



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 16, 2020

Mr. Daniel G. Stoddard  
Senior Vice President and  
Chief Nuclear Officer  
Innsbrook Technical Center  
5000 Dominion Blvd.  
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION UNIT NO. 3 – RELIEF REQUEST IR-4-03,  
CONCERNING NON-CODE METHODOLOGY TO DEMONSTRATE  
STRUCTURAL INTEGRITY OF CLASS 3 MODERATE-ENERGY PIPING  
(EPID L-2020-LLR-0038)

Dear Mr. Stoddard:

By letter dated March 14, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20076A549), as supplemented on March 16, 2020 (ADAMS Accession Nos. ML20076C833 and ML20076F300), Dominion Energy Nuclear Connecticut, Inc. (the licensee) submitted a request in accordance with paragraph 50.55a(z)(2) of Title 10 of the *Code of Federal Regulations* (10 CFR) for a proposed alternative to the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, paragraph IWD-3132 and article IWD-3400, for Millstone Power Station, Unit No. 3 (Millstone Unit 3).

Specifically, the licensee submitted alternative request IR-4-03 requesting U.S. Nuclear Regulatory Commission (NRC) approval of a proposed alternative to demonstrate that moderate-energy service water system piping, line designation 3-SWP-19-2-7-3, is operable without repair or replacement in accordance with the ASME Code, Section XI, on the basis that complying with the specified ASME Code requirement to repair or replace the service water system piping would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

The NRC staff has reviewed the subject request and concludes, as set forth in the enclosed safety evaluation, that the licensee has adequately addressed all regulatory requirements set forth in 10 CFR 50.55a(z)(2). The NRC staff finds that complying with the requirements of the ASME Code, Section XI, would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Therefore, the NRC staff authorizes the use of the licensee's proposed alternative IR-4-03 for Millstone Unit 3 until the next refueling outage scheduled for the fall of 2020.

On March 16, 2020, the NRC staff verbally authorized the use of the alternative in relief request IR-4-03. The summary of the verbal authorization was issued on March 16, 2020 (ADAMS Accession No. ML20076J372). The enclosed safety evaluation documents the NRC staff's detailed technical basis for the verbal authorization.

D. Stoddard

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If you have any questions, please contact the Millstone project manager, Richard Guzman, at 301-415-1030 or by e-mail to [Richard.Guzman@nrc.gov](mailto:Richard.Guzman@nrc.gov).

Sincerely,

James G. Danna, Chief  
Plant Licensing Branch I  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosure:  
Safety Evaluation

cc: Listserv



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELIEF REQUEST IR-4-03 CONCERNING ALTERNATE NON-CODE METHODOLOGY TO  
DEMONSTRATE STRUCTURAL INTEGRITY OF CLASS 3 MODERATE-ENERGY PIPING  
DOMINION ENERGY NUCLEAR CONNECTICUT, INC.  
MILLSTONE POWER STATION, UNIT NO. 3  
DOCKET NO. 50-423

1.0 INTRODUCTION

By letter dated March 14, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20076A549), as supplemented on March 16, 2020 (ADAMS Accession Nos. ML20076C833 and ML20076F300), Dominion Energy Nuclear Connecticut, Inc. (the licensee) proposed an alternative to the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, paragraph IWD-3132 and article IWD-3400, for Millstone Power Station, Unit No. 3 (Millstone Unit 3 or MPS3).

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(2), the licensee submitted alternative request IR-4-03 requesting U.S. Nuclear Regulatory Commission (NRC or the Commission) approval of a proposed alternative to demonstrate that moderate-energy service water (SW) system piping, line designation 3-SWP-19-2-7-3, is operable without repair or replacement in accordance with the ASME Code, Section XI. The licensee has concluded that complying with the specified ASME Code requirement to repair or replace the SW system piping would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety, noting that unnecessary plant shutdown activities result in additional plant risk. The licensee requested approval of the proposed alternative until no later than the Millstone Unit 3 refueling outage scheduled for October 2020, or until such time that leakage exceeds the maximum acceptable leakage rate of 5 gallons per minute (gpm), or ultrasonic testing (UT) examinations determine that the licensee's structural integrity analysis is no longer bounding.

