

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



**Dominion**

SEP 3 2003

Docket No. 50-423  
B18948

RE: 10 CFR 54  
10 CFR 50.12, 54.15

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

Millstone Power Station, Unit No. 3  
License Renewal - Request for Exemption  
From the Requirements of 10 CFR 54.17(c)  
Response to Request for Additional Information

By letter dated December 13, 2002, <sup>(1)</sup> Dominion Nuclear Connecticut, Inc. (DNC) requested an exemption from the schedular requirements of 10 CFR 54.17(c) for Millstone Unit No. 3. Based on a telephone conference with the Nuclear Regulatory Commission (NRC) staff on March 5, 2003, DNC submitted a letter dated April 28, 2003<sup>(2)</sup> that provided supplemental information related to the exemption request.

By facsimile dated July 18, 2003<sup>(3)</sup> a Request for Additional Information (RAI) was received from the NRC staff, which contained questions pertaining to additional details of the basis for DNC's exemption request related to Millstone Unit No. 3 containment and other Category I structures.

Attachment 1 provides the DNC response to the questions received in the RAI.

There are no regulatory commitments contained within this submittal.

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- <sup>(1)</sup> J. A. Price letter to U.S. Nuclear Regulatory Commission, "Millstone Power Station, Unit No. 3 License Renewal - Request for Exemption From the Requirements of 10 CFR 54.17(c)," dated December 13, 2002.
- <sup>(2)</sup> J. A. Price letter to U.S. Nuclear Regulatory Commission, "Millstone Power Station, Unit No. 3 License Renewal - Request for Exemption From the Requirements of 10 CFR 54.17(c), Supplemental Information" dated April 28, 2003.
- <sup>(3)</sup> Victor Nerses, Nuclear Regulatory Commission memorandum to James W. Clifford, Nuclear Regulatory Commission, "Millstone Power Station, Unit No. 3, Facsimile Transmission, Draft Request for Additional Information (RAI) to be Discussed in an Upcoming Conference Call (TAC No. MB7039)" dated July 18, 2003.

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Should you have any questions regarding this RAI response, please contact Mr. J. E. Wroniewicz at (804) 273-2186.

Very truly yours,

DOMINION NUCLEAR CONNECTICUT, INC.

  
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J. Alan Price  
Site Vice President - Millstone

Attachments: (1)

cc: H. J. Miller, Region 1 Administrator  
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3  
Millstone Senior Resident Inspector

Docket No. 50-423  
B18948

**Attachment 1**

**Millstone Power Station, Unit No. 3**

**License Renewal**

**Request for Exemption from the Requirements of 10 CFR 54.17(c)**

**Response to Request for Additional Information**

**Millstone Unit No. 3  
Request For Exemption from the Requirements of 10 CFR 54.17(c)  
Response to NRC Request for Additional Information**

**Restatement of NRC Request for Additional Information**

"The staff notes that the application and supplement did not address with sufficient information on how the operating experience with the Millstone Power Station, Unit No. 2 (MP2) containment and Category 1 structures, which is of different design than MP3, can be applied to MP3's lack of 20 years operating experience. Consequently, additional information is needed to justify the applicability of MP2's containment and Category 1 structures operating experience as the basis for the exemption request. Alternately, the licensee could discuss how industry-wide operating experience (such as the Generic Aging Lessons Learned Report {NUREG-1801} or in the relevant areas of other PWR plants with similar containment that may have 20 or longer years of operating experience) can make up for MP3's lack of sufficient operating experience."

**Response to NRC Request for Additional Information**

**I. Background**

In the submittal requesting an exemption from the schedular requirements of 10 CFR 54.17(c), <sup>(1)</sup> Dominion Nuclear Connecticut, Inc. (DNC) recognized the design differences between Millstone Unit No. 2 and Millstone Unit No. 3 and their effect on the license renewal process. In that submittal it was concluded that Millstone Unit No. 2 operating experience, and the operating experience associated with Surry and North Anna plants, can be applied to the license renewal review of Millstone Unit No. 3. The primary basis for this conclusion was that the Millstone Unit No. 3 materials of construction, and the environmental conditions to which the materials are exposed, are similar to Millstone Unit No. 2 and the Surry and North Anna plants and, therefore, the aging effects would also be similar. The aging management programs are also similar for both Millstone units.

