environment. Typically, this release is ignored in dose calculations when the test criteria is $< 0.05\%$. If the leakage rate increases due to structural maintenance, it impacts the release to the environment and may need to be considered in the design basis analysis dose assessment.

DNC Response

- (c) 10 CFR 50 Appendix B, Criterion XI, Test Control, stipulates in part: "A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents." This standard was referenced simply to identify a basis for other regulatory requirements that apply to the conduct of testing. Upon further review, DNC agrees that the reference to Criterion XI has limited relevance to the proposed change.

NRC Question No. 2

SR 4.0.1 and 10 CFR Part 50, Appendix B, Criterion XI were cited as justification for the removal of the phrase, "or after any modifications which could affect diesel generator interdependence." However, the NRC staff noted that neither SR 4.0.1 nor Criterion XI specify what post-modification testing must be completed to fulfill the portion of SR 4.8.1.1.2.h that was proposed to be deleted. Also, it is not clear to the staff that the requirement to start both emergency diesel generators (EDGs) simultaneously and to verify required voltage and frequency after any modification that could affect EDG interdependence would be established in SR 4.0.1 or by Criterion XI. Please provide justification that SR 4.0.1 and Criterion XI provide an equivalent level of requirement for removing the phrase that was proposed to be removed. Additionally, please provide assurance that the fundamental requirements to start both EDGs simultaneously, and to verify required voltage and frequency after any modification that could affect EDG interdependence, will be preserved.

DNC Response

The proposed change deletes the specific language in the SR related to post-maintenance testing but retains the balance of the SR to periodically test for emergency diesel generator (EDG) interdependence. Additionally, neither the method of performance nor the associated acceptance criteria for the specified tests are affected by the proposed change. As such, any maintenance activity affecting the ability of the EDGs to meet the acceptance criteria specified in the modified SR would make the previous test results invalid and thereby require the associated SR to be re-performed to verify operability.

As stated in response to Question No. 1.(c), DNC agrees that the reference to 10 CFR 50 Appendix B, Criterion XI has only limited relevance to the proposed changes.

NRC Question No. 3

Identify the specific post-modification testing requirements (EDG interdependence, frequency, and voltage acceptance criteria) in the relevant procedures and documentation that verify that the test requirements (to start both EDGs simultaneously, and to verify required voltage and frequency after any modification that could affect EDG interdependence) will be completed and are equivalent to the deleted portion of the SR discussed in question 2. In addition, please provide the bases for the acceptance criteria for the test requirements to start both EDGs simultaneously, and to verify required voltage and frequency after any modification that could affect EDG interdependence.

DNC Response

This question was addressed, in part, in DNC's correspondence to the NRC dated October 26, 2006 (Serial Number 06-835). Included in that correspondence was a table which identified the specific procedure for performance of SR 4.8.1.1.2.h. and the specific statements captured within the procedure related to the frequency of performance.

In response to the current question, SP 3646A.3, Diesel Generator Independence Test, is the MPS3 procedure directing performance of SR 4.8.1.1.2.h. Section 1.4, Frequency, specifies; "This procedure is performed once every 10 years or after modifications which could affect diesel generator interdependence." Step 4.12 of that procedure requires both EDGs to be started simultaneously, consistent with the TS SR. Step 4.14 requires recording of EDG voltage, frequency, and start time (i.e., time to reach rated voltage and frequency) data on the associated data form. The acceptance criteria for these parameters are unaffected by the proposed change.