On March 16, 2020 (ADAMS Accession No. ML20076J372), the NRC staff verbally authorized the use of relief request IR-4-03 for Millstone Unit 3 until the next refueling outage scheduled for the fall of 2020. This safety evaluation documents the NRC staff's detailed technical basis for the verbal authorization.

## 2.0 REGULATORY EVALUATION

Adherence to Section XI of the ASME Code is mandated by 10 CFR 50.55a(g)(4), which states, in part, that ASME Code Class 1, 2, and 3 components will meet the requirements, except the design and access provisions and the preservice examination requirements set forth in the ASME Code, Section XI.

Paragraph 50.55a(z) of 10 CFR states that alternatives to the requirements of paragraphs (b) through (h) of 10 CFR 50.55a, or portions thereof, may be used when authorized by the Director, Office of Nuclear Reactor Regulation. A proposed alternative must be submitted and authorized prior to implementation. The licensee must demonstrate that (1) the proposed alternative would provide an acceptable level of quality and safety, or (2) compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Based on the above, and subject to the following technical evaluation, the NRC staff finds that regulatory authority exists for the licensee to request the use of an alternative and the Commission to authorize the alternatives requested by the licensee.

## 3.0 TECHNICAL EVALUATION

### 3.1 Licensee's Proposed Relief Request IR-4-03

#### 3.1.1 ASME Code Components Affected

ASME Code Class 3 moderate energy (i.e.,  $\leq 200$  degrees Fahrenheit ( $^{\circ}\text{F}$ ) (or 93 degrees Celsius ( $^{\circ}\text{C}$ )) and  $\leq 275$  pounds per square inch gauge (psig) (1.9 megapascal (MPa)) maximum operating conditions) SW system piping, line designation 3-SWP-19-2-7-3. The subject piping segment is carbon steel seam welded pipe with a non-pressure-retaining copper-nickel (Cu-Ni) roll clad interior lining provided for corrosion resistance.

#### 3.1.2 Applicable Code Edition and Addenda

The current code of record for Millstone Unit 3 is the ASME Code, Section XI, 2013 Edition, no addenda. Millstone Unit 3 is in its fourth 10-year inservice inspection interval, which began on April 23, 2019, and will end on April 22, 2029.

#### 3.1.3 Applicable Code Requirement

For ASME Code Class 3 components, the repair/replacement activity and reexamination shall comply with the requirements of article IWA-4000 of the ASME Code, Section XI.

ASME Code, Section XI, IWA-4400 of the 2013 Edition, provides requirements for welding, brazing, metal removal, and installation of repair/replacement activities.

ASME Section XI, IWA-4422, "Defect Evaluation and Examination," states, "A defect is considered removed when it has been reduced to an acceptable size. If the resulting section thickness is less than the minimum required thickness, the component shall be corrected by repair/replacement activities in accordance with this article."

Alternatively, the defect removal area and any remaining portion of the defect may be evaluated and the component accepted in accordance with the appropriate flaw evaluation provisions of Section XI, or the design provisions of the owner's requirements and either the Construction Code or ASME Code, Section III.

#### 3.1.4 Reason for Request

On March 11, 2020, water was found dripping from the weep hole in a reinforcing pad (also referred to as a branch reinforcement by the ASME Code or as a saddle plate in Attachment 2 of the licensee's March 14, 2020, letter) on a 30-inch diameter section of SW system supply piping (i.e., 3-SWP-19-2-7-3) in the 'A' SW train at Millstone Unit 3. The presence of the reinforcing pad precluded identifying and characterizing the flaw as required by ASME Code, Section XI.

The licensee stated that implementation of the applicable ASME Code, Section XI requirements would necessitate removal of the defect through an appropriate repair process. Such a repair would require removing the system from service and performing a major disassembly for access to the flaw. Other alternative repair methods such as local weld overlays were not practicable because of the configuration of the joint and the presence of the reinforcing pad.

