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

Dominion

OCT 18 2002

Docket Nos. 50-336
50-423
B18790

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

Millstone Power Station, Unit Nos. 2 and 3
Inservice Inspection Program - Owner's Activity Reports

Dominion Nuclear Connecticut, Inc. (DNC), hereby submits the American Society of Mechanical Engineers (ASME), Section XI, Form OAR-1, Owner's Activity Reports for Millstone Power Station, Unit Nos. 2 and 3. The enclosures are in accordance with requirements of ASME Code Case N-532. The authorization for use of this Code Case for Unit Nos. 2 and 3 is documented in references 1 and 2 below.

There are no commitments contained within this letter.

Should you have any questions regarding this submittal, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

DOMINION NUCLEAR CONNECTICUT, INC.

J. Alan Price
Site Vice President - Millstone

Enclosures: (2)

cc: H. J. Miller, Region I Administrator
R. B. Ennis, NRC Senior Project Manager, Millstone Unit No. 2
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3
Millstone Senior Resident Inspector

1. NRC letter to S E. Scace, "Millstone Nuclear Power Station, Unit No. 3 (Millstone Unit 3) - ASME Section XI Inservice Inspection Relief Request Number IR-2-10 (TAC No. MA8276)," dated August 24, 2000.
2. NRC letter to S. E. Scace, "Safety Evaluation of Relief Request RR-89-22 Associated with ASME Section XI, Code Case N-532, Millstone Nuclear Power Station, Unit No. 2 (TAC No. MA6961)," dated March 24, 2000.

A047

Docket Nos. 50-336
50-423
B18790

Enclosure 1

Millstone Power Station, Unit No. 2

Owner's Activity Reports for Refueling Outages 13 and 14

MILLSTONE POWER STATION

UNIT NO. 2

OWNER'S ACTIVITY REPORTS FOR

REFUELING OUTAGES 13 AND 14

Revision 0

Contents:

OAR Report Number: MP-2, 2R13:

Table 1: Abstract of Examinations and Tests
Table 2: Items With Flaws or Relevant Conditions That Required Evaluation for Continued Service
Table 3: Abstract of Repairs, Replacements, or Corrective Measures Required for Continued Service

OAR Report Number: MP-2, 2R14:

Table 1: Abstract of Examinations and Tests
Table 2: Items With Flaws or Relevant Conditions That Required Evaluation for Continued Service
Table 3: Abstract of Repairs, Replacements, or Corrective Measures Required for Continued Service

Prepared By: _____ *Date:* 10/15/02
ISI Program Coordinator

Reviewed By: _____ *Date:* 15 October 2002
Authorized Nuclear Inservice Inspector

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number MP-2, 2R13

Owner Northeast Nuclear Energy Company P O Box 345, Waterford , Connecticut 06385
(Name and Address of Owner)

Plant Millstone Nuclear Power Station, Rope Ferry Road, Waterford Connecticut 06385
(Name and Address of Plant)

Unit Number 2 (if applicable) Commercial Service Date 12/26/1975 Refueling Outage Number 13

Current Inspection Interval 3rd
(1st, 2nd, 3rd, , 4th, other)

Current Inspection Period 1st
(1st, 2nd, 3rd)

Edition and Addenda of Section XI Applicable to the Inspection Plan 1989 Edition, No Addenda

Date and Revision of Inspection Plan 6/21/96 Revision 02, Change 01

Edition and Addenda of Section XI Applicable to Repairs and replacements, if Different N/A

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No N/A (if applicable) Expiration Date N/A

Signed Richard J Nulli Jr ISI Coordinator Date 8/7/00
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Connecticut and employed by The Hartford Steam Boiler Insp & Ins Co of Hartford, CT have inspected the items described in this Owner's Activity Report, during the period April 11, 1999 to July 31, 2002* and state to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, repairs, replacements, evaluations and corrective measures described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Elizabeth Vanc Commissions NB9384 CT1137
Inspectors Signature National Board State, Province and Endorsements

