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Dominion®

September 1, 2006

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

Serial No.	06-646
NSS&L/RWM	R0
Docket Nos.	50-336/423
License Nos.	DPR-65
	NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNITS 2 AND 3
PROPOSED SURVEILLANCE REQUIREMENT CHANGES:
USE OF GENERIC TERMINOLOGY FOR EMERGENCY CORE COOLING SYSTEMS CONTAINMENT SUMP STRAINERS (LBDCR 06-MP2-031 and 06-MP3-029)

Pursuant to 10 CFR 50.90, Dominion Nuclear Connecticut, Inc. (DNC) hereby requests to amend Operating Licenses DPR-65 and NPF-49 for the Millstone Power Station Units 2 and 3 (MPS2&3), respectively. The proposed changes to emergency core cooling systems (ECCS), Technical Specifications (TS) 3.5.2, in Surveillance Requirements (SR) 4.5.2.j for MPS2 and 4.5.2.d.2 for MPS3, are editorial in nature in that specific terminology descriptive of the current sump design is replaced with a more generic description. The intent of the SR is not altered by this change, nor are any acceptance criteria impacted by this change. As such, DNC does not consider NRC approval of this change a prerequisite to implementation of planned modifications to address GSI-191 concerns or restart of the units from their respective refueling outages. New containment sump strainers for GSI-191 will be installed in upcoming refueling outages at MPS2&3. The new designs for sump strainers are being planned and designed as described in DNC responses to Generic Letter 2004-02.

The proposed amendment does not involve a significant hazards consideration pursuant to the provisions of 10 CFR 50.92 (see Significant Hazards Consideration in Attachment 1). The Site Operations Review Committee has reviewed and concurred with this determination.

Regarding the MPS2 proposed change, DNC is requesting NRC approval by October 2006 with a 30 day implementation period. This will allow implementation during the fall 2006 refueling outage. Regarding the MPS3 proposed change, DNC is requesting NRC approval by October 2006 with a 90 day implementation period. This will allow implementation prior to the upcoming spring 2007 refueling outage.

Precedence for a similar change was granted on November 1, 2005 for Oconee Nuclear Station, reference ADAMS Accession No. ML052800170.

If you should have any questions regarding this submittal, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,

G. T. Bischof
Vice President - Nuclear Engineering

Enclosures:
1. Notarized Affidavit

Attachments:
1. Evaluation of Proposed License Amendment
2. Millstone Unit 2, DPR-65, Marked-Up Pages
3. Millstone Unit 2, DPR-65, Re-typed Pages
4. Millstone Unit 3, NPF-49, Marked-Up Pages
5. Millstone Unit 3, NPF-49, Re-typed Pages

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission
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COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Gerald T. Bischof, who is Vice President – Nuclear Engineering, of Dominion Nuclear Connecticut, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 1ST day of September, 2006.

My Commission Expires: August 31, 2008.

Margaret B. Bennett
Notary Public

(SEAL)

ATTACHMENT 1

PROPOSED SURVEILLANCE REQUIREMENT CHANGES: USE OF GENERIC TERMINOLOGY FOR EMERGENCY CORE COOLING SYSTEMS CONTAINMENT SUMP STRAINERS (LBDCR 06-MP2-031 and 06-MP3-029)

EVALUATION OF PROPOSED LICENSE AMENDMENT

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNITS 2 AND 3

EVALUATION OF PROPOSED LICENSE AMENDMENT

EVALUATION OF PROPOSED LICENSE AMENDMENT

1.0 DESCRIPTION

Pursuant to 10 CFR 50.90, Dominion Nuclear Connecticut, Inc. (DNC) hereby requests to amend Operating Licenses DPR-65 and NPF-49 for the Millstone Power Station Units 2 and 3 (MPS2 and 3), respectively. The proposed changes to emergency core cooling systems (ECCS), Technical Specifications (TS) 3.5.2, in Surveillance Requirements (SR) 4.5.2.j for MPS2 and 4.5.2.d.2 for MPS3, are viewed to be editorial in nature in that specific terminology descriptive of the current sump design is replaced with a more generic description. The intent of the SR is not altered by this change, nor are any acceptance criteria impacted by this change. As such, DNC does not consider NRC approval of this change a prerequisite to implementation of planned modifications to address GSI-191 concerns or restart of the units from their respective refueling outages. New containment sump strainers for GSI-191 will be installed in upcoming refueling outages at MPS2&3. The new designs for sump strainers are being planned and designed as described in DNC responses to Generic Letter 2004-02.[1]