The licensee stated that the repair of the degraded piping would require significant time for evaluation, design, material procurement, planning, scheduling, and implementation, and would necessitate a unit shutdown and removal of the 'A' SW train from service. This would render one train of decay heat removal and one emergency diesel generator inoperable. The licensee stated that during cold shutdown, the loss of the remaining operable train of decay heat removal would result in an uncontrolled temperature increase and mode change until decay heat removal from the steam generators could be established. The licensee stated that during a refueling outage, the repair could be performed with the refueling cavity flooded, providing additional defense in depth against a loss of the train of decay heat removal. The licensee stated that the proposed alternative method demonstrates that structural integrity is maintained, with margin. Complying with the requirements of the ASME Code and affecting a midcycle repair now would present an undue hardship without a compensating increase in the level of quality and safety of the unit. The licensee stated that until the repair is complete, the leakage will be managed by implementation of compensatory monitoring actions.

NRC approval is needed since the licensee's methodology used to establish structural integrity has not been previously approved by the NRC. Although the alternate methodology utilizes ASME Code equations to assess the capacity of the load path through the branch reinforcement, the ASME Code does not provide a direct means of crediting a fabricated tee for structural design loading without the full penetration weld between the branch and the main pipe run.

#### 3.1.5 Duration of Proposed Alternative

The duration of the proposed alternative for SW piping, 3-SWP-19-2-7-3, is requested to be until the end of the fall 2020 refueling outage, which is scheduled for October 2020.

#### 3.1.6 Licensee's Proposed Alternative and Basis for Use

The licensee proposed to use an alternative, non-code methodology to evaluate the structural integrity of the affected section of piping. Leakage will be monitored on a daily basis and the leak rate trended. UT examination of the piping and reinforcing pad will be performed monthly

(every 30 days +/- 25 percent) and in response to an increase in leakage that indicates further degradation of the underlying flaw.

The affected piping (3-SWP-19-2-7-3) is the common supply line of the 'A' train of SW system located downstream of motor-operated valves 3SWP\*MOV102A and 3SWP\*MOV102C. The affected piping is located in the 'A' SW cubicle in the intake structure.

The licensee stated that the leak has the potential to affect the following systems, structures, and components:

- 'A' train of SW system
- SW piping spool 3-SWP-19-2-7-3
- Safety-related heat exchangers cooled by the 'A' train of SW
- SW pumps P1A and P1C hydraulic performance
- Intake structure equipment susceptible to spray or flooding damage

The leak is coming from a weep hole on the upper reinforcing pad, which is welded to the intersection of two 30-inch pipes to provide structural support for the piping joint (fabricated tee). The reinforcing pad has a drilled weep hole from which water is being discharged at a rate of about one drop every 40 seconds with one 'A' header SW pump running. Based on field observations, the leakage rate changes to one drop every 20 seconds with both 'A' header SW pumps running. The reinforcing pad is 60 inches long and  $\frac{3}{4}$  inch thick with a  $69\frac{3}{4}$ -degree arc rolled to a 30-inch inside diameter.

The licensee stated that the location and size of the flaw under the reinforcing pad cannot be determined.

The licensee performed a structural integrity evaluation, which showed the load path is from the reinforcing pad fillet weld on the branch piping (downstream of 3SWP\*MOV102A) and across the reinforcing pad to the reinforcing pad fillet weld on the run piping (immediately downstream of 3SWP\*MOV102C). The licensee did not take structural integrity credit for the full penetration butt weld, which connects the two 30-inch pipe pieces into a fabricated tee. Based on the low leak rate and previous large-bore SW leaks at Millstone Unit 3, the licensee believed it was possible the flaw penetrated the Cu-Ni clad and epoxy coating on the piping by a pinhole defect and began to corrode the underlying carbon steel (SA-516) piping, resulting in a leak path. The licensee also believed that pinhole degradation of the butt weld resulting in a leak path under the reinforcing pad is a possible cause.

The licensee reviewed documentation to confirm that the subject piping spool was fabricated and inspected to the appropriate ASME Code. The licensee concluded that inservice degradation of the spool components needed for structural integrity was not likely.

Additionally, the licensee stated that inspections of the inservice spool were performed to confirm that the condition of the spool will support the continued structural integrity of the spool. Nondestructive examination inspections were subject to geometric limitations and were identified in the nondestructive examination reports. The inspections performed included:

- UT measurements of accessible pipe wall thickness adjacent to the reinforcing pad welds and of accessible areas of the pipe directly under the welds using shear wave UT.