Date August 8, 2000 / *October 15, 2002

Table 1
ABSTRACT OF EXAMINATIONS AND TESTS

Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
B-A	28	0	0%	0%	
B-B	9	3	33%	33%	
B-D	34	6	17%	17%	
B-E	N/A	0	0%	0%	Tracked under B-P pressure tests per Granted Relief Request RR-89-16.
B-F	28	4	14%	14%	
B-G-1	219	0	0%	0%	
B-G-2	90	22	26%	26%	
B-H	1	0	0%	0%	Not required for Third Interval, MP-2 has elected to perform examination of one support skirt due to SG replacement in 1992. This is an augmented examination.
B-J	131	18	14%	14%	
B-L-1	2	0	0%	0%	
B-L-2	2	0	0%	0%	
B-M-2	5	0	0%	0%	
B-N-1	14	4	29%	29%	
B-N-2	15	0	0%	0%	
B-N-3	33	0	0%	0%	
B-O	15	0	0%	0%	Deferred to Third Period
B-P	12	3	33%	33%	Based upon 6 refueling outages
C-A	7	0	0%	0%	
C-B	6	0	0%	0%	
C-C	36	8	22%	22%	
C-F-1	77	25	32%	32%	
C-F-2	19	4	21%	21%	
F-A	270	80	29%	29%	
IWE	3	1	33%	33%	1st period inspection completed
IWL	3	1	33%	33%	1st period inspection completed

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
B-D	B3.110	Weld PR-NTH-3	Pressurizer Safety Valve Nozzle To Top Head Weld @ 180 Degrees	This flaw was evaluated as a subsurface planar flaw. The measured wall thickness is 4.05" excluding cladding. The a/l = .225, a/t = .0333 or 3.33% and Y =1.0 The maximum allowable flaw size for an a/l of .225 is 3.55% in accordance with Table IWB-3512-1 of ASME Section XI, 1989 Edition with no addenda, thus the indication was evaluated as acceptable for continued service.	Yes
B-D	B3.110	Weld PR-NTH-1	Relief Valve Nozzle To Top Head Weld	This indication was evaluated as a spot indication with no depth or length and evaluated as acceptable for continued service.	Yes
F-A	F1.30G	Component Support 413125	Restraint	Gap between base plate and wall. Evaluated as acceptable for continued service	Yes
F-A	F1.30G	Component Support 413153	Restraint	Incomplete thread engagement of two bolts: Bolt 1: 1 Nut Thread Visible 180° and Bolt 2: 1 Nut Thread Visible 270°. Evaluated as acceptable for continued service.	Yes
F-A	F1.30B	Component Support 527070	Spring Can	Spring can was indicated outside of hot/cold range. Evaluated as acceptable for continued service as the setting was with 10% of the design criteria.	Yes
F-A	F1.30B	Component Support 329048	Pedestal Support	Incomplete thread engagement of one nut, 1 full thread visible. Evaluated as acceptable for continued service.	Yes
F-A	F1.30G	Component Support 427080	Restraint	Incomplete thread engagement of one nut, 1 full thread visible. Evaluated as acceptable for continued service.	Yes

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
F-A	F1.30B	Component Support 527069	Spring Can	Spring can was indicated outside of hot/cold range. Evaluated as acceptable for continued service as the setting was with 10% of the design criteria.	Yes
F-A	F1.30C	Component Support 527068	Spring Can	Spring can was indicated outside of hot/cold range. Evaluated as acceptable for continued service as the setting was with 10% of the design criteria.	Yes
F-A	F1.30C	Component Support 427098	Spring Hanger	Spring can was indicated outside of hot/cold range. Evaluated as acceptable for continued service as the setting was with 10% of the design criteria.	Yes
F-A	F1.30A	Component Support 401020	Sway Strut	Support does not match the drawing. The two snubbers do not exist. Different Configuration. UIR written. UIR Disposition: No Discrepancy exists. Support was modified via MMOD M2-97510 as documented on DCN DM2-00-1367-96. Evaluated as acceptable for continued service.	Yes
F-A	F1.30G	Component Support 304029	Restraint-Support	Improper thread engagement: Anchor bolt is recessed into nut ½ thread. Connection is tight but not fully engaged. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30G	Component Support 502019	Restraint with 1" Ring Welded To Pipe	Improper Thread Engagement, approximately 2 threads not engaged on nut. (upper right). Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30A	Component Support 403078	Sway Strut	No spacer to prevent over tightening of clamp. Evaluated as acceptable as is (no spacer required) for continued service.	Yes

