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

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DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3
END OF CYCLE 16 STEAM GENERATOR TUBE INSPECTION REPORT

In accordance with the Millstone Power Station Unit 3 Technical Specification (TS) Section 6.9.1.7, Dominion Nuclear Connecticut, Inc. hereby submits the End of Cycle 16 (EOC16) Steam Generator (SG) Tube Inspection report. The report is submitted within 180 days after initial entry into MODE 4 following completion of the fall 2014 SG inspections performed in accordance with TS 6.8.4.g, "Steam Generator (SG) Program." Initial entry into Mode 4 occurred on November 13, 2014.

Enclosure 1 contains the EOC16 SG Tube Inspection report. Enclosure 2 contains a list of acronyms.

The report addresses the following reporting requirements:

a. The scope of inspections performed on each SG,

b. Degradation mechanisms found,

c. Nondestructive examination techniques utilized for each degradation mechanism,

d. Location, orientation (if linear), and measured sizes (if available) of service induced indications,

e. Number of tubes plugged during the inspection outage for each degradation mechanism,

f. The number and percentage of tubes plugged to date and the effective plugging percentage in each steam generator,

g. The results of condition monitoring, including the results of tube pulls and in-situ testing,

h. The primary to secondary LEAKAGE rate observed in each SG (if it is not practical to assign the LEAKAGE to an individual SG, the entire primary to secondary LEAKAGE should be conservatively assumed to be from one SG) during the cycle preceding the inspection which is the subject of the report,

i. The calculated accident induced leakage rate from the portion of the tubes below 15.2 inches from the top of the tubesheet for the most limiting accident in the most limiting SG. In addition, if the calculated accident induced leakage rate from the most limiting accident is less than 2.49 times the maximum operational primary to secondary leakage rate, the report should describe how it was determined; and

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j. The results of monitoring for tube axial displacement (slippage). If slippage is discovered, the implications of the discovery and corrective action shall be provided.

If you have any questions or require additional information, please contact Mr. William D. Bartron at (860) 444-4301.

Sincerely,

J. R. Daugherty
Site Vice President – Millstone

Enclosures:

1) Millstone Power Station Unit 3, End of Cycle 16 Steam Generator Tube Inspection Report

2) Acronyms

Commitments made in this letter: None

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ENCLOSURE 1

Millstone Power Station Unit 3
End of Cycle 16 Steam Generator Tube Inspection Report

MILLSTONE POWER STATION UNIT 3
DOMINION NUCLEAR CONNECTICUT, INC.

End of Cycle 16 Steam Generator Tube Inspection Report

Transmittal of this report satisfies Millstone Power Station Unit 3 (MPS3) Technical Specification (TS) 6.9.1.7 which specifies that a report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with TS 6.8.4.g, Steam Generator (SG) Program. During the MPS3 fall 2014 refueling outage (3R16), steam generator inspections were completed in accordance with (TS) Section 6.8.4.g. Initial entry into Mode 4 occurred on November 13, 2014; therefore, this report is required to be submitted by May 12, 2015.

This enclosure provides responses to TS 6.9.1.7 reporting requirements for SG inspections performed during 3R16. Enclosure 2 contains a list of acronyms.

Introduction

MPS3 is a four loop Westinghouse pressurized water reactor with Westinghouse Model F SGs. Each SG contains 5,626 U-bend thermally-treated Inconel 600 tubes. The tubing is nominally 0.688 inches outside diameter with a 0.040 inch nominal wall thickness. During SG fabrication, the tubes were hydraulically expanded over the full depth of the 21.23 inch thick tubesheet. The tubesheet was drilled on a square pitch with 0.98 inch spacing. There are 59 rows and 122 columns in each SG. The radius of the row 1 U-bends is 2.20 inches. U-bends in rows 1 through 10 were stress relieved after being formed. Secondary side tube support structures include a flow distribution baffle, seven plate supports with broached holes on the vertical section of the tubes, and six anti-vibration bars (AVBs) on the U-bend section of the tubes. See Figure 1, "Millstone Power Station Unit 3 Steam Generator Arrangement," for an illustration of the steam generator component locations.