2.0 PROPOSED CHANGE

Millstone Unit 2, TS SR 4.5.2.j states:

> "At least once per 18 months by verifying through visual inspection of the containment sump that each Emergency Core Cooling System subsystem suction inlet is not restricted by debris and the suction inlet trash racks and screens show no evidence of structural distress or abnormal corrosion."
>
> The proposed change to SR 4.5.2.j revises the SR to state:
>
> "At least once per 18 months by verifying through visual inspection of the containment sump that each Emergency Core Cooling System subsystem suction inlet is not restricted by debris and the suction inlet strainers show no evidence of structural distress or abnormal corrosion."

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[1] DNC Letter [Millstone Units 2 and 3], "Response to NRC Generic Letter 2004-02: Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at [PWRs], dated September 1, 2005. (Reference ADAMS Accession No. ML052500378)

Millstone Unit 3, TS SR 4.5.2.d.2 states:

> *[At least once per 24 months: ...]* "A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or abnormal corrosion."
>
> The proposed change to TS SR 4.5.2.d.2 revises the SR to state:
>
> *[At least once per 24 months: ...]* "A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (strainers, etc.) show no evidence of structural distress or abnormal corrosion."

In summary, the use of the more generic terminology (i.e., strainers) for both surveillance requirements (SRs) addresses the installation of the new strainers and can also be applied to the existing designs that use trash racks (gratings) and screens to strain debris from the suction inlet.

3.0 BACKGROUND

The proposed change to Technical Specification (TS) Surveillance Requirements (SRs) 4.5.2.j for MPS2 and 4.5.2.d.2 for MPS3 is editorial and reflects the replacement of the emergency core cooling system (ECCS) sump suction inlet trash racks and screens with strainers in response to Generic Letter 2004-02. DNC concluded in evaluation of Generic Letter 2004-02 that the ECCS sump screen effective surface area must be increased for MPS2&3. New sump strainer design changes are analyzed for structural loading, including dead weight, differential pressure, seismic, thermal and potential for jet impingement and missile generation. Trash racks are not needed for MPS2&3 in the new design. The proposed term "strainers" is also appropriate for the existing design that uses trash racks (gratings) with screens to strain debris from the suction inlet. Therefore, the change proposed would support both the installation of strainers in upcoming refueling outages at MPS2&3 and the interim operation with existing trash racks and screens. This modification will be performed at MPS2 in the fall 2006 refueling outage and at MPS3 during the spring 2007 refueling outage.

During the review of implementation plans for the sump strainer modifications, DNC recognized that the TS SRs more appropriately required modification to address the proposed editorial revision to reflect the planned replacement of trash racks and screens with strainers. The description of the planned modifications and design details are provided below. Since the design effort is continuing, some design details may change from those included in this proposal. However, system descriptions and the

details related to these modifications are continuing to be provided in response to Generic Letter 2004-02 and its associated corrective actions.

MPS2 System Description:

The floor at the lowest elevation of containment forms the containment sump. Two 24-inch containment sump recirculation pipes are provided from the sump to the suction of the safety injection and containment spray pumps. The pipe inlets for recirculation are located 11 inches off the floor to prevent the sump suction from clogging due to debris. There is also a wire mesh screen network that constitutes the trash rack (grating) and screens to prevent fragments of pipe insulation and other debris from entering the system. Water drawn from the containment sump is either pumped back to the core or to the containment spray rings via the shutdown cooling heat exchangers to prevent containment overpressure. Refer to Final Safety Analysis Report, Sections 6.2 and 6.3 for a further description.