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
F-A	F1.30A	Component Support 403072	Sway Strut	One stud on bottom base plate is 1 full thread short of full engagement. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30C	Component Support 412012	Spring Hanger	One loose nut was identified on the main clevis, and spring settings were out of tolerance. Evaluation was to retighten the nut and reset the spring cans to their design configuration. Support was evaluated as being able to perform its' intended function in the as found condition.	Yes
F-A	F1.30B	Component Support 491408A	Support	Bolt 1 Bent, nut edge is 1/8" out from plate. Bolt 2 Bent, nut edge is 1/8" out from plate	Yes
F-A	F1.30H	Component Support 410015	Hydraulic Snubber	Improper Thread Engagement One Thread Visible for 180 ° within nut. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30C	Component Support 402052	Spring Hanger	Exact setting could not be discerned using optical aids from floor level. Sketch provided for spring position. UIR M2-00-019 Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30M	Component Support 507002	Dual Mechanical Snubbers	Improper Thread Engagement, 1½ threads visible within nut. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30A	Component Support 405599	Sway Strut	Two nuts on the pipe clamp were identified as loose and the southernmost sway strut was identified as impinging upon another support. Impingement was evaluated as acceptable and TR 18M2154348 was initiated to tighten loose nuts.	Yes

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
F-A	F1.30C	Component Support 380324	Spring Hanger	Spring can was indicated outside of hot/cold range. This support was walked down in the field and evaluated as acceptable for continued service as the setting was with 10% of the design criteria.	Yes
F-A	F1.30C	Component Support 405651	Spring Hanger	Spring can was indicated outside of hot/cold range. This support was walked down in the field and evaluated as acceptable for continued service as the setting was with 10% of the design criteria.	Yes
F-A	F1.30E	Component Support 491389	Hanger	During VT-3 exam of hanger 491389, a rusted "C" clamp was observed, possibly interfering with the intended operation of the hanger. The "C" clamp is fastened to item #5 on the Mech Dwg, restricting the movement of item #6, also on the Mech Dwg. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30G	Component Support 402077	Restraint	VT-3 examination identified 3 Hilti bolts as not having full thread engagement, 4 Hilti bolts as being bent and 1 nut not fully engaged. The lack of thread engagement was evaluated as acceptable based upon NUSCO Calc. 79-02-1066GP, the 4 bent Hilti bolts evaluated acceptable as is as they were installed at an angle and the 1 nut not fully engaged evaluated acceptable as the nut has sufficient bearing against the baseplate.	Yes

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
F-A	F1.30C	Component Support 410045	Spring Hanger	The plate affixed to spring can is illegible. Could not tell where spring can is set. Setting is approximately mid-scale. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30A	Component Support 310019	Sway Strut	Nut has improper thread engagement. 1/8" below flush. Evaluated as acceptable as is for continued service.	Yes
F-A	F1.30H	Component Support 412016	Shock And Sway Suppressor	2 nuts were identified as being loose. Evaluated as acceptable as is for continued service. TR 18M2145257 was initiated to tighten the nuts.	Yes
F-A	F1.30C	Component Support 312012	Spring Hanger	Both spring cans are below the required setting per drawing 312012. One can is at 9513# + 10% = 10,580# One can is at 9372# + 10% = 10,430# Evaluated as acceptable as is for continued service.	Yes

Table 3
ABSTRACT OF REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES
REQUIRED FOR CONTINUED SERVICE

Code Class	Repair, Replacement, or Corrective Measure	Item Description	Description of Work	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes/No)	Date Completed	Repair/ Replacement Plan Number
No Repairs, Replacements or Corrective Measures were required for continued service during 2R13						

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number MP-2, 2R14

Owner Dominion Nuclear Connecticut P.O. Box 345, Waterford , Connecticut 06385
(Name and Address of Owner)

Plant Dominion Nuclear Connecticut, Rope Ferry Road, Waterford Connecticut 06385
(Name and Address of Plant)

Unit Number 2 (if applicable) Commercial Service Date 12/26/1975 Refueling Outage Number 14

Current Inspection Interval 3rd (1st, 2nd, 3rd, , 4th, other)

Current Inspection Period 1st (1st, 2nd, 3rd)

Edition and Addenda of Section XI Applicable to the Inspection Plan 1989 Edition, No Addenda

Date and Revision of Inspection Plan 6/21/96 Revision 02, Change 01

Edition and Addenda of Section XI Applicable to Repairs and replacements, if Different N/A

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No N/A (if applicable) Expiration Date N/A

Signed Richard Miller ISI Coordinator (Owner or Owner's Designee, Title) Date 9/10/02