In an additional submittal, <sup>(2)</sup> DNC provided supplemental information in response to a telephone conference held with NRC staff on March 5, 2003. The supplemental information provided additional details of the NSSS design and thermal output differences between Millstone Unit No. 2 and Millstone Unit No. 3, and further basis for the applicability of Millstone Unit No. 2 operating experience, and the Surry and North Anna plants operating experience, in order to meet the underlying intent of 10 CFR 54.17(c).

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<sup>(1)</sup> J. A. Price letter to U.S. Nuclear Regulatory Commission, "Millstone Power Station, Unit No. 3 License Renewal - Request for Exemption From the Requirements of 10 CFR 54.17(c)," dated December 13, 2002.

<sup>(2)</sup> J. A. Price letter to U.S. Nuclear Regulatory Commission, "Millstone Power Station, Unit No. 3 License Renewal - Request for Exemption From the Requirements of 10 CFR 54.17(c), Supplemental Information" dated April 28, 2003.

The following provides a discussion of Millstone Unit No. 2 and Unit No. 3 containments and other Category I structures, and further basis for the DNC conclusion that Millstone Unit No. 2 operating experience and industry operating experience can be applied to Millstone Unit No. 3 in order to meet the intent of the operating experience requirement of 10 CFR 54.17(c).

## II. Applicability of Millstone Unit No. 2 Operating Experience to Millstone Unit No. 3

The Millstone Unit No. 2 containment is a steel-lined, prestressed, reinforced concrete structure designed to function at atmospheric pressure. The containment is an upright cylinder topped with a dome and supported on a flat concrete basemat that is founded on bedrock. The containment design includes a post-tensioning system of tendons with access galleries. The containment is completely enclosed by a containment enclosure building.

The other Millstone Unit No. 2 Category I structures, including the containment enclosure building, are either reinforced concrete, structural steel and metal siding, or a combination of both. These structures are founded on bedrock, compacted structural fill, concrete fill, or glacial till.

The architect-engineer for Millstone Unit No. 2 structures was Bechtel Corporation.

The Millstone Unit No. 3 containment is a steel-lined, reinforced concrete structure designed to function at subatmospheric pressure. The containment is an upright cylinder topped by a dome and supported on a flat concrete basemat that is founded on bedrock. A porous concrete subfoundation directs groundwater seepage to a dewatering sump system. The containment is completely enclosed by a containment enclosure building.

The other Millstone Unit No. 3 Category I structures, including the containment enclosure building, are either reinforced concrete, structural steel and metal siding, or a combination of both. These structures are founded on bedrock, compacted structural fill, concrete fill, or glacial till. For the Engineered Safety Features (ESF) building, a porous concrete subfoundation directs groundwater seepage to a dewatering sump system.

The architect-engineer for Millstone Unit No. 3 structures was Stone & Webster Engineering Corporation (SWEC).

Millstone Unit No. 2 and Unit No. 3 are located on a common plant site on the north shore of Long Island Sound in Waterford, Connecticut. The above-grade and below-grade environments to which structures are exposed are the same for both units.

As noted above, the Millstone Unit No. 2 containment is a prestressed, reinforced concrete structure and the Millstone Unit No. 3 containment is a reinforced concrete structure. Since the Millstone Unit No. 3 containment design does not incorporate a post-tensioning system, the Unit No. 2 tendon-related operating experience is not applicable to Unit No. 3. However, the other structural elements of the containment, i.e., reinforced concrete and structural steel members, are essentially the same for both the Unit No. 2 and Unit No. 3 containments. In addition, the environments to which the structures are exposed are the same for Unit No. 2 and Unit No. 3 containments, as

stated above. Therefore, the Unit No. 2 operating experience associated with the containment, other than the post-tensioning system, is directly applicable to Unit No. 3, with respect to containment structure aging issues.

The other relevant difference noted between Millstone Unit No. 2 and Millstone Unit No. 3 structures is the porous concrete subfoundation installed beneath the foundation for the Unit No. 3 containment and ESF buildings to control groundwater seepage through or around the waterproof membrane. The porous concrete subfoundation is a non-reinforced concrete mat consisting of a coarse aggregate and cement mixture that provides for passage of water through small voids. The water is channeled to a subsurface drainage system for removal. The use of porous concrete media for the subfoundation is a common construction practice for SWEC-designed containment structures to minimize groundwater effects at below grade elevations.

Millstone Unit No. 3 has a significant amount of experience with the porous concrete subfoundation and the potential for aging-related degradation related to erosion of porous concrete. The NRC initiated an industry evaluation of the condition of porous concrete subfoundations at nuclear plants, which is documented in NRC Information Notice 97-11<sup>(3)</sup>. This evaluation was initiated as a result of indications of cement erosion from containment subfoundation porous concrete at Millstone Unit No. 3.