MPS3 System Description:

The containment sump is located within the containment structure and constitutes the lowest level of containment. It provides the suction point for the containment recirculation spray pumps (RSS). Quench spray water, along with injection water from the ECCS and leakage from the reactor coolant system break, collects in the containment recirculation sump. Recirculated containment water is provided to each RSS pump through a dedicated inlet line from the containment emergency sump. There are four 14-inch diameter suction pipes in the containment sump that provide borated water to the recirculation pumps after an accident. Refer to Final Safety Analysis Report, Sections 6.2 and 6.3 for a discussion of containment and safety injection systems.

4.0 TECHNICAL ANALYSIS

The proposed amendment revises the MPS2&3 technical specifications to replace the terms "trash racks and screens" with the term "strainers". This is an editorial change that accommodates the replacement of the ECCS containment sump suction inlet trash racks and screens with strainers in response to Generic Letter 2004-02.

The ECCS sump screens are designed to allow long-term recirculation of coolant for decay heat removal following a design basis loss-of-coolant accident (LOCA). Adequate long-term decay heat removal following a LOCA is required by 10 CFR 50.46(b)(5).

MPS2 Existing Design:

The containment sumps are located on the floor of the containment and are protected by a screen assembly. Each sump pipe is covered by an enclosure approximately 4 ft high. The top of the enclosure is solid. The sides have protective vertical grating spaced one inch in front of a fine mesh screen. The screen assembly is divided into two sections separated by mesh to ensure filtered flow in the event that a part of the assembly is damaged. The total screen area is approximately 100 sq. ft. The wire mesh has 3/32-inch openings that prevent larger particles from entering the containment spray system.

MPS3 Existing Design:

The four containment recirculation pumps take suction from a common containment sump that is located on the floor of the containment and is enclosed by a protective screen assembly. Three stages of trash rejection are provided: a 1 1/2-inch grating, coarse mesh screen, and fine mesh screen. The approximate screen sizes are as follows: 3/8 inch for the coarse mesh and 3/32 inch for the fine mesh. The grating and screens are erected vertically around the sump perimeter. The total screen is approximately 248 sq. ft. The existing screen assembly is designed to prevent particles larger than 3/32-inch from entering the ECCS and RSS. The containment screen assembly is constructed of stainless steel materials except for the grating, which is galvanized carbon steel.

New Strainer System Modification for MPS2&3:

The new strainer systems are constructed of corrosion resistant stainless steel materials. The primary material is 304 stainless steel with low carbon content and, due to the corrosion resistant nature of the materials used, none of the surfaces are painted or galvanized. The fins are made of thin corrugated stainless steel perforated with 1/16-inch holes. The strainer size is increased to accommodate the new postulated debris loading and the resulting increased pressure drop across the strainer. The total filtration surface area of the strainer is approximately 6000 square feet for the MPS2 design and is estimated to be approximately 4600 square feet for the MPS3 design. The strainer hole size is decreased from 3/32-inch holes to 1/16-inch round holes to reduce the amount of material that bypasses the strainer fins either by working its way through the holes in the case of fiber or by passing through the holes in the case of small particulate.

The only FSAR safety analysis event that credits the ECCS sump strainer is the LOCA. The replacement of the ECCS sump strainer does not have any adverse impact on the ECCS subsystems. The revised ECCS sump strainer performance exceeds the

performance of the existing ECCS sump strainer considering the existing design basis requirements.

The strainers are passive devices with no moving parts. As such, there are no internal sources of failures and an active failure of the strainer does not need to be considered. Failure modes and effects analysis is included in design analyses to confirm that there is no credible failure mechanism that will cause a failure of the strainer and challenge the independence and redundancy of the containment spray and ECCS systems.

Floor gratings and structures above the new strainers will capture large debris that could potentially fall onto the strainers. There is no credible failure that could cause damage to any part of the replacement ECCS strainer assemblies and the strainer design is evaluated for damage due to a high energy line break.