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CT and employed by NSB Code Services - NSB CT of Hartford, CT have inspected the items described in this Owner's Activity Report, during the period April 1, 1999 to July 31, 2002, and state to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, repairs, replacements, evaluations and corrective measures described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Elizabeth Yard (Inspectors Signature) Commissions CT 1137 (National Board, State, Province and Endorsements)

Date 27 September 2002

End of 1st Period - July 31, 2002

Table 1
ABSTRACT OF EXAMINATIONS AND TESTS

Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
B-A	28	3	100%	11%	
B-B	9	3	100%	33%	
B-D	34	12	100%	33%	
B-E	N/A	0	0%	0%	Tracked under B-P pressure tests per Granted Relief Request RR-89-16.
B-F	28	11	100%	33%	
B-G-1	219	56	100%	26%	
B-G-2	90	29	100%	32%	
B-H	1	0	0%	0%	Not required for Third Interval, MP-2 has elected to perform examination of one support skirt due to SG replacement in 1992. This is an augmented examination.
B-J	131	38	100%	29%	
B-L-1	2	0	100%	0%	
B-L-2	2	1	100%	50%	
B-M-2	5	0	0%	0%	
B-N-1	14	4	100%	29%	
B-N-2	15	0	0%	0%	
B-N-3	33	0	0%	0%	
B-O	15	0	0%	0%	Deferred to Third Period
B-P	12	4	100%	33%	Based upon 6 refueling outages
C-A	7	2	100%	29%	
C-B	6	2	100%	33%	
C-C	36	10	100%	28%	
C-F-1	77	22	100%	29%	
C-F-2	19	5	100%	26%	
C-H	104	26	100%	25%	
D-A	4	2	100%	50%	
D-B	14	7	100%	33%	
D-C	16	4	100%	25%	
F-A	270	87	100%	33%	
IWE	3	1	100%	33%	1st period inspection completed
IWL	3	1	100%	33%	1st penod inspection completed

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
F-A	F1.30G	Component Support 327125	Restraint	Incomplete thread engagement of one nut, 2 threads visible. The lack of thread engagement was evaluated as acceptable based upon NUSCO Calc. 79-02-1066GP. Evaluated as acceptable for continued service.	Yes
F-A	F1.30G	Component Support 505138	Restraint	Corner of the base plate was not flush by approximately ¼" and one nut was not fully engaged. The base plate was evaluated in accordance with M2-EV-98-0181 and the nut was evaluated in accordance with M2-EV-98-0180 as acceptable for continued service with no corrective actions required.	Yes

Table 3
ABSTRACT OF REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES
REQUIRED FOR CONTINUED SERVICE

Code Class	Repair, Replacement, or Corrective Measure	Item Description	Description of Work	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes/No)	Date Completed	Repair/ Replacement Plan Number
1	Repair	Reactor Vessel Head control rod drive mechanism nozzles 21, 34, 50	Half nozzle replacements at penetration locations 21, 34 & 50 using the temper bead welding technique and in accordance with approved relief request RR-89-34	No, these flaws were found during an inspection to comply with NRC Information Notice 2001-05 and NRC Bulletin 2001-01	3/19/2002	M2-01-14140
1	Corrective Measure	Pressurizer heater penetration nozzles A1 and C4	Machining of the heater nozzle penetrations and drilling and tapping of the pressurizer bottom head at nozzles A1 and C4 were required to install MNSA clamps	No, these flaws were found as part of an augmented inspection based upon industry experience with pressurizer heater penetration cracking.	3/16/2002	M2-02-02270

Docket Nos. 50-336
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Enclosure 2

Millstone Power Station, Unit No. 3

Owner's Activity Report for Refueling Outage 7

MILLSTONE POWER STATION

UNIT NO. 3

OWNER'S ACTIVITY REPORT FOR

REFUELING OUTAGE 7

Revision 0

Contents:

OAR Report Number: MP-3, 3R07:

Table 1: Abstract of Examinations and Tests
Table 2: Items With Flaws or Relevant Conditions That Required Evaluation for Continued Service
Table 3: Abstract of Repairs, Replacements, or Corrective Measures Required for Continued Service

Prepared By: _____ *Date:* 10/15/02
ISI Program Coordinator

Reviewed By: _____ *Date:* 15 October 2002
Authorized Nuclear Inservice Inspector

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number MP-3, 3RO7

Owner Dominion Nuclear Connecticut, Rope Ferry Road, Waterford Connecticut 06385
(Name and Address of Owner)