The SGs have accrued 22.02 Effective Full Power Years (EFPYs) of operation as of the end of Cycle 16 (October 2014). MPS3 has the capacity to generate a maximum calculated gross output of approximately 1,296 MWe and operates with an average hot leg temperature of 618 degrees Fahrenheit.

EOC16 SG Tube Inspection Report

This section provides responses to each of the requirements specified by MPS3 TS 6.9.1.7. Bold wording represents TS verbiage. The required information is provided immediately following the restatement of each reporting requirement.

A report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with TS 6.8.4.g, Steam Generator (SG) Program. The report shall include:

a. The scope of inspections performed on each SG,

One hundred percent of the operational tubes within SG A and SG C, a total of 11,181 tubes or approximately 50 percent of the total population of tubes, were inspected full length. The majority of the tubing length was examined with bobbin probes. The U-bends of rows 1 and 2 (475 in-service tubes) were examined by a Motorized Rotating Probe Coil (MRPC) technique in addition to the bobbin probe examination of the straight legs of the tubes. An additional augmented sample of 689 tube locations was examined with a MRPC probe. The augmented sample inspections were performed in areas of special interest including hot leg expansion transitions, tube overexpansion locations within the hot leg tubesheet, dents, as well as locations where the bobbin probe response was ambiguous. An augmented sample of 12,635 tube locations was inspected with an array coil probe. The array coil probe sample included 100% of the hot leg top-of-tubesheet (TTS) locations (11,181 tubes), and approximately 13% of the cold leg TTS locations (1,454 tubes). The extent of the TTS examinations was from the first support structure detected above the secondary face of the tubesheet to 15.2 inches below the secondary face of the tubesheet.

During 3R16, secondary side activities were performed in SGs A, B, C, and D and included the following:

- Deposit Minimization Treatment (DMT) which is a soft chemical cleaning technique.
- High pressure sludge lancing.
- Post-sludge lancing visual examination of TTS annulus and no-tube lane to assess as-left material condition and cleanliness, and to identify and remove any retrievable foreign objects.
- Visual investigation of accessible locations having eddy current indications potentially related to foreign objects, and if present, removal of those retrievable foreign objects.
- Secondary side upper internal examinations within SG A only as follows:
    - Steam drum visual inspections to evaluate the material condition and cleanliness of key components such as moisture separators, drain systems, and interior surfaces.
    - Drop down examinations (through the primary separators) of the upper tube bundle and AVB supports.
    - Visual inspections of feed ring internal interface for flow assisted corrosion.
    - Visual inspections of upper tube support plate (TSP) to assess material conditions and cleanliness.

b. Degradation mechanisms found,

The existing degradation mechanisms found during 3R16 included AVB wear, TSP wear, volumetric indications from fabrication and volumetric degradation from foreign object wear. A summary of the eddy current test (ECT) results from 3R16 is provided in Table 1.

c. Nondestructive examination techniques utilized for each degradation mechanism,

Table 2 identifies the examination techniques utilized for each identified degradation mechanism.

d. Location, orientation (if linear), and measured sizes (if available) of service induced indications,

Tables 3 through 8 identify the AVB wear and non AVB wear volumetric indications reported during 3R16.

e. Number of tubes plugged during the inspection outage for each degradation mechanism,

Based on the inspection results, no tubes were plugged during the 3R16 outage.

f. The number and percentage of tubes plugged to date and the effective plugging percentage in each steam generator,

The total number of tubes plugged to date and the effective plugging percentage in each SG are summarized below.