- UT measurements of the reinforcing pad thickness adjacent to the reinforcing pad welds and at selected locations across the reinforcing pad.
- A visual examination of the reinforcing pad welds.

Based on these considerations, the licensee stated that there is reasonable expectation that the inservice condition of the reinforcing pad and the piping that can be examined will remain in a condition to support their intended use for maintaining structural integrity of this piping spool. The confirmed integrity of these components provides a sound load carrying path between the branch and main run of the piping.

The licensee evaluated the effects on the SW system hydraulic performance due to a leak at the junction between pumps 3SWP P1A and 3SWP P1C by using the PROTO-FLO model of the system. The licensee stated that the evaluation assumed a 60 gpm leak rate to bound the capacity of the SW pump cubicle floor drain capacity of 56 gpm documented in an internal flooding calculation. Delivered flows to the various heat exchangers cooled by the SW system during system operation with 60 gpm of leakage out of the header were compared to delivered flows during system operation with no leakage. The evaluation was for the normal and design accident cases. The licensee determined that the impact on delivered flows due to a 60 gpm leak rate is negligible and will not have an adverse impact on the system operation.

The licensee stated that these accident configurations are consistent with the system design requirements and are conservative to minimize delivered flow to the safety-related heat exchangers. The licensee stated that there are no concerns with adequate flow from the SW system to the safety-related heat exchangers with the existing leak or increases in leakage up to 60 gpm.

The licensee stated that spraying adjacent components is not a concern based upon the location of the leak. The leak is through the pipe wall at an unknown location under the reinforcing pad and is thus inherently limited in its flow capacity due to the probable tortuous path to the atmosphere. The licensee stated that a daily visual inspection to monitor leakage will be performed. The licensee stated there are no components susceptible to spray damage that are in the immediate vicinity of the leak. With respect to spray from a bounding leak, the nearest electrical target is the conduit and flex conduit for the 4160 volts alternating current line for the 'A' SW pump. These conduits are rated for spray without damage. With respect to both spray and flooding from a bounding leak, the nearest electrical target is safety-related motor control center (MCC) 3EHS MCC1A5 (32-5T). The MCC stands on a 5-inch high concrete pedestal and is 25 feet away from the leak. Daily checks of the leak will identify a worsening leak well before these targets would be exposed to spray.

Flooding concerns were evaluated for safety-related components within the 'A' SW pump cubicle. Based on the structural integrity evaluation of the leak, catastrophic failure of the pipe or reinforcing pad is considered unlikely. The licensee has established compensatory measures to ensure that the capability of existing room flood control systems will not be challenged. For the duration for the proposed alternative, the licensee will perform the following actions:

- Daily observation and recording of leak rate by operators. Maximum acceptable leak rate is 5 gpm.

- Periodically (every 30 days +/- 25%) or upon identification of an increase of 100 drops/min (10 ml/min) over the previous 7 days, UT verification that degradation of the piping base metal adjacent to and under the reinforcement pad fillet weld, and reinforcing pad base metal is within the bounds of the structural integrity determination provided in Attachment 2 [the alternative].

Multiple alarms, including low discharge pressure and low flow to cooled components, are available to alert operators, should a gross failure of the pipe occur. Indication of pressure is also available to the operators both on the main control board, as well as the plant process computer. The licensee stated that operators would respond to such a condition as directed by the applicable alarm response procedures and Abnormal Operating Procedure (AOP) 3560, "Loss of Service Water."

The licensee stated the following extent of conditions regarding the leakage from the affected piping:

- SW piping in the 'A' train SW cubicle was walked down with no signs of exterior piping leakage noted besides the leakage from the weep hole on the upper reinforcing pad.
- The weep hole on the lower reinforcing pad was verified to have no leakage.

The licensee stated that inspection videos and inspection results from the last two inspections (3R16 – October 2014 and 3R18 – October 2017) were reviewed for the 'A' train SW header in the intake to determine if any piping problems had been identified. No corrosion problems were evident from the video and no corrosion or coating problems were noted on the inspection forms. The licensee stated that previous robotic cameral inspections from 3R17 (April 2016) and 3R19 (April 2019) of the corresponding spool piece with the 30-inch fabricated tee on the 'B' train of Millstone Unit 3 SW were also reviewed. No corrosion problems were evident from the video, and no corrosion problems or coating problems were noted on the inspection forms.