Plant Millstone Nuclear Power Station, Rope Ferry Road, Waterford Connecticut
(Name and Address of Plant)

Unit Number 3 (if applicable) Commercial Service Date April 23, 1986 Refueling Outage Number 07

Current Inspection Interval 2nd (1st, 2nd, 3rd,)

Current Inspection Period 1st (1st, 2nd, 3rd, 4th, other)

Edition and Addenda of Section XI Applicable to the Inspection Plan 1989 Edition, No Addenda and 1998 Edition, No Addenda for Subsection IWE/IWL

Date and Revision of Inspection Plan May 15, 2001 , Revision 01, Change 4 and January 30, 2001, Revision 1 for Subsection IWE/IWL

Edition and Addenda of Section XI Applicable to Repairs and replacements, if Different N/A

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations and corrective measures represented by this report conform to the requirements of Section XI

Certificate of Authorization No N/A (if applicable) Expiration Date N/A

Signed [signature] ISI Program Coordinator (Owner or Owner's Designee, Title) Date 10/08/2002

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Connecticut and employed by Hartford Steam Boiler CT of Hartford Connecticut have inspected the items described in this Owner's Activity Report, during the period April 23, 1999 to July 22, 2002 , and state to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, repairs, replacements, evaluations and corrective measures described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature] Inspectors Signature Commissions CT 1137 National Board State, Province and Endorsements

Date 10/11/2002

Table 1
ABSTRACT OF EXAMINATIONS AND TESTS (See Note 1)

Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
B-A	24	5	21	21	
B-B	3	1	33	33	
B-D	44	8	18	18	Item numbers B3.90 and B3.100 utilize Code Case N-521 which allows deferral to the end of the Interval.
B-E	2	0	0	0	See Note 2
B-F	22	4	18	18	
B-G-1	221	72	33	33	
B-G-2	62	21	34	34	
B-H	9	0	0	0	Relief Request IR-2-4 granted to perform all (9) examinations in one period.
B-K-1	9	3	33	33	
B-J	306	60	20	20	
B-L-1	N/A	N/A	N/A	N/A	There are no components under this Category at Millstone Unit 3.
B-L-2	0	0	0	0	Required only if disassembled during maintenance activity.
B-M-1	N/A	N/A	N/A	N/A	There are no components under this Category at Millstone Unit 3.
B-M-2	0	0	0	0	Required only if disassembled during maintenance activity.
B-N-1	3 (1/Period)	1	33	33	100% are examined each Inspection period.
B-N-2	7	0	0	0	See Note 2
B-N-3	2	0	0	0	See Note 2
B-O	4	0	0	0	See Note 2
B-P	30	12	40	40	Required for examination each refueling outage. Number and percentage are based on the number of refueling outages anticipated during the Interval.
C-A	7	2	29	29	
C-B	13	4	30	30	
C-C	39	8	21	21	

Table 1
ABSTRACT OF EXAMINATIONS AND TESTS (See Note 1)

Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
C-D	2	0	0	0	See Note 3
C-F-1	162	41	25	25	
C-F-2	38	11	29	29	
C-G	11	3	27	27	
C-H	86	27	31	31	
D-A	30	9	30	30	
D-B	128	37	28	28	
D-C	4	1	25	25	
E-A	105 (35/Period)	35	33	33	100% of the items are examined each Inspection Period.
E-C	N/A	N/A	N/A	N/A	There are no components listed under this category during this period
L-A	N/A	34	100	N/A	Examination frequency for this Category is once every five years. Inspection Interval is not applicable for this Category.
L-B	N/A	N/A	N/A	N/A	There are no components under this Category at Millstone Unit 3.
F-A	262	81	30	30	
R-A	83	29	34	34	

NOTES:

1. This report represents a summary of the Inservice Inspection activities performed at Dominion Nuclear Connecticut's Millstone Unit 3 power station during the 2001 refueling outage (3RO7) through the end of the inspection period which ended 7/22/2002. This represented the last outage of the first inspection period of the second inspection interval. Reporting of the first refueling outage of this period (3RFO6) in 1999 was previously submitted in accordance with the requirements IWA-4000 and IWA-6000, (Reference Unit 3 letter, dated September 27, 1999, Docket No. 50-423). Table 1 represents credited examinations from both refueling outages RFO6 and RFO7.

2. For this Examination Category, deferral of examinations to later in the interval is permissible, in accordance with ASME Section XI, IWB-2500-1 requirements.