In summary, the new strainers are functionally equivalent to the existing trash racks and screens for meeting requirements of 10 CFR 50.46(b)(5) for long term cooling and 10 CFR Part 50, Appendix A, Criterion 35 for emergency core cooling. The use of generic term "strainers" can be used for both the existing and new designs and will not affect implementation of MPS2 SR 4.5.2.j and MPS3 SR 4.5.2.d.2.

Consistent with implementing corrective actions associated with Generic Letter 2004-02, the new design for strainers shall be shown capable of withstanding the loads imposed by expanding jets, missiles, the accumulation of debris, and pressure differentials caused by post-LOCA blockage. The new strainer design is evaluated for damage due to high-energy line breaks. No pipe whip or jet impingement concerns exist. The new containment strainer is a safety related, QA Category I, and seismic Category I designed component/structure. It will be designed to the design basis earthquake loads applicable to the containment floor elevation. These requirements ensure that it performs its intended safety function.

The proposed change does not affect requirements that verify operability of affected subsystems, nor will it affect the assurance that the accident analysis assumptions are satisfied. The use of the term "strainers" in place of "trash racks and screens" is relevant only to the surveillance which requires the sump strainers to be inspected for evidence of structural distress or abnormal corrosion. The term "strainer", being more generic, encompasses all straining elements of the structure. For the existing sumps with trash racks (grating) and screens installed, the term "strainer" would encompass the surrounding grating (trash rack), the screen mesh, and the fit between these elements and supporting members of the structure. For new (modified) sumps, the term "strainer" would apply to the fins, which perform the straining function and fit between this plate and all supporting members. The inspection procedures (applicable to both Millstone Units 2 and 3) will be revised upon implementation of this proposed

amendment to use the generic term and clarify inspection requirements. As such, the change does not adversely impact compliance with any of the applicable regulatory requirements/criteria listed above.

The requested amendment proposes no significant increased risk to plant safety. The administrative changes proposed by this license amendment request do not impact the technical aspects of the technical specifications.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

Dominion Nuclear Connecticut, Inc. (DNC) is replacing the existing emergency core cooling system (ECCS) trash racks and screens with strainers in upcoming refueling outages as part of the response to Generic Letter 2004-02 for Millstone Power Station Units 2 and 3. A change to Technical Specification (TS) Surveillance Requirements (SRs) 4.5.2.j for Unit 2 and 4.5.2.d.2 for Unit 3 are editorial in nature in that specific terminology descriptive of the current design sump is being replaced with a more generic description. The intent of the surveillance requirements is not altered by this change, nor are any acceptance criteria impacted by this change. In summary, the use of the more generic terminology (i.e., strainers) for both surveillance requirements addresses the installation of the new strainers and can also be applied to the existing designs that use trash racks (gratings) and screens to strain debris from the suction inlet.

DNC has evaluated whether or not a significant hazards consideration (SHC) is involved with the proposed changes by addressing the three standards set forth in 10 CFR 50.92(c) as discussed below.

Criterion 1:

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

Response: No.

Although the configurations of the existing sump screen and the replacement strainer assemblies are different, they serve the same fundamental purpose of passively removing debris from the sump's suction supply of the supported system pumps. Replacing trash racks with strainers does not adversely impact the adequacy of pump net positive suction head assumed in the safety analyses. In fact, it will improve it. Likewise, the proposed change does not reduce the

reliability of any supported systems or introduce any new system interactions. A missile evaluation of the new strainer design concluded that there is no credible missile that could damage the strainer when needed during a loss-of-coolant accident. A jet impingement evaluation of the new strainer design concluded that there are no credible high energy line break jets that could damage the strainer when needed during a LOCA. The greatly increased surface area of the new strainer will reduce the approach velocity of the strainer face significantly, further decreasing the risk of impact from large debris entrained in the sump flow stream. The proposed rewording of the SRs will continue to ensure that the ECCS sump suction inlet strainers show no evidence of structural distress or abnormal corrosion for MPS2 and 3 with or without the strainer modification complete. As such, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Criterion 2:

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

Response: No.