Millstone has performed extensive analysis of the condition of the porous concrete subfoundation, including the effect of cement erosion, the potential for loss of strength of the subfoundation due to conversion of the high-alumina cement, the effect of cement erosion on load bearing capacity of the porous concrete, and the functional integrity of the containment structure. The results of a detailed NRC inspection of the Millstone Unit No. 3 porous concrete analyses are documented in a letter to Northeast Nuclear Energy Company<sup>(4)</sup>. As a result of this inspection, the NRC staff concluded "...the erosion of cement from the underlying porous [concrete] drainage system has not jeopardized the [Unit 3] containment's ability to perform its safety function for the immediate future. Moreover, through an in-depth evaluation of the present and future potential degradation of the porous concrete media, [Millstone Unit No. 3] demonstrated that the containment structure will maintain its ability to perform the intended functions throughout the licensed lifetime of the plant (until year 2026), and beyond."

Through this analysis, inspection effort, and aging management program, Millstone Unit No. 3 has gained a significant amount of operating experience associated with the porous concrete subfoundation. DNC believes that any lack of experience resulting from this difference between Millstone Unit No. 2 and Unit No. 3 is more than compensated for by the in-depth review that the porous concrete subfoundation has received, and the attention it continues to receive through its associated aging management program.

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<sup>(3)</sup> NRC Information Notice 97-11: Cement Erosion From Containment Subfoundations at Nuclear Power Plants, dated March 21, 1997.

<sup>(4)</sup> NRC Letter to Mr. M. L. Bowling, Northeast Nuclear Energy Company, "NRC Combined Inspection 50-245/98-208; 50-336/98-208; 50-423/98-208 and Notice of Violation", dated August 12, 1998.

Table 1 provides a comparison of Millstone Unit No. 2 and Millstone Unit No. 3 containments and other Category I structures with respect to materials of construction, exposure environments, and general design and configuration features.

In addition to the comparison of Millstone Unit No. 2 and Unit No. 3 containments and other Category I structures, an internal operating experience review has been conducted related to Millstone Unit No. 2 and Unit No. 3. There were no significant differences in operating experience related to the effects of aging between the units other than the porous concrete-related experiences described above. In addition, both Millstone Unit No. 2 and Unit No. 3 have developed programs to monitor the condition of structures in accordance with the requirements of 10 CFR 50.65<sup>(5)</sup> and ASME B&PV Code, Section XI, Division 1, Subsection IWE<sup>(6)</sup> and Subsection IWL<sup>(7)</sup>. Operating experience has been gained related to Millstone Unit No. 3 structures as a result of the implementation of these programs.

Based on the consistency of materials of construction and environments for the Millstone Unit No. 2 and Millstone Unit No. 3 structures as demonstrated above, DNC concludes that the associated Millstone Unit No. 2 operating experience is applicable to Millstone Unit No. 3, particularly in the identification of aging effects. In addition, DNC believes that there is sufficient Millstone Unit No. 3 operating experience related to the potential for degradation of porous concrete subfoundations such that this condition is well understood and any associated degradation is managed by programs in place in the current licensing basis.

### III. Applicability of Industry Operating Experience to Millstone Unit No. 3

DNC has identified several nuclear plants, with a Westinghouse Nuclear Steam Supply System, that were designed and/or constructed by SWEC, the architect-engineer for Millstone Unit No. 3. Many of these plants include structures that are similar to the structures at Millstone Unit No. 3. The following is a list of plants that were designed and constructed by SWEC, include construction attributes for structures that are similar to Millstone Unit No. 3, and have operated for greater than 20 years:

Beaver Valley Generating Station Unit No. 1 (OL issued 7/76)

North Anna Power Station Unit No. 1 (OL issued 4/78)

North Anna Power Station Unit No. 2 (OL issued 8/80)

Surry Power Station Unit No. 1 (OL issued 5/72)

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<sup>(5)</sup> 10 CFR 50.65 "Requirements for monitoring the effectiveness of maintenance at nuclear power plants."

<sup>(6)</sup> ASME Boiler and Pressure Vessel Code, Section XI, Division 1, Subsection IWE  
"Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Power Plants."

<sup>(7)</sup> ASME Boiler and Pressure Vessel Code, Section XI, Division 1, Subsection IWL  
"Requirements for Class CC Concrete Components of Light-Water Cooled Power Plants."