Number and Percentage of Tubes Plugged To Date

	SG A	SG B	SG C	SG D
Prior to 3R16	49	25	22	91
During 3R16	0	0	0	0
Total After 3R16	49	25	22	91
Percentage	0.871	0.444	0.391	1.617
Overall Percentage	0.831			

Since no sleeving has been performed in the MPS3 SGs, the effective plugging percentage is the same as the actual plugging percentage.

g. The results of condition monitoring, including the results of tube pulls and in-situ testing,

No tubes were pulled and no in-situ pressure tests were performed. The condition monitoring assessment concluded that the structural integrity, operational leakage and accident induced leakage performance criteria were not exceeded during the operating interval preceding 3R16.

h. The primary to secondary LEAKAGE rate observed in each SG (if it is not practical to assign the LEAKAGE to an individual SG, the entire primary to secondary LEAKAGE should be conservatively assumed to be from one SG) during the cycle preceding the inspection which is the subject of the report,

No primary to secondary SG leakage was reported during Cycle 16.

i. The calculated accident induced leakage rate from the portion of the tubes below 15.2 inches from the top of the tubesheet for the most limiting accident in the most limiting SG. In addition, if the calculated accident induced leakage rate from the most limiting accident is less than 2.49 times the maximum operational primary to secondary leakage rate, the report should describe how it was determined;

For the purposes of condition monitoring assessment, and in accordance with the permanent alternate repair criteria, the accident leakage attributed to degradation within the tubesheet below the H* dimension must be estimated by applying a factor of 2.49 to the operational leakage. There was no recordable operational leakage during Cycle 16; hence, the leakage from this degradation during a limiting accident would have been zero (i.e., 2.49 x 0).

j. The results of monitoring for tube axial displacement (slippage). If slippage is discovered, the implications of the discovery and corrective action shall be provided.

The tube slippage monitoring was performed for SG A and SG C using the bobbin coil data during 3R16. There was no detection of slippage identified during 3R16.

Table 1
ECT Examination Summary for 3R16

	SG A	SG B	SG C	SG D	Total
Number of Tubes Inservice at start of 3R16	5577	5601	5604	5535	22317
Number of Tubes Inspected F/L w/Bobbin Probe	4491	N/A	4524	N/A	9015
Number of Tubes Inspected w/Bobbin Probe Hot Leg Straights (Rows 1 through 9)	1086	N/A	1080	N/A	2166
Number of Tubes Inspected w/Bobbin Probe Cold Leg Candy Canes (Rows 3 through 9)	843	N/A	848	N/A	1691
Number of Tubes Inspected w/Bobbin Probe Cold Leg Straights and MRPC U-Bends (Rows 1 and 2)	243	N/A	232	N/A	475
Previously Plugged Tubes	49	25	22	91	187
Number of Tubes Incomplete w/Bobbin Probe due to Obstruction	0	N/A	0	N/A	0
Number of Examinations w/MRPC (Total)‡	598	N/A	566	N/A	1164
• Row 1 and 2 U-Bends	243	N/A	232	N/A	475
• Hot Leg Misc. Special Interest - Diagnostic Exams and from Previous History	278	N/A	238	N/A	516
• Cold Leg Misc. Special Interest - Diagnostic Exams and from Previous History	58	N/A	71	N/A	129
• U-bend. Special Interest – Diagnostic Exams and from Previous History	19	N/A	19	N/A	38
• Other Extent-Based Exams (e.g., foreign object bounding)	0	N/A	6	N/A	6
Number of Examinations w/ARRAY (Total)	6299	N/A	6336	N/A	12,635
Hot Leg Tubesheet (Baffle Plate)*	4338	N/A	4361	N/A	8699
Hot Leg Tubesheet (Non-Baffle)*	1239	N/A	1243	N/A	2482
Cold Leg Tubesheet (Baffle Plate)*	606	N/A	621	N/A	1227
Cold Leg Tubesheet (Non-Baffle)*	116	N/A	111	N/A	227
Foreign Object Wear Bounding	0	N/A	0	N/A	0
Hot Leg OXP/OVR Array Exam Sample Size	100%	N/A	100%	N/A	N/A
Cold Leg OXP/OVR Array Exam Sample Size	16%	N/A	17%	N/A	N/A
Tubes w/ Max AVB Wear ≥ 40 %	0	N/A	0	N/A	0
Tubes w/ Max AVB Wear ≥ 20% but < 40%	46	N/A	10	N/A	56
Tubes w/ Max AVB Wear < 20%	119	N/A	29	N/A	148
Tubes w/ Max TSP Wear ≥ 40 %	0	N/A	0	N/A	0
Tubes w/ Max TSP Wear ≥ 20% but < 40%	1	N/A	0	N/A	1
Tubes w/ Max TSP Wear < 20%	5	N/A	6	N/A	11
Tubes w/ Max Non-Structure Vol. Deg. ≥ 40 %	0	N/A	0	N/A	0
Tubes w/ Max Non-Structure Vol. Deg. ≥ 20% but < 40%	8	N/A	7	N/A	15
Tubes w/ Max Non-Structure Vol. Deg. < 20%	5	N/A	20	N/A	25
Total Tubes Plugged as a Result of this Inspection:	0	N/A	0	N/A	0
• Due to AVB Wear ≥ 40%	0	N/A	0	N/A	0
• Due to AVB Wear < 40% (discretionary)	0	N/A	0	N/A	0
• Due to Non-Support Volumetric Degradation ≥ 40 %	0	N/A	0	N/A	0
• Due to Non-Support Volumetric Degradation < 40 % (discretionary)	0	N/A	0	N/A	0
• Due to BET lower than TTS -1"	0	N/A	0	N/A	0
• Due to ID Chatter (discretionary)	0	N/A	0	N/A	0
• Due to an Obstruction	0	N/A	0	N/A	0