During the next refueling outage for each unit, DNC is replacing the ECCS trash racks and screens with strainers in support of the response to Generic Letter 2004-02 on Millstone Units 2 and 3. The ECCS strainers are passive components in standby safety systems used for accident mitigation. As such, they are not accident initiators. Therefore, there is no possibility that this change could create any accident of any kind. A change to TS SRs 4.5.2.j for MPS2 and 4.5.2.d.2 for MPS3 addresses differences in nomenclature between the existing and GSI-191 designs. These changes do not alter the nature of events postulated in the Final Safety Analysis Report nor do they introduce any unique precursor mechanisms. Therefore, the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

Criterion 3:

Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed changes do not adversely affect any plant safety limits, set points, or design parameters. The changes also do not adversely affect the fuel, fuel

cladding, reactor coolant system (RCS), or containment integrity. Therefore, the proposed TS change, which revises the terminology associated with TS SRs, does not involve a significant reduction in the margin of safety.

In summary, DNC concludes that the proposed amendment does not represent a significant hazards consideration under the standards set forth in 10 CFR 50.92(c).

5.2 Applicable Regulatory Requirements/Criteria

Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents and Pressurized Water Reactors," is part of the regulatory framework the NRC staff is using to address issues associated with GSI-191, "Assessment of Debris Accumulation on PWR Sump Performance," for requirements to improve evaluation of plant capability to meet Title 10 of the Code of Federal Regulations (10 CFR) Section 50.46(b)(5).

The changes requested are administrative in nature, ensuring nomenclature differences in the text of the surveillance requirements (SRs), in that the generic use of the term "strainers" in the SRs is intended to be synonymous with the existing use of trash racks and screens. At the same time the term is also compatible with the new strainers that are planned for upcoming refueling outages. The new strainers are functionally equivalent to the existing trash racks and screens for meeting requirements of 10 CFR 50.46(b)(5) for Long Term Cooling and 10 CFR Part 50, Appendix A, Criterion 35 for Emergency Core Cooling.

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

6.0 ENVIRONMENTAL CONSIDERATION

DNC has determined that the proposed amendment would change requirements with respect to use of a facility component located within the restricted area, as defined by 10 CFR 20, or an inspection or surveillance requirement. DNC has evaluated the proposed change and has determined that the change 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 off site, 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.

Serial No. 06-646
Docket No. 50-336

ATTACHMENT 2

PROPOSED SURVEILLANCE REQUIREMENT CHANGES: USE OF GENERIC TERMINOLOGY FOR EMERGENCY CORE COOLING SYSTEMS CONTAINMENT SUMP STRAINERS

MILLSTONE UNIT 2 MARKED-UP PAGES

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2

SURVEILLANCE REQUIREMENTS(Continued)

h. At least once per 18 months by verifying each low pressure safety injection pump stops automatically on an actual or simulated actuation signal.

i. By verifying the correct position of each electrical and/or mechanical position stop for each injection valve in Table 4.5-1:

1. Within 4 hours after completion of valve operations.

2. At least once per 18 months.

j. At least once per 18 months by verifying through visual inspection of the containment sump that each Emergency Core Cooling System subsystem suction inlet is not restricted by debris and the suction inlet trash racks and screens show no evidence of structural distress or abnormal corrosion. ^ strainers

k. At least once per 18 months by verifying the Shutdown Cooling System open permissive interlock prevents the Shutdown Cooling System inlet isolation valves from being opened with an actual or simulated Reactor Coolant System pressure signal of $\geq$ 300 psia.