Surry Power Station Unit No. 2 (OL issued 1/73)

Haddam Neck Plant (Connecticut Yankee) (OL issued 6/67 {ceased commercial operation 12/96})

Table 2 provides a comparison of materials of construction, exposure environments, and general design and configuration features for the containments and other Category I structures for these plants and Millstone Unit No. 3. As can be seen from the table, the containments and other Category I structures at these plants are similar with respect to these attributes.

These plants are generally located in inland areas, while Millstone Unit No. 3 is located in a coastal area. The general atmospheric environment is likely different from Millstone at these sites. However, the external environment for the Millstone Unit No. 3 containment is indoor air within the enclosure building as described previously. The other plants' containments are exposed to non-sheltered, atmospheric conditions that are likely to be more conducive to aging effects than the protected environment of the Millstone Unit No. 3 containment exterior. Thus, the exposure environment for aging issues for the containments at these other plants envelops the external aging conditions at Millstone Unit No. 3. For other Category I structures, the similarity between Millstone Unit No. 2 structures and those at Millstone Unit No. 3, as described earlier, provides for the direct applicability of the Millstone Unit No. 2 aging experience with the coastal environment to Millstone Unit No. 3 for these structures.

The Surry and North Anna plants have applied for, and have been granted, renewed operating licenses. A rigorous review of aging effects related to the Surry and North Anna containments and other Category I structures has been performed and the NRC has accepted the results.<sup>(8)</sup> The experience gained from this effort has been applied to the Integrated Plant Assessment (IPA) for license renewal associated with the Millstone Unit No. 3 containment and other Category I structures.

Operating experience related to aging of nuclear plants, including those plants listed above, is collected in the Generic Aging Lessons Learned (GALL) Report, NUREG-1801. This report is a compilation of typical reactor plant structures and components, materials, environments, aging effects and mechanisms, and aging management programs and is used as a basis document associated with the Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants, NUREG-1800, in the NRC's review of license renewal applications. The GALL Report contains the NRC's evaluations of aging effects on structures and components, identifies relevant aging management programs, and evaluates program attributes to manage aging effects. The GALL Report incorporates industry-wide operating experience on aging of plant structures obtained from industry reports addressing license renewal, Licensee Event Reports (LER), NRC Information Notices, NRC Generic Letters, and NRC Bulletins.<sup>(9)</sup>

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<sup>(8)</sup> NUREG-1766, "Safety Evaluation Report Related to the License Renewal of North Anna Power Station, Units 1 and 2, and Surry Power Station, Units 1 and 2", dated January 28, 2003.

<sup>(9)</sup> NUREG-1801, page 1, "Gall Report Evaluation Process."



DNC has completed preliminary reviews of the Millstone Unit No. 3 containment and other Category I structures in accordance with the IPA methodology for license renewal. In conjunction with this effort, DNC has performed a review of the materials and environments specific to the Millstone Unit No. 3 design. DNC has determined that the aging evaluations found in the GALL Report are directly applicable to the Millstone Unit No. 3 containment and other Category I structures. The materials and environments addressed in the GALL Report in the applicable sections of Chapter II "Containment Structures" and Chapter III "Structures and Component Supports" envelop the materials and environments applicable to Millstone Unit No. 3. The aging management programs identified to manage the effects of aging for Millstone Unit No. 3 structures are also comparable to the aging management programs identified in the GALL Report. Table 3 provides a listing of GALL Report line items that are applicable to the Millstone Unit No. 3 containment and other Category I structures.

Since the materials of construction and environment conditions for Millstone Unit No. 3 are similar to those identified in the GALL Report, the industry operating experience within the GALL Report is applicable to Millstone Unit No. 3.

In summary, based on the comparison of these other plants' structures to Millstone Unit No. 3, DNC concludes that the industry operating experience gained from operation of these plants for greater than 20 years and incorporated into the GALL Report, is directly applicable to the evaluation of aging effects for the Millstone Unit No. 3 containment and other Category I structures. This industry operating experience provides additional basis for the conclusion that Millstone Unit No. 3 has accumulated adequate operating experience to satisfy the underlying purpose of the license renewal schedular requirement of 10 CFR 54.17(c).

#### IV. Actual Years of Operating Experience

DNC currently plans to submit the LRA for Millstone Unit No. 3 in the first quarter of 2004. Based on the date of the issuance of the Operating License (OL), Millstone Unit No. 3 will have accumulated over 18 years of operating experience by the time the LRA is submitted to the NRC. With the NRC 22-month review schedule for the LRA, Millstone Unit No. 3 is expected to have over 20 years of operating experience by the time the NRC finishes their review of the LRA. In addition, during NRC review of the application, any new aging concerns will be addressed as part of the annual update to the LRA required by 10 CFR 54.21(b).