3. Percentage requirements in this category can not be met for each period due to only 2 items in the Examination Category.

Table 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Component ID	Item Description	Flaw Characterization (IWA-3300)	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
B-G-1	B6.50	179-103-34	RPV Closure Head Washer.	0 875" linear indication found during visual examination of RPV Closure Head Washer. Indication is within the limits of IWB-3515.1(b) and evaluated as acceptable.	YES
C-H	C7.50	3QSS*P1A	Quench Spray System Pump	Leakage at bolted connection. Evaluated using the criteria of Code Case N-566-1 approved for use under Relief Request IR-2-6.	YES
D-C	D3.10	Line 3-SFC-012-34-3	Piping flanged connection	Leakage at bolted connection. Evaluated using the criteria of Code Case N-566-1 approved for use under Relief Request IR-2-6.	YES

Table 3
ABSTRACT OF REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES
REQUIRED FOR CONTINUED SERVICE

Code Class	Repair, Replacement, or Corrective Measure	Item Description	Description of Work	Flaw or relevant Condition Found During Scheduled Section XI Examination or Test (Yes/No)	Date Completed	Repair/ Replacement Plan Number
No Repairs, Replacements or Corrective Measures were required for continued service during 3RO7						

YANKEE ATOMIC ELECTRIC COMPANY

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October 21, 2002
BYR 2002-056

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

References: (a) License No. DPR-3 (Docket No. 50-29)

Subject: Licensee Event Report (LER) 2002-001-00

Pursuant to 10CFR50.73(a)(2)(i)(B) of the Commission's Rules and Regulations, Yankee Atomic Electric Company (YAEC) is providing Licensee Event Report 2002-001-00, titled "Spent Fuel Pit Area Radiation Monitor Alarm Setpoint Set Above Limit Allowed by Technical Specification 3.3."

Should you have any questions, please contact Mr. Greg Babineau, Safety Oversight Manager, at (413) 424-2202.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY

J. A. Kay

James A. Kay
Manager of Regulatory Affairs

c: J.B. Hickman, USNRC, Project Manager
R.R. Bellamy, USNRC, Region I

NRC FORM 366 (7-2001)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

Estimated burden per response to comply with this mandatory information collection request 50 hours Reported lessons learned are incorporated into the licensing process and fedback to Industry Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503 If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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4. TITLE

Spent Fuel Pit Area Radiation Monitor Setpoint Set Above Limit Allowed by Technical Specification 3.3

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8 OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER 05000
08	22	2002	2002	- 001	00	10	21	2002	FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE	N/A
10. POWER LEVEL	

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

20 2201(b)	20 2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50 73(a)(2)(ix)(A)
20 2201(d)	20 2203(a)(4)	50 73(a)(2)(iii)	50 73(a)(2)(x)
20 2203(a)(1)	50 36(c)(1)(i)(A)	50 73(a)(2)(iv)(A)	73 71(a)(4)
20 2203(a)(2)(i)	50 36(c)(1)(ii)(A)	50 73(a)(2)(v)(A)	73 71(a)(5)
20 2203(a)(2)(ii)	50 36(c)(2)	50 73(a)(2)(v)(B)	OTHER Specify in Abstract below or in NRC Form 366A
20 2203(a)(2)(iii)	50 46(a)(3)(ii)	50 73(a)(2)(v)(C)	
20 2203(a)(2)(iv)	50.73(a)(2)(i)(A)	50 73(a)(2)(v)(D)	
20 2203(a)(2)(v) X	50 73(a)(2)(i)(B)	50 73(a)(2)(vii)	
20.2203(a)(2)(vi)	50 73(a)(2)(i)(C)	50 73(a)(2)(viii)(A)	
20 2203(a)(3)(i)	50 73(a)(2)(ii)(A)	50 73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Greg Babineau, Safety Oversight Manager	(413) 424-2202

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FA CTURER	REPORTABLE TO EPIX
D	IL	RA							