ATTACHMENT 3

PROPOSED SURVEILLANCE REQUIREMENT CHANGES: USE OF GENERIC TERMINOLOGY FOR EMERGENCY CORE COOLING SYSTEMS CONTAINMENT SUMP STRAINERS

MILLSTONE UNIT 2 RE-TYPED PAGES

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2

h. At least once per 18 months by verifying each low pressure safety injection pump stops automatically on an actual or simulated actuation signal.

i. By verifying the correct position of each electrical and/or mechanical position stop for each injection valve in Table 4.5-1:

1. Within 4 hours after completion of valve operations.

2. At least once per 18 months.

j. At least once per 18 months by verifying through visual inspection of the containment sump that each Emergency Core Cooling System subsystem suction inlet is not restricted by debris and the suction inlet strainers show no evidence of structural distress or abnormal corrosion. |

k. At least once per 18 months by verifying the Shutdown Cooling System open permissive interlock prevents the Shutdown Cooling System inlet isolation valves from being opened with an actual or simulated Reactor Coolant System pressure signal of $\geq$ 300 psia.

ATTACHMENT 4

PROPOSED SURVEILLANCE REQUIREMENT CHANGES: USE OF GENERIC TERMINOLOGY FOR EMERGENCY CORE COOLING SYSTEMS CONTAINMENT SUMP STRAINERS

MILLSTONE UNIT 3 MARKED-UP PAGES

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3

Millstone Unit 3

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Surveillance Requirement 4.5.2.d.2 addresses periodic inspection of the containment sump to ensure that it is unrestricted and stays in proper operating condition. The 24 month frequency is based on the need to perform this surveillance under the conditions that apply during an outage, and the need to have access to the location. This frequency is sufficient to detect abnormal degradation and is confirmed by operating experience.

DO NOT INCLUDE BASES TEXT OR ITS CHANGES IN THIS SUBMITTAL (THIS IS FOR INFORMATION ONLY AND NOT FOR FINAL CORRESPONDENCE ISSUE)

2) A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or abnormal corrosion.

strainers

e. At least once per 24 months by:

1) Verifying that each automatic valve in the flow path actuates to its correct position on a Safety Injection actuation test signal, and

2) Verifying that each of the following pumps start automatically upon receipt of a Safety Injection actuation test signal:

a) Centrifugal charging pump,

b) Safety Injection pump, and

c) RHR pump.

3) Verifying that the Residual Heat Removal pumps stop automatically upon receipt of a Low-Low RWST Level test signal.

f. By verifying that each of the following pump's developed head at the test flow point is greater than or equal to the required developed head when tested pursuant to Specification 4.0.5:

1) Centrifugal charging pump

2) Safety Injection pump

3) RHR pump

4) Containment recirculation pump

g. By verifying the correct position of each electrical and/or mechanical position stop for the following ECCS throttle valves:

1) Within 4 hours following completion of each valve stroking operation or maintenance on the valve when the ECCS subsystems are required to be OPERABLE, and

2) At least once per 24 months.

ECCS Throttle Valves Valve Number	Valve Number
3SIH*V6	3SIH*V25
3SIH*V7	3SIH*V27

ATTACHMENT 5

PROPOSED SURVEILLANCE REQUIREMENT CHANGES: USE OF GENERIC TERMINOLOGY FOR EMERGENCY CORE COOLING SYSTEMS CONTAINMENT SUMP STRAINERS

MILLSTONE UNIT 3 RE-TYPED PAGES

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3

2) A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (strainers, etc.) show no evidence of structural distress or abnormal corrosion.

e. At least once per 24 months by:

1) Verifying that each automatic valve in the flow path actuates to its correct position on a Safety Injection actuation test signal, and

2) Verifying that each of the following pumps start automatically upon receipt of a Safety Injection actuation test signal:

a) Centrifugal charging pump,

b) Safety Injection pump, and

c) RHR pump.

3) Verifying that the Residual Heat Removal pumps stop automatically upon receipt of a Low-Low RWST Level test signal.

f. By verifying that each of the following pump's developed head at the test flow point is greater than or equal to the required developed head when tested pursuant to Specification 4.0.5:

1) Centrifugal charging pump

2) Safety Injection pump

3) RHR pump

4) Containment recirculation pump

g. By verifying the correct position of each electrical and/or mechanical position stop for the following ECCS throttle valves:

1) Within 4 hours following completion of each valve stroking operation or maintenance on the valve when the ECCS subsystems are required to be OPERABLE, and

2) At least once per 24 months.