#### V. Conclusion

The basis for establishing the 20-year limit contained in 10 CFR 54.17(c), as discussed in the 1991 Statements of Consideration for Part 54 (56 FR 64963), is "...to ensure that substantial operating experience was accumulated by a licensee before a renewal application is submitted such that any plant-specific concerns regarding aging would be disclosed."

Millstone Unit No. 2 and Millstone Unit No. 3 both exhibit similar aging effects due to the similarity of the materials of construction and environments for the containments and other Category I structures. Thus, the operating experience from Millstone Unit No. 2 is

applicable to Millstone Unit No. 3 for the purposes of license renewal, specifically with regard to identifying aging effects. In addition, six other nuclear units with greater than 20 years of operating experience were evaluated and found to be similar to the Millstone Unit No. 3 structures with respect to design, materials of construction, and environments, such that the industry operating experience from these plants is also applicable to Millstone Unit No. 3. Further, information contained within the GALL Report is evaluated as part of the IPA process and incorporated into the LRA, as appropriate. Thus, Millstone Unit No. 3 will have the benefit of the industry-wide operating experience contained within the GALL Report. Also, by the time the NRC completes its review of the LRA, Millstone Unit No. 3 will likely have accumulated 20 years of operating experience.

DNC concludes that, based on the similarity of containment and other Category I structures between Millstone Unit No. 2 and Millstone Unit No. 3, and the six other nuclear units evaluated herein, Millstone Unit No. 3 has accumulated adequate operating experience to satisfy the underlying purpose of the license renewal scheduler requirement of 10 CFR 54.17(c). Therefore, DNC believes that, pursuant to 10 CFR 50.12, special circumstances exist to warrant the approval of this request; namely, that the application of 10 CFR 54.17(c) to Millstone Unit No. 3 is not necessary to achieve the underlying purpose of the rule.

**Table 1: Comparison of Millstone Unit No. 2 and Unit No. 3 Structures**

	Millstone Unit No. 2	Millstone Unit No. 3
Containment Type	Steel-lined, Prestressed and Reinforced Concrete, Atmospheric	Steel-lined, Reinforced Concrete, Sub-atmospheric
Category I Structures Design	Reinforced Concrete; Structural Steel with Metal Siding; Combination	Reinforced Concrete; Structural Steel with Metal Siding; Combination
Primary Materials of Construction	Reinforced concrete, structural steel	Reinforced concrete, structural steel
<u>Primary Design Codes</u>		
Concrete	American Concrete Institute 318	American Concrete Institute 318
Steel	American Institute of Steel Construction Manual	American Institute of Steel Construction Manual
<u>External Environment</u>		
Containment	Protected (Enclosure Building)	Protected (Enclosure Building)
Other Category I Structures	Weather	Weather
Below-grade Environment	Soil, non-aggressive groundwater	Soil, non-aggressive groundwater
Foundation Support	Bedrock; compacted structural fill; concrete fill; glacial till	Bedrock; compacted structural fill; concrete fill; glacial till
Groundwater Protection	Waterproof membrane	Waterproof membrane, porous concrete <sup>(1)</sup> , sub-surface drainage system <sup>(1)</sup>

<sup>(1)</sup> Containment and ESF Building

**Table 2: Comparison of Millstone Unit No. 3 with Other SWEC Plant Structures**

	Millstone Unit No. 3	North Anna Unit Nos. 1 and 2	Surry Unit Nos. 1 and 2	Beaver Valley Unit No. 1	Haddam Neck
<b>Containment Type</b>	Steel-lined, Reinforced Concrete, Sub- atmospheric	Steel-lined, Reinforced Concrete, Sub- atmospheric	Steel-lined, Reinforced Concrete, Sub- atmospheric	Steel-lined, Reinforced Concrete, Sub- atmospheric	Steel-lined, Reinforced Concrete, Atmospheric
<b>Category I Structures Design</b>	Reinforced Concrete; Structural Steel with Metal Siding; Combination	Reinforced Concrete; Structural Steel with Metal Siding; Combination	Reinforced Concrete; Structural Steel with Metal Siding; Combination	Reinforced Concrete; Structural Steel with Metal Siding; Combination	Reinforced Concrete; Structural Steel with Metal Siding; Combination
<b>Primary Materials of Construction</b>	Reinforced concrete, structural steel	Reinforced concrete, structural steel	Reinforced concrete, structural steel	Reinforced concrete, structural steel	Reinforced concrete, structural steel
<b><u>Primary Design Codes</u></b>					
Concrete	American Concrete Institute 318	American Concrete Institute 318	American Concrete Institute 318	American Concrete Institute 318	American Concrete Institute 318
Steel	American Institute of Steel Construction Manual	American Institute of Steel Construction Manual	American Institute of Steel Construction Manual	American Institute of Steel Construction Manual	American Institute of Steel Construction Manual
<b><u>External Environment</u></b>					
Containment	Protected (Enclosure Building)	Weather	Weather	Weather	Weather
Other Category I Structures	Weather	Weather	Weather	Weather	Weather