14. SUPPLEMENTAL REPORT EXPECTED			15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO				

16. ABSTRACT (Limit to 1400 spaces, i e , approximately 15 single-spaced typewritten lines)

Yankee Nuclear Power Station ceased power operation in February 1992 and is being decommissioned. To facilitate completion of decommissioning, a campaign is underway to transfer spent nuclear fuel located in the Spent Fuel Pit (SFP) to dry cask storage. On 08/22/02, during fuel handling operations, the Plant Shift Supervisor identified that the alarm setpoints for the SFP Area Radiation Monitor (ARM) were set at a value greater than Technical Specification requirements. The SFP ARM is an instrument required by Technical Specification 3.3 to ensure early detection of inadvertent criticality during fuel handling activities. The Technical Specification requires the alarm setpoints for the SFP ARM be set at less than 5 mr/hr or two times the background radiation level, whichever is greater, while moving irradiated fuel, control rods or sources. Fuel handling operations were immediately suspended, Condition Report No. 02-579 was initiated, and procedure OP-4816, "Functional Test and Alarm Setting of the Area Radiation Monitoring System" was performed. The SFP ARM alarm setpoints were verified to be 12 mr/hr, while two times the observed background radiation level (3 mr/hr) at that point in time would have resulted in a required alarm setpoint of 6 mr/hr. As such, this LER is submitted in accordance with 10CFR50.73(a)(2)(i)(B) as a condition of non-compliance with a Technical Specification. The cause has been attributed to procedural inadequacies that did not properly anticipate or account for potential changes to SFP background radiation levels (and SFP ARM alarm setpoint requirements) due to dry cask storage activities adjacent to the SFP during fuel handling operations.

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17. NARRATIVE *(If more space is required, use additional copies of NRC Form 366A)*

EVENT DESCRIPTION

Yankee Nuclear Power Station ceased power operation in February 1992 and is being decommissioned. To facilitate completion of decommissioning, a campaign is underway to transfer spent nuclear fuel located in the Spent Fuel Pit (SFP) to dry cask storage. While conducting fuel handling operations associated with the loading of Transportable Storage Container (TSC) No. 5 in accordance with OP-7107, "Spent Fuel Pit Component Movement Program" on 08/22/02 at approximately 1830, the Plant Shift Supervisor identified that the Spent Fuel Pit Area Radiation Monitor alarm setpoints exceeded Technical Specification 3.3 requirements. Technical Specification 3.3 requires the alarm setpoints for the SFP ARM be set at less than 5 mr/hr or two times the background radiation level, whichever is greater, while moving irradiated fuel, control rods, or sources. Fuel handling operations were immediately suspended, Condition Report No. 02-579 was initiated, and procedure OP-4816 "Functional Test and Alarm Setting of the Area Radiation Monitoring System" was performed. The SFP ARM alarm setpoints were verified to be 12 mr/hr, while two times the observed background radiation level (3 mr/hr) at that point in time would have resulted in a required alarm setpoint of 6 mr/hr. The SFP ARM Alert and High alarms were reset in accordance with OP-4816, "Functional Test and Alarm Setting of the Area Radiation Monitoring System" to be consistent with the Technical Specification 3.3 LCO prior to the resumption of fuel handling operations. Based on review of records, it has been determined that fuel handling operations were conducted with the SFP ARM in operation per OP-4822 "SFP Manipulator Crane Area Radiation Monitor Channel Check", but with the alarm setpoints in non-compliance with Technical Specification 3.3 from 08/19/02 at approximately 1835 until the point of discovery on 08/22/02 at approximately 1830.

CAUSE OF EVENT

The corrective actions associated with Condition Report No. 02-579 identified procedural inadequacies as the cause of event. The procedures in place at the time of the occurrence did not properly anticipate or account for potential changes to SFP background radiation levels (and SFP ARM alarm setpoint requirements) during fuel handling operations due to dry cask storage activities adjacent to the SFP. Examples of such activities include movement of the loaded Transfer Cask (TFR) and/or loaded Vertical Concrete Cask (VCC), or changes to the shielding configuration of the loaded TFR while it was in the Fuel Transfer Enclosure (FTE) or alleyway between the FTE and SFP. The SFP ARM alarm setpoints were properly set on 08/15/02 by OP-4816 "Functional Test and Alarm Setting of the Area Radiation Monitoring System" to reflect the ambient SFP background radiation level at that time. Subsequent changes in SFP background radiation levels caused by movement of loaded VCC No. 4 to the ISFSI pad on 8/18/02 at approximately 2030 were not recognized. Although the SFP ARM was determined to be in operation per OP-4822 "SFP Manipulator Crane Area Radiation Monitor Channel Check", the SFP ARM alarm setpoints were not evaluated prior to initiation of fuel handling operations on 8/19/02 at approximately 1835. The following procedures have been identified as containing inadequacies which contributed to this occurrence:

- OP-4822 "SFP Manipulator Crane Area Radiation Monitor Channel Check".
- OP-7107 "Spent Fuel Pit Component Movement Program".
- 13200-OP-2961 "Fuel Load into TSC/Transfer Cask".

