Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385

Dominion

July 7, 2004

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

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Docket Nos.:	50-336
	50-423
License Nos.:	DPR-65
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DOMINION NUCLEAR CONNECTICUT, INC. (DNC)
MILLSTONE POWER STATION UNITS 2 AND 3
ADDITIONAL INFORMATION IN SUPPORT OF
APPLICATIONS FOR RENEWED OPERATING LICENSES

By letter dated January 20, 2004, DNC submitted the applications for renewed operating licenses (LRAs) for Millstone Power Station, Units 2 and 3. Based on questions from various audits and internal reviews, additional information in support of the Millstone Power Station, Units 2 and 3 LRAs is being submitted as Attachment 1.

Should you have any questions regarding this submittal, please contact Mr. William D. Corbin, Director, Nuclear Projects, Dominion Resources Services, Inc., 5000 Dominion Blvd., Glen Allen, VA, 23060, (804) 273-2365.

Very truly yours,

E. S. Grecheck
Vice President – Nuclear Support Services

Attachments:

1. Additional Information in Support of Applications for Renewed Operating Licenses

Commitments made in this letter:

None.

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SN: 04-327
Docket Nos.: 50-336/423
Subject: Additional Information in Support of
Renewed Operating Licenses

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Eugene S. Grecheck, who is Vice President - Nuclear Support Services, 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 7th day of July, 2004.

My Commission Expires: March 31, 2008.

Maggie McClure
Notary Public

(SEAL)

Attachment 1

Additional Information in Support of Applications for Renewed Operating Licenses

Millstone Power Station Units 2 and 3
Dominion Nuclear Connecticut, Inc.

Additional Information in Support of Applications for Renewed Operating Licenses

Millstone Unit 2

- On Unit 2 drawing 25203-LR26005, Sh.2, there are Main Steam System components inadvertently highlighted as Condensate System components. The drawing has been revised and the list of LR drawings provided in Unit 2 Section 2.3.4.1 (page 2-160) should include drawing 25203-LR26005, Sh.2. There are no component type changes resulting from this change.

- The aging effect of Buildup of Deposits does not apply for the copper alloy "Pipe" component type in Unit 2 Table 3.3.2-3 (page 3-206) since this piping is unlined.

- The atmosphere/weather environment and associated information (i.e., "Aging Effects Requiring Management", "Aging Management Programs", etc,) for the aluminum "Electrical Conduit, Cable Trays" structural members was inadvertently included in Unit 2 Table 3.5.2-25 (page 3-532). It was determined that Unit 2 does not have these structural members constructed of aluminum in an atmosphere/weather environment.

- The smoke detectors in the Unit 2 Control Room Air Conditioning System duct penetrate the duct and perform a pressure boundary intended function. Therefore, these components are within the scope of license renewal. A component type, "Smoke Detectors", was added to the screening results and an aging management review was performed. This change affects the list of component types subject to aging management review in the Unit 2 Table 2.3.3-19 (page 2-133) by adding the component type "Smoke Detectors" with a "Pressure Boundary" intended function. The aging management review results listed in Unit 2 Table 3.3.2-19 (page 3-257) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Smoke Detectors	PB	Carbon Steel	(I) Air	None	None			I,10
			(E) Air	None	None			I,10

These added components are shown on license renewal drawing 25203-LR26027, Sheet 3 at location B-11.

- The containment particulate and gaseous radiation monitors and associated components in the Unit 2 Process and Area Radiation Monitoring System perform an intended function to actuate isolation of the containment purge flow in the event of a fuel handling accident in the containment. Therefore, these components are within the scope of license renewal. The component types "Fan/Blower Housings", "Filter Housings", and "Radiation Detectors" were added to the screening results and an aging management review was performed. This change affects the list of component types subject to aging management review in Unit 2 Table 2.3.3-27 (page 2-141) by adding the component types "Radiation Detectors", "Fan/Blower Housings", and "Filter Housings" with a "Pressure Boundary" intended function. The aging management review results listed in Unit 2 Table 3.3.2-27 (page 3-271) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Fan/Blower Housings	PB	Stainless Steel	(E) Air	None	None			I,11
			(I) Air	None	None			I,11
Filter Housings	PB	Stainless Steel	(E) Air	None	None			I,11
			(I) Air	None	None			I,11
Radiation Detectors	PB	Stainless Steel	(E) Air	None	None			I,11
			(I) Air	None	None			I,11

These added components are shown on license renewal drawing 25203-LR26028, Sheet 2 between locations J-6 to J-11 and G-6 to G-11.