‡ Values provided in the total and the sub-bullets correspond to the number of examinations performed.

* Within the cutout region, the upper extent of the array probe exam was the second support (i.e., 02H or 02C)

Table 2
Degradation Mechanisms and Inspection Techniques

Classification	Degradation Mechanism	Location	Probe Type
Existing	Tube Wear	Anti-Vibration Bars	Bobbin – Detection and Sizing
Existing	Tube Wear	Tube Support Plate	Bobbin – Detection +Point™ – Sizing
Existing	Tube Wear (foreign objects)	Freespan and TTS	Bobbin, Array and +Point™ – Detection +Point™ - Sizing
Existing	IGA/SCC	Tube Ends	N/A*
Existing	FAC	Feed Ring and J Tube to Feed Ring Interface	Visual Inspection
Existing	Tube Wear	Flow Distribution Baffle	Bobbin – Detection +Point™ – Sizing
Potential	ODSCC PWSCC	Hot Leg Top-of-Tubesheet and Sludge Region	Array - Detection +Point™ – Detection and Sizing
Potential	ODSCC PWSCC	Bulges, Dents, Manufacturing Anomalies, and Above-Tubesheet Overexpansions (OVR)	Array - Detection +Point™– Detection and Sizing
Potential	PWSCC	Tubesheet Overexpansions (OXP)	Array - Detection +Point™– Detection and Sizing
Potential	ODSCC PWSCC	Row 1 and 2 U-bends	+Point™ – Detection and Sizing
Potential	FAC	Moisture Separators	Visual Inspection
Potential	Plug Installation Problems	Plugs	Visual Inspection
Potential	Tube Slippage	Within Tubesheet	Bobbin Detection

* Inspection for this mechanism is not necessary under the permanent alternate repair criteria.

Table 3
3R16 Volumetric Degradation Summary SG A (excludes AVB Wear)