**Table 2: Comparison of Millstone Unit No. 3 with Other SWEC Plant Structures**

	Millstone Unit No. 3	North Anna Unit Nos. 1 and 2	Surry Unit Nos. 1 and 2	Beaver Valley Unit No. 1	Haddam Neck
Below-grade Environment	Soil, non- aggressive groundwater	Soil, non- aggressive groundwater	Soil, non- aggressive groundwater	Soil, non- aggressive groundwater	Soil, groundwater (unknown quality)
Foundation Support	Bedrock; compacted structural fill; concrete fill; glacial till	Hard crystalline rock, fresh to weathered crystalline rock, in-situ residual soil, compacted granular fill, concrete fill.	In-situ undisturbed soil, compacted granular fill, concrete fill	Sand and Gravel; Intake Structure for River Water Lies on Bedrock	Bedrock, compacted structural fill
Groundwater Protection	Waterproof membrane, porous concrete <sup>(1)</sup> , sub- surface drainage system <sup>(1)</sup>	Waterproof membrane, porous concrete <sup>(2)</sup> , sub- surface drainage system <sup>(2)</sup>	Waterproof membrane, porous concrete <sup>(2)</sup> , sub- surface drainage system <sup>(2)</sup>	Waterproof membrane, porous concrete <sup>(2)</sup>	Porous concrete <sup>(2)</sup> , sub- surface drainage system <sup>(2)</sup>

<sup>(1)</sup> Containment and ESF Building

<sup>(2)</sup> Containment

**Table 3 - GALL Report Items Applicable to Millstone Unit No. 3 Structures**

Millstone Unit No. 3 Structural Element	Material	Environment(s)	Applicable GALL Report Item(s)
Containment: Reinforced Concrete (Interior and exterior walls, floors, dome, basemat)	Reinforced Concrete	Inside containment; Outside containment	II.A1.1-a, II.A1.1-b, II.A1.1-c, II.A1.1-d II.A1.1-e, II.A1.1-f, II.A1.1-h, III.A4.1-a, III.A4.1-b, III.A4.1-c, III.A4.1-d
Containment: Porous Concrete Subfoundation	Porous Concrete	Flowing water under foundation	II.A1.1-g
Containment: Steel Liner	Carbon Steel	Inside or outside containment	II.A1.2-a
Containment: Structural Steel	Carbon Steel	Inside containment	III.A4.2-a
Category I Structures: Reinforced Concrete (Interior and exterior walls, floors, foundation)	Reinforced Concrete	Above-grade; below-grade; weather exposed; exposure to aggressive environment; any	III.A1.1-a, III.A1.1-c, III.A1.1-d, III.A1.1-e, III.A1.1-f, III.A1.1-g, III.A1.1-j, III.A3.1-a, III.A3.1-c, III.A3.1-d, III.A3.1-e, III.A3.1-f, III.A3.1-g, III.A3.1-j, III.A5.1-a, III.A5.1-c, III.A5.1-d, III.A5.1-e, III.A5.1-f, III.A5.1-g, III.A5.1-j, III.A6.1-a, III.A6.1-b, III.A6.1-c, III.A6.1-d, III.A6.1-e, III.A6.1-h
Category I Structures: Porous Concrete Subfoundation	Porous Concrete	Flowing water under foundation	III.A3.1-i

**Table 3 - GALL Report Items Applicable to Millstone Unit No. 3 Structures**

Millstone Unit No. 3 Structural Element	Material	Environment(s)	Applicable GALL Report Item(s)
Category I Structures: Structural Steel; Metal Siding	Carbon Steel	Various	III.A1.2-a, III.A3.2-a, III.A5.2-a, III.A6.2-a