- The diesel generator starting air compressors and components in the Unit 2 Diesel Generator System are credited with replenishing starting air tanks during certain 10CFR50, Appendix R fire scenarios. Therefore, these components are within the scope of license renewal. The components include the air compressors along with the piping and components downstream of the starting air tanks. The component types "After-filter Housings", "Compressor Casings", "Dryers", and "Pre-filter Housings" were added to the screening results and an aging management review was performed. Piping and valve components in the diesel generator starting air subsystem are evaluated within existing component types. This change affects the list of component types subject to aging management review in Unit 2 Table 2.3.3-34 (page 2-149) by adding the component types "After-filter Housings" "Compressor Casings", "Dryers", and "Pre-filter Housings" with a "Pressure Boundary" intended function. The aging management review results in Unit 2 Table 3.3.2-34 (pages 3-300, 3-301, and 3-306) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
After-Filter Housings	PB	Stainless Steel	(E) Air	None	None			G
			(I) Air	Loss of Material	Work Control Process	VII.F2.4-a	3.3.1-05	C,2
Compressor Casings	PB	Carbon Steel	(E) Air	None	None			I,6
			(I) Air	Loss of Material	Work Control Process	VII.D.2-a	3.3.1-19	E,2
Dryers	PB	Stainless Steel	(E) Air	None	None			G
			(I) Air	Loss of Material	Work Control Process	VII.F2.4-a	3.3.1-05	C,2
Pre-Filter Housings	PB	Stainless Steel	(E) Air	None	None			G
			(I) Air	Loss of Material	Work Control Process	VII.F2.4-a	3.3.1-05	C,2

These added components are shown on license renewal drawing 25203-LR26018, Sheet 5 and include all previously non-highlighted portions.

- The Unit 1 Turbine Building flood wall provides flood protection for Unit 2 Turbine Building. Therefore, this structure is within the scope of license renewal. The structural members "Flood Barrier Wall" and "Masonry Block Walls" were added to the screening results for the Unit 1 Turbine Building and an aging management review was performed. This change affects the list of structural members subject to aging management review in Unit 2 Table 2.4.2-5 (page 2-226) by adding the structural members "Flood Barrier Wall" and "Masonry Block Walls" with "Flood Barrier" and "Structural Support" intended functions. The aging management review results in Unit 2 Table 3.5.2-6 (page 3-469) should read as follows:

Structural Member	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Flood Barrier Wall	SSR, FLB	Carbon Steel	Air	Loss of Material	Structural Monitoring Program	III.A3.2-a	3.5.1-20	A
Masonry Block Wall	SNS	Concrete	Air	Cracking	Structural Monitoring Program	III.A3.3-a	3.5.1-24	A

Millstone Unit 3

- The Boric Acid Batching Tank in the Unit 3 Chemical and Volume Control System could potentially effect safety related equipment per the criteria of 10 CFR 54.4(a)(2). Therefore, this component is within the scope of license renewal. The component type "Boric Acid Batching Tank" was added to the screening results and an aging management review was performed. This change affects Unit 3 Table 2.3.3-15 (page 2-146) by adding the component type "Boric Acid Batching Tank" with "Pressure Boundary" and "Limited Structural Integrity" intended functions. The aging management review results listed in Unit 3 Table 3.3.2-15 (page 3-257) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Boric Acid Batching Tank	LSI, PB	Stainless Steel	(E) Air	None	None			G
			(I) Treated Water	Loss of Material	Chemistry Control For Primary Systems	VII.C2.2-a	3.3.1-15	E

This added component is shown on license renewal drawing 25212-LR26904, Sheet 3 at location M-5.

- On Unit 3 drawings 25212-LR26937, Sh. 2 and 25212-LR26953, Sh. 1 there are Hot Water Heating components inadvertently highlighted as Hot Water Pre-heating. The drawings have been revised and the list of LR drawings provided in Unit 3 Section 2.3.4.8 (page 2-194) should include drawings 25212-LR26937, Sh. 2 and 25212-LR26953, Sh. 1. There are no component type changes resulting from this change. The list of drawings provided in Unit 3 Section 2.3.4.9 (page 2-195) should add drawing 25212-LR26948 Sh. 2 since Hot Water Pre-heating components are highlighted on this drawing.

  In the 2nd paragraph of Unit 3 Section 2.3.4.9, the phrase "and non-safety-related components that are used to mitigate the effects of a high-energy line break" was inadvertently added to the first sentence.

  In addition, the 3rd paragraph of Unit 3 Section 2.3.4.9 is more correctly stated with the following:

  > "The evaluation boundary includes the non-safety-related components with a spatial orientation near safety-related SSCs that are located in the Auxiliary Building and Fuel Building, and valves that isolate non-safety-related components with a spatial orientation near safety-related SSCs in the Service Building."