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17. NARRATIVE *(If more space is required, use additional copies of NRC Form 366A)*

SAFETY ASSESSMENT

The safety significance of this incident is low. The SFP ARM is an instrument required by Technical Specification 3.3 to ensure early detection of inadvertent criticality during fuel handling activities. Although the alarm setpoints for the SFP ARM were out of tolerance with Technical Specification 3.3, the SFP ARM was in operation with the alarm setpoints based on the background radiation levels with loaded VCC No. 4 in the alleway between the FTE and SFP. Subsequent movement of loaded VCC No. 4 out of the alleyway reduced the SFP background radiation levels from 6 mr/hr to 3 mr/hr. The actual time interval to reach an alarm condition (12 mr/hr), as compared to the time required to reach the Technical Specification required alarm setpoint (6 mr/hr) would have been negligible. An increase in radiation levels resulting from an inadvertent criticality would have been detected early enough to preclude any additional impact to the workers or public safety.

CORRECTIVE ACTIONS

The following procedural changes were made to preclude recurrence:

- OP-4822 "SFP Manipulator Crane Area Radiation Monitor Channel Check" is the procedure that is used to satisfy the Technical Specification 4.3.1 surveillance requirement to perform a SFP ARM Channel Check prior to and every 12 hours during fuel movement. OP-4822 was revised to include a verification that the SFP ARM alarm setpoints are proper at each surveillance interval and to provide actions to suspend fuel handling operations and initiate OP-4816 "Functional Test and Alarm Setting of the Area Radiation Monitoring System" to reset the SFP ARM alarm setpoints if they are not properly set. The revision to OP-4822 received an Independent Safety Review, Site Manager approval, and was issued on 09/12/02.
- OP-7107 "Spent Fuel Pit Component Movement Program" provides programmatic controls for fuel handling operations and includes a prerequisite to verify SFP ARM operability per OP-4822 prior to fuel handling operations. OP 7107 was revised and as part of the revision the prerequisite to verify SFP ARM operability now highlights that proper SFP ARM alarm setpoints are also verified per OP-4822. In addition, the revision to OP-7107 incorporates a new Attachment D "Shiftly Prerequisite Verification" which includes performance of OP-4822 at 12 hour intervals during fuel handling operations. The revision to OP-7107 received an Independent Safety Review, Site Manager approval, and was issued on 09/17/02.

As additional defense in depth to ensure proper SFP ARM alarm setpoints during fuel handling operations, the planned revision to 13200-OP-2961 "Fuel Load into TSC/Transfer Cask" will include appropriate steps to initiate SFP ARM alarm setpoint verification when work activities external to the SFP could affect SFP background radiation levels.

- The revision to 13200-OP-2961 will be issued prior to the resumption of fuel loading activities for TSC #7 which is anticipated in mid-November 2002.

ADDITIONAL INFORMATION

None.

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17. NARRATIVE *(If more space is required, use additional copies of NRC Form 366A)*

PREVIOUS SIMILAR EVENTS

Licensee Event Report 2001-001-00, dated August 22, 2001, addressed the Spent Fuel Pit Area Radiation Monitor Alarm setpoints being set above the limits allowed by Technical Specification 3.3. In that the issue of SFP ARM alarm setpoints is common to LER 2001-001 and this LER (2002-001) an evaluation of the effectiveness of the corrective actions for LER 2001-001 has been performed. The corrective actions for LER 2001-001 included a significant revision to OP-4816 " Functional Test and Alarm Setting of the Area Radiation Monitoring System" to provide clearer and more consistent guidance on Technical Specification 3.3 requirements and in particular the method to determine proper SFP ARM alarm setpoints based on maximum observed background. Since issuance on July 13, 2001, the revision to OP-4816, training, and heightened personnel awareness during fuel handling operations have proven to be effective in ensuring proper SFP ARM alarm setpoints during performance of OP-4816. The issue that caused this LER (2002-001) was the lack of defense in depth in supporting procedures (OP-4822, OP-7107, and 13200-OP-2961) to anticipate the effect of dry cask storage activities adjacent to the SFP which can change SFP ambient background radiation levels (and SFP ARM alarm setpoint requirements) during fuel handling operations.