Row	Col	Supp	Max Depth	Cause	Foreign Object Remaining	Plugged & Stabilized?
2	17	05H -0.74	10	Tube Support Wear		No
3	112	06C -0.8	15	Tube Support Wear		No
6	122	TSH +4.07	15	Foreign Object Wear	No	No
7	3	TSC +0.18	26	Foreign Object Wear	No	No
15	68	07C -0.74	14	Tube Support Wear		No
18	94	03H -0.36	11	Tube Support Wear		No
20	97	08C -0.87	7	Tube Support Wear		No
23	76	03C +0.32	12	Tube Support Wear		No
24	11	TSH +0.27	23	Foreign Object Wear	No	No
28	112	01H +0.55	37	Foreign Object Wear	No	No
29	109	TSC +0.17	21	Foreign Object Wear	No	No
29	110	01H +0.62	15	Foreign Object Wear	No	No
29	110	TSC +0.2	21	Foreign Object Wear	No	No
35	71	08C -0.92	16	Tube Support Wear		No
36	76	01H +0.5	7	Tube Support Wear		No
43	103	TSC +0.74	17	Foreign Object Wear	No	No
47	24	01C +1.17	19	Foreign Object Wear	No	No
		01C +0.96	29	Foreign Object Wear	No	No
47	25	01C +0.95	25	Foreign Object Wear	No	No
		01C +1.19	30	Foreign Object Wear	No	No
58	47	TSC +0.57	19	Sled		No
58	76	TSC +0.57	19	Sled		No
59	60	08H -1.57	27	Foreign Object Wear		No

Table 4
3R16 Volumetric Degradation Summary SG C (excludes AVB Wear)

Row	Col	Supp	Max Depth	Cause	Foreign Object Remaining	Plugged & Stabilized?
1	5	TSC +3.55	15	Foreign Object Wear	No	No
1	73	TSC +19.52	18	Foreign Object Wear	No	No
1	102	01C +4.65	19	Foreign Object Wear	No	No
2	103	01C +12.91	19	Foreign Object Wear	No	No
13	120	08C -0.65	13	Tube Support Wear		No
20	72	02H +5.69	16	Fabrication		No
35	78	08C -0.74	11	Tube Support Wear		No
35	110	06C -1.04	24	Foreign Object Wear	No	No
36	13	TSC +0.63	20	Sled		No
		TSC +0.56	16	Sled		No
		TSC +0.61	19	Sled		No
		TSC +0.43	16	Sled		No
36	51	08C -0.62	12	Tube Support Wear		No
36	75	08C -0.73	9	Tube Support Wear		No
38	15	TSC +0.64	19	Sled		No
44	102	TSC +0.63	18	Sled		No
46	34	TSH +0.44	18	Foreign Object Wear	No	No
47	34	TSH +0.45	18	Foreign Object Wear	No	No
47	61	06C -0.61	8	Tube Support Wear		No
48	88	07C -0.57	21	Tube Support Wear		No
54	64	TSH +0.28	28	Foreign Object Wear	No	No
55	68	TSH +0.78	21	Foreign Object Wear	No	No
56	41	TSH +0.64	18	Foreign Object Wear	No	No
56	69	TSH +0.23	29	Foreign Object Wear	No	No
56	82	TSC +0.62	16	Sled		No
		TSC +0.62	18	Sled		No

Table 4
3R16 Volumetric Degradation Summary SG C (excludes AVB Wear)

Row	Col	Supp	Max Depth	Cause	Foreign Object Remaining	Plugged & Stabilized?
57	44	TSH +0.59	17	Sled		No
58	48	TSC +0.65	20	Sled		No
58	48	TSH +0.67	17	Sled		No
58	49	TSC +0.61	17	Sled		No
58	49	TSH +0.61	17	Sled		No
58	76	TSC +0.72	19	Sled		No
58	76	TSH +0.55	19	Sled		No
59	55	TSC +0.68	18	Sled		No
59	59	TSC +0.67	17	Foreign Object Wear	No	No
59	68	TSH +0.57	18	Sled		No