- The aging effect of Buildup of Deposits does not apply to the copper alloy “Pipe” component type in the Unit 3 Table 3.3.2-1 (page 3-216) and Table 3.3.2-2 (page 3-218) since the piping is unlined.

- The atmosphere/weather environment and associated information (i.e., “Aging Effects Requiring Management”, “Aging Management Programs”, etc,) for the aluminum “Electrical Conduit, Cable Trays” structural members was inadvertently included in Unit 3 Table 3.5.2-36 (page 3-643). It has been determined that Unit 3 does not have these structural members constructed of aluminum in an atmosphere/weather environment.

- Two in-line flow gauges for the Unit 3 Fire Protection System have been identified as providing a system pressure boundary intended function. Therefore, these components are within the scope of license renewal. The component type "Flow Indicators" was added to the screening results and an aging management review has been performed. This change affects the list of components subject to aging management review in Unit 2 Table 2.3.3-32 (page 2-146) and Unit 3 Table 2.3.3-37 (page 2-170) by adding the component type "Flow Indicators" with a "Pressure Boundary" intended function. The aging management review results listed in Unit 2 Table 3.3.2-32 (page 3-289) and Unit 3 Table 3.3.2-37 (page 3-344) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Flow Indicators	PB	Carbon Steel	(E) Air	None	None			I,6
			(I) Raw Water	Loss of Material	Fire Protection Program	VII.G.6-b	3.3.1-21	C

These added components are shown on license renewal drawing 25212-LR26946, Sheet 2 at locations N-7,8.

- The hydraulic subsystem components associated with the Unit 3 Feedwater System feedwater isolation valve (FWIV) actuators are required for FWIV closure in response to a feedwater isolation actuation signal. Therefore, these components are within the scope of license renewal. The component types "Control Blocks", "Hydraulic Reservoirs", and "Nitrogen Accumulators" were added to the screening results and an aging management review was performed. Tubing and valve components of the FWIV hydraulic subsystem are evaluated within existing component types but were not previously evaluated for an oil environment. The oil environment was added to the list of environments in Unit 3 Section 3.4.2.1.2 (page 3-402). This change affects the list of component types subject to aging management review in Unit 3 Table 2.3.4-2 (page 2-201) by adding the component types "Control Blocks", "Hydraulic Reservoirs", and "Nitrogen Accumulators" with a "Pressure Boundary" intended function. The aging management review results listed in Unit 3 Table 3.4.2-2 (pages 3-425 and 3-426) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Control Blocks	PB	Stainless Steel	(E) Air	None	None			G
			(I) Oil	None	None			G
Hydraulic Reservoirs	PB	Stainless Steel	(E) Air	None	None			G
			(I) Oil	None	None			G
Nitrogen Accumulators	PB	Stainless Steel	(E) Air	None	None			G
			(I) Gas	None	None			G
Tubing (Additions Only)	PB	Stainless Steel	(I) Oil	None	None			G
Valves (Additions Only)	PB	Stainless Steel	(I) Oil	None	None			G

These added components are shown on license renewal drawing 25212-LR26930, Sheets 3 and 4 at locations F-2,3 and F-7,8 (both sheets).

- Components needed to support post-accident calibration of the hydrogen analyzers in the Unit 3 Post-Accident Sampling Systems are necessary to maintain post-accident operability. Therefore, these components are within the scope of license renewal. The component types "Hydrogen Tanks" and "Restricting Orifices" were added to the screening results and an aging management review was performed. Tubing and valve components which are part of the hydrogen analyzers calibration subsystem are evaluated within existing component types. This change affects the list of component types subject to aging management review in Unit 3 Table 2.3.3-46 (page 2-182) by adding the component types "Hydrogen Tanks" and "Restricting Orifices" with "Pressure Boundary" and "Restricts Flow" intended functions. The aging management review results in Unit 3 Table 3.3.2-46 (pages 3-387 and 3-388) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Hydrogen Tanks	PB	Stainless Steel	(E) Air	None	None			G
			(I) Gas	None	None			G
Restricting Orifices	PB, RF	Stainless Steel	(E) Air	None	None			G
			(I) Gas	None	None			G

These added components are shown on license renewal drawing 25212-LR26955, Sheet 1 at locations bounded by I-5,6 through L-5,6 and I-8 through L-8.