The licensee provided the following conclusions to support its proposed alternative request:

Although a regulatory-approved methodology for demonstrating structural integrity is not available for use in this case, structural integrity of the 30-inch fabricated tee on service water line 3-SWP-19-2-7-3 has been demonstrated using an alternate analysis methodology detailed in Attachment 2 [of its March 14, 2020, letter]. The safety function of the 'A' train SW header is unaffected by the identified leakage and the leak rate is within the capabilities of the floor drain system in the 'A' SW pump train cubicle. Therefore, there is no potential adverse impact on neighboring equipment due to either spray or flooding.

Leakage will be monitored on a daily basis and the leak rate trended. UT examination of the piping and reinforcing pad will be performed monthly (30 days +/- 25%) and in response to an increase in the leakage that indicates further degradation of the underlying flaw.

A Code-compliant repair will be completed no later than the next MPS3 refueling outage, which is scheduled for fall 2020.

### 3.2 NRC Staff's Evaluation

The licensee discovered a leak coming from a weep hole on the upper reinforcing pad, which is welded to the intersection of two 30-inch pipes to provide structural support for the piping joint (fabricated tee). The reinforcing pad has a drilled weep hole from which water is being discharged at a rate of about one drop every 40 seconds with one 'A' header SW pump running. The licensee stated that the rate changes to one drop every 20 seconds with both 'A' header SW pumps running (based on field observation). The reinforcing pad is 60 inches long and  $\frac{3}{4}$  inch thick with a  $69\frac{3}{4}$  degree arc rolled to a 30-inch inside diameter. The location and size of the flaw under the reinforcing pad cannot be determined.

The licensee performed a structural integrity evaluation from the reinforcing pad fillet weld on the branch piping (immediately downstream of motor-operated valves 3SWP\*MOV102A) and across the reinforcing pad to the reinforcing pad fillet weld on the run piping (immediately downstream of 3SWP\*MOV102C). The licensee did not take credit for structural integrity for the full penetration butt weld, which connects the two 30-inch pipe pieces into a fabricated tee. The piping is well supported in the vicinity and isolated from vibrations. The system is a low pressure, low temperature line. The run and branch pipes of the tee joint have a 30-inch inside diameter with 0.5-inch wall thickness. The thickness of the reinforcing pad is 0.75 inch. Based on visual inspection, the reinforcing pad fillet weld is greater than 0.5 inch all around.

The licensee performed an operability evaluation using a non-code methodology to demonstrate structural integrity of location, and the staff found the licensee's methodology to be reasonable. The licensee calculated stresses due to the mechanical loads (dead weight and seismic), excluding the internal pressure stress from the existing piping stress analysis. Using those loads, the licensee evaluated structural integrity of the tee joint with reinforcing pad, which showed acceptability with significant margin. Deadweight and deadweight plus safe shutdown earthquake (SSE) stresses are approximately 12 percent and 29 percent of the respective ASME Code allowable stresses, demonstrating significant margins. In addition, the structural integrity of the pad for the loads for faulted (SSE) loads is acceptable because the pad is thicker than the pipe. The licensee also calculated required weld size of 0.215 inch for the fillet welds based on combined dead weight, thermal, and SSE loads at the joint. Since the fillet welds are greater than 0.5 inch all around compared to the required weld size of 0.215 inch, they are structurally acceptable with significant margin. The staff found the results of the licensee's structural evaluation to be acceptable, showing significant margins for short-term operability until a repair is completed no later than the end of fall 2020 refueling outage, when combined with leakage monitoring measures.

The licensee also performed inspections of the inservice spool to confirm that the condition of the spool will support the continued structural integrity of the spool. Nondestructive examination inspections were performed and included:

- UT measurements of accessible pipe wall thickness adjacent to the reinforcing pad welds and of accessible areas of the pipe directly under the welds using shear wave UT
- UT measurements of the reinforcing pad thickness adjacent to the reinforcing pad welds and at selected locations across the reinforcing pad
- A visual exam of the reinforcing pad welds

The licensee concluded there is reasonable expectation that the inservice condition of the reinforcing pad and the piping that can be examined are and will remain in a condition to support their intended use for maintaining structural integrity of this piping spool. The licensee stated that the confirmed integrity of these components provides a sound load carrying path between the branch and main run of the piping.