ECCS Throttle Valves

Valve Number	Valve Number
3SIH*V6	3SIH*V25
3SIH*V7	3SIH*V27

ECCS SUBSYSTEMS (Continued)

flush upon heat exchanger return to service and procedural compliance is relied upon to ensure that gas is not present within the heat exchanger u-tubes.

Surveillance Requirement 4.5.2.C.2 requires that the visual inspection of the containment be performed at least once daily if the containment has been entered that day and when the final containment entry is made. This will reduce the number of unnecessary inspections and also reduce personnel exposure.

Surveillance Requirement 4.5.2.d.2 addresses periodic inspection of the containment sump to ensure that it is unrestricted and stays in proper operating condition. The 24 month frequency is based on the need to perform this surveillance under the conditions that apply during an outage, and the need to have access to the location. This frequency is sufficient to detect abnormal degradation and is confirmed by operating experience.

The Emergency Core Cooling System (ECCS) has several piping cross connection points for use during the post-LOCA recirculation phase of operation. These cross-connection points allow the Recirculation Spray System (RSS) to supply water from the containment sump to the safety injection and charging pumps. The RSS has the capability to supply both Train A and B safety injection pumps and both Train A and B charging pumps. Operator action is required to position valves to establish flow from the containment sump through the RSS subsystems to the safety injection and charging pumps since the valves are not automatically repositioned. The quarterly stroke testing (Technical Specification 4.0.5) of the ECC/RSS recirculation flowpath valves discussed below will not result in subsystem inoperability (except due to other equipment manipulations to support valve testing) since these valves are manually aligned in accordance with the Emergency Operating Procedures (EOPs) to establish the recirculation flowpaths. It is expected the valves will be returned to the normal pre-test position following termination of the surveillance testing in response to the accident. Failure to restore any valve to the normal pre-test position will be indicated to the Control Room Operators when the ESF status panels are checked, as directed by the EOPs. The EOPs direct the Control Room Operators to check the ESF status panels early in the event to ensure proper equipment alignment. Sufficient time before the recirculation flowpath is required is expected to be available for operator action to position any valves that have not been restored to the pretest position, including local manual valve operation. Even if the valves are not restored to the pre-test position, sufficient capability will remain to meet ECCS post-LOCA recirculation requirements. As a result, stroke testing of the ECCS recirculation valves discussed below will not result in a loss of system independence or redundancy, and both ECCS subsystems will remain OPERABLE.

When performing the quarterly stroke test of 3SIH*MV8923A, the control switch for safety injection pump 3SIH*P1A is placed in the pull-to-lock position to prevent an automatic pump start with the suction valve closed. With the control switch for 3SIH*P1A in pull-to-lock, the Train A ECCS subsystem is inoperable and Technical Specification 3.5.2, ACTION a., applies. This ACTION statement is sufficient to administratively control the plant configuration with the automatic start of 3SIH*P1A defeated to allow stroke testing of 3SIH*MV8923A. In addition, the EOPs and the ESF status panels will identify this abnormal plant configuration, if not corrected following the termination of the surveillance testing, to the plant operators to allow restoration of the normal post-LOCA recirculation flowpath. Even if system restoration is not accomplished, sufficient equipment will be available to perform all ECCS and RSS injection and recirculation functions, provided no additional ECCS or RSS equipment is inoperable, and an additional single failure does not occur (an acceptable assumption since the Technical Specification ACTION statement limits the plant configuration time such that no additional equipment failure need be postulated). During the injection phase the redundant subsystem (Train B) is fully functional, as is a significant portion of the Train A subsystem. During the recirculation phase, the Train A RSS subsystem can supply water from the containment sump to the Train A