- The auxiliary feedwater pump lubricating oil subsystem in the Unit 3 Auxiliary Feedwater System should be included within the scope of license renewal. The component types "Flow Indicators", "Lube Oil Filters", and "Oil Reservoirs" were added to the screening results and an aging management review was performed. Piping and valves components of the auxiliary feedwater pump lubricating oil subsystem are evaluated within existing component types but were not previously evaluated in an oil environment. This change affects the list of component types subject to aging management review in Unit 3 Table 2.3.4-5 (page 2-204) by adding the component types "Flow Indicators", "Lube Oil Filters", and "Oil Reservoirs" with a "Pressure Boundary" intended function. The aging management review results in Unit 3 Table 3.4.2-5 (pages 3-433, 3-434, and 3-435) should read as follows:

Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Mgm't Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Flow Indicators	PB	Carbon Steel	(E) Air	Loss of Material	General Condition Monitoring	VIII.H.1-b	3.4.1-05	A,2
			(I) Oil	Loss of Material	Work Control Process	VIII.G.5-d	3.4.1-04	C,2
Lube Oil Filters	PB	Carbon Steel	(E) Air	Loss of Material	General Condition Monitoring	VIII.H.1-b	3.4.1-05	A,2
			(I) Oil	Loss of Material	Work Control Process	VIII.G.5-d	3.4.1-04	C,2
Oil Reservoirs	PB	Carbon Steel	(E) Air	Loss of Material	General Condition Monitoring	VIII.H.1-b	3.4.1-05	A,2
			(I) Oil	Loss of Material	Work Control Process	VIII.G.5-d	3.4.1-04	C,2
Pipe (Additions Only)	PB	Carbon Steel	(I) Oil	Loss of Material	Work Control Process	VIII.G.5-d	3.4.1-04	C,2
Valves (Additions Only)	PB	Carbon Steel	(I) Oil	Loss of Material	Work Control Process	VIII.G.5-d	3.4.1-04	C,2

These added components are shown on Millstone Unit 3 FSAR Figure 10.2-2 at locations A,B-4 through A,B-11 and D,E-9 through D,E-11.

- DNC identified a publication error that resulted in missing text in a portion of Section 3.1 in the Unit 3 application. Specifically, some information is missing from various subsections of Section 3.1.2.2, "Further Evaluation of Aging Management as Recommended by NUREG-1801". The corrections for the pertinent missing information are identified as follows:

  - Section 3.1.2.2.6: the second paragraph should state the following:

    "Millstone will continue to implement all relevant ASME Section XI inspection requirements associated with reactor vessel internals. In addition, Millstone will follow the industry efforts on reactor vessel internals regarding such issues as thermal or neutron irradiation embrittlement (loss of fracture toughness), void swelling (change in dimensions), stress corrosion cracking (PWSCC and IASCC), and loss of pre-load for baffle and former-assembly bolts and will implement the appropriate recommendations resulting from this guidance."

    "This commitment is identified in Appendix A, Table A6.0-1 License Renewal Commitments, Item 13."

  - Section 3.1.2.2.7.1: the first sentence should state the following:

    <u>"Pressurizer Spray Head/Nozzle Assembly"</u>

    "The pressurizer spray head assembly/nozzle assembly is fabricated from cast austenitic stainless steel which is subject to cracking due to SCC. Cracking of the pressurizer spray head assembly/nozzle assembly is managed with the Chemistry Control for Primary Systems Program."

  - Section 3.1.2.2.7.3: the first sentence should state the following:

    "The pressurizer does not use nickel-based alloys in the instrumentation penetrations and heater sheaths and sleeves. However, Alloy 82/182 weld metal is used in the pressurizer spray, relief, safety and surge nozzle safe end welds. Primary water stress corrosion cracking of these locations is managed with the Chemistry Control for Primary Systems Program and the Inservice Inspection Program: Systems, Components and Supports."

- Section 3.1.2.2.8: the first sentence should state the following:

  "Aging effects of baffle/former bolts will be managed with the Chemistry Control for Primary Systems Program and the Inservice Inspection Program: Reactor Vessel Internals."

- Section 3.1.2.2.9: the first sentence should state the following:

  "Loss of pre-load of baffle/former bolts is managed with the Inservice Inspection Program: Reactor Vessel Internals."

- Section 3.1.2.2.11: the first sentence should state the following:

  "Cracking and loss of material in the steam generator tubes and tube plugs are managed by the Chemistry Control for Primary Systems Program, the Chemistry Control for Secondary Systems Program, and the Steam Generator Structural Integrity program."

- Section 3.1.2.2.12: the following should be added:

  "Tube support lattice bars are not used in the steam generators. Therefore, this item is not applicable."

- Section 3.1.2.2.13: the following should be added:

  "The steam generator tube support plates are fabricated from stainless steel. Therefore, this item is not applicable."