The licensee also evaluated the effects of SW system hydraulic performance due to a leak at the junction between pumps 3-SWP-P1A and 3-SWP-P1C using the PROTO-FLO model of the system. As a result of the evaluation, the licensee concluded that there are no concerns with adequate flow from the SW system to the safety-related heat exchangers with the existing leak or increases in leakage up to 60 gpm.

The licensee stated that spraying adjacent components is not a concern based upon the location of the leak. A daily visual inspection to monitor leakage will be performed. The licensee stated that no components susceptible to spray damage are in the immediate vicinity of the leak. Daily checks of the leak will identify a worsening leak well before these targets would be exposed to spray.

The licensee stated that flooding concerns were evaluated for safety-related components within the 'A' SW pump cubicle. Based on the structural integrity evaluation of the leak, catastrophic failure of the pipe or reinforcing pad is considered unlikely.

The licensee stated that there are multiple alarms, including low discharge pressure and low flow to cooled components available to alert operators, should a gross failure of the pipe occur. Pressure indicators are also available to the operators both on the main control board and the plant process computer. Operators would respond to such a condition as directed by applicable alarm response procedures and AOP 3560, "Loss of Service Water."

### 3.3 Summary

Based on the results of the licensee's evaluation, the NRC staff finds that: (1) there is reasonable assurance of adequate margin between the size of the existing flaws in the SW piping 3-SWP-19-2-7-3 and the allowable flaw size for the piping; (2) the existing flaws are reasonably expected to be stable and not grow for the period of the requested alternative; (3) the leak rate from the existing flaw is less than the allowable leak rate, and thus, the 3-SWP-19-2-7-3 piping system is capable of performing its intended function; (4) the daily observation and recording of the leak rate by operators with the maximum leak rate at 5 gpm is acceptable to monitor the changes in leak rate and/or potential flaw growth; (5) periodic (every 30 days, +/- 25 percent) or upon identification of an increase of 100 drops/minute (10 ml/min) over the previous 7 days, UT verification that degradation of the piping base metal adjacent to and under the reinforcement pad fillet weld, and reinforcing pad base metal is within the bounds of the structural integrity determination provided in the alternative; and (6) the licensee's hardship justification is acceptable.

### 4.0 CONCLUSION

As set forth above, the NRC staff determined that the proposed alternative provides reasonable assurance of the structural integrity of the SW piping, 3-SWP-19-2-7-3. The NRC staff finds that complying with the requirements of the ASME Code, Section XI, would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed all regulatory

requirements set forth in 10 CFR 50.55a(z)(2). Therefore, the NRC staff authorizes the use of the licensee's proposed alternative IR-4-03 for Millstone Unit 3 until the next refueling outage scheduled for the fall of 2020.

Accordingly, the NRC staff concludes that the licensee has adequately addressed all the regulatory requirements set for in 10 CFR 50.55a(z)(2). Therefore, the NRC authorizes the use of the proposed alternative for Millstone Unit 3 until the next refueling outage scheduled for the fall of 2020. If the observed leak rate through walkdowns exceeds the maximum acceptable leakage rate of 5 gpm or the UT examination results determine that the licensee's structural integrity analysis is no longer bounding and exceeds the limits cited in the licensee's March 14, 2020, letter, as supplemented by two e-mails dated March 16, 2020, the basis for the licensee's alternative will no longer be applicable, and an ASME Code, Section XI repair shall be performed.

All other requirements of the ASME Code, Section XI, for which relief was not specifically requested and approved in this relief request remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: E. Reichelt

Date: July 16, 2020

SUBJECT: MILLSTONE POWER STATION UNIT NO. 3 – RELIEF REQUEST IR-4-03, CONCERNING NON-CODE METHODOLOGY TO DEMONSTRATE STRUCTURAL INTEGRITY OF CLASS 3 MODERATE-ENERGY PIPING (EPID L-2020-LLR-0038) DATED JULY 16, 2020

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\*by e-mail

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