Table 5
AVB Wear Listings, Steam Generator A – Repeat Indications

Row	Col	AVB	%TW
12	121	AV6	11
22	78	AV1	14
22	78	AV5	16
22	78	AV6	11
24	116	AV6	11
26	115	AV1	25
26	44	AV2	17
26	44	AV5	16
27	115	AV1	19
28	113	AV5	8
28	115	AV1	32
28	36	AV5	10
29	114	AV2	15
29	114	AV5	11
29	12	AV2	14
29	40	AV2	10
29	67	AV1	11
29	67	AV2	15
29	67	AV5	12
29	79	AV5	10
30	10	AV5	15
30	11	AV5	9
30	113	AV5	21
30	114	AV1	13
30	40	AV2	14
30	9	AV5	31
31	109	AV2	10
31	61	AV5	11
32	111	AV4	20
32	111	AV5	18
33	111	AV6	9
34	107	AV4	10
34	109	AV4	28
34	15	AV6	10
34	41	AV3	17
34	41	AV4	10
34	44	AV3	7
34	46	AV3	18

Row	Col	AVB	%TW
34	46	AV4	15
34	46	AV5	28
34	46	AV6	33
34	48	AV1	19
34	48	AV2	19
34	48	AV3	27
34	73	AV3	14
34	73	AV4	33
34	73	AV5	36
34	73	AV6	10
34	85	AV5	17
34	91	AV2	12
34	91	AV4	9
34	97	AV3	13
34	98	AV4	9
35	100	AV3	12
35	108	AV2	11
35	108	AV3	15
35	49	AV2	12
35	49	AV5	13
35	49	AV6	11
35	59	AV2	29
35	59	AV3	13
35	59	AV4	13
35	59	AV6	14
35	60	AV4	25
35	60	AV5	17
35	60	AV6	10
35	61	AV2	15
35	61	AV4	14
35	65	AV2	14
35	65	AV3	14
35	65	AV4	15
35	65	AV5	18
35	71	AV3	11
35	71	AV4	25
35	71	AV5	14
35	71	AV6	10

Table 5
AVB Wear Listings, Steam Generator A – Repeat Indications

Row	Col	AVB	%TW
35	77	AV2	13
35	77	AV3	20
35	77	AV4	14
35	77	AV5	11
35	80	AV3	10
35	90	AV2	11
37	100	AV3	15
37	100	AV4	12
37	100	AV5	15
37	102	AV4	5
37	106	AV4	18
37	106	AV5	10
37	45	AV2	31
37	45	AV3	21
37	45	AV4	13
37	45	AV5	16
37	56	AV3	16
37	56	AV4	18
37	69	AV5	20
37	69	AV6	19
37	72	AV3	10
37	89	AV3	9
37	90	AV3	23
37	90	AV4	14
37	90	AV5	10
37	91	AV3	23
37	91	AV4	14
37	91	AV5	27
37	91	AV6	21
37	92	AV5	18
37	99	AV3	7
38	106	AV3	19
38	106	AV4	16
38	106	AV5	14
38	52	AV2	17
38	52	AV3	15
38	79	AV6	11
38	86	AV5	14

Row	Col	AVB	%TW
39	51	AV3	15
39	51	AV4	12
39	57	AV1	13
39	57	AV2	30
39	57	AV3	18
39	57	AV4	18
39	57	AV5	9
39	60	AV4	25
39	62	AV5	10
39	62	AV6	10
39	70	AV2	10
39	70	AV3	17
39	70	AV4	9
39	71	AV2	9
39	71	AV4	19
39	71	AV5	18
39	71	AV6	14
39	75	AV3	11
39	75	AV4	13
39	75	AV5	17
39	75	AV6	15
39	78	AV3	13
40	100	AV3	12
40	102	AV4	9
40	45	AV3	13
40	45	AV4	28
40	45	AV5	14
40	51	AV4	21
40	51	AV5	29
40	58	AV2	14
40	58	AV3	16
40	58	AV5	10
40	64	AV4	17
40	67	AV2	9
40	67	AV3	10
40	71	AV2	16
40	71	AV3	23
40	71	AV4	28

Table 5
AVB Wear Listings, Steam Generator A – Repeat Indications

Row	Col	AVB	%TW
40	86	AV2	12
40	94	AV5	21
41	100	AV3	10
41	101	AV4	10
41	101	AV5	11
41	102	AV4	25
41	102	AV5	10
41	61	AV3	21
41	61	AV4	26
41	74	AV5	10
41	87	AV4	18
42	101	AV2	21
42	101	AV3	14
42	101	AV4	24
42	101	AV5	23
42	102	AV3	20
42	102	AV4	32
42	102	AV5	24
42	103	AV3	14
42	103	AV4	13
42	20	AV6	10
42	33	AV3	21
42	33	AV4	13
42	37	AV2	14
42	37	AV3	11
42	37	AV6	13
42	43	AV2	20
42	43	AV3	18
42	53	AV3	11
42	53	AV4	21
42	53	AV5	18
42	63	AV2	11
42	63	AV3	19
42	63	AV4	13
42	63	AV5	9
42	77	AV2	13
42	77	AV3	15
42	77	AV4	27

Row	Col	AVB	%TW
42	85	AV2	10
42	85	AV4	14
42	86	AV3	10
42	86	AV4	12
42	93	AV3	16
42	93	AV4	19
42	93	AV5	24
42	98	AV1	7
42	98	AV3	31
42	98	AV4	29
43	101	AV3	10
43	101	AV4	19
43	101	AV5	16
43	102	AV4	16
43	102	AV5	17
43	103	AV5	14
43	20	AV6	6
43	49	AV2	11
43	49	AV3	10
43	64	AV3	13
43	64	AV4	13
43	64	AV5	18
43	76	AV4	13
43	80	AV3	20
43	80	AV4	23
43	80	AV5	13
43	80	AV6	15
43	87	AV2	20
43	87	AV4	20
43	87	AV5	21
43	96	AV5	12
43	98	AV4	16
43	98	AV5	12
43	99	AV4	14
44	64	AV2	29
44	64	AV3	19
44	74	AV4	17
44	74	AV5	23

Table 5
AVB Wear Listings, Steam Generator A – Repeat Indications

Row	Col	AVB	%TW
44	74	AV6	18
44	75	AV3	13
44	96	AV2	15
44	96	AV4	17
44	96	AV5	12
44	98	AV1	11
44	98	AV2	23
44	98	AV4	14
45	45	AV3	9
45	71	AV2	13
45	98	AV4	22
45	98	AV5	10
45	98	AV6	14
45	99	AV4	12
45	99	AV5	7
46	97	AV5	10
46	98	AV5	7
46	99	AV2	12
46	99	AV4	17
46	99	AV5	20
47	98	AV3	11
47	99	AV6	10
48	25	AV3	9
48	26	AV2	9
48	26	AV6	10
48	96	AV6	12
49	95	AV4	9
50	29	AV4	10
50	29	AV5	13
50	44	AV3	13
50	44	AV4	16
50	44	AV5	33

Row	Col	AVB	%TW
50	44	AV6	12
50	50	AV4	19
50	76	AV2	23
50	76	AV3	20
50	82	AV2	20
50	82	AV3	24
50	82	AV4	21
50	86	AV2	13
50	87	AV2	27
50	87	AV3	16
50	87	AV5	9
51	64	AV3	12
51	65	AV3	9
51	65	AV4	9
51	65	AV5	13
51	66	AV2	11
51	66	AV3	10
51	79	AV3	10
52	66	AV4	27
52	90	AV3	13
52	90	AV4	12
53	81	AV1	13
53	81	AV3	29
54	35	AV4	17
54	35	AV5	18
54	49	AV2	14
54	49	AV3	10
56	41	AV2	13
58	54	AV1	13
59	64	AV6	10

Table 6
AVB Wear Listings, Steam Generator A – New Indications

Row	Col	Supp	%TW
21	118	AV6	11
27	8	AV1	11
27	8	AV6	11
27	9	AV3	14
28	36	AV1	10
30	113	AV6	11
34	29	AV3	11
34	29	AV6	10
35	108	AV6	11
35	77	AV1	13
37	34	AV1	11
39	74	AV3	10
41	91	AV3	10
42	53	AV2	10
42	80	AV4	14
43	36	AV1	13
43	85	AV3	10
43	95	AV6	10
45	101	AV6	10
45	96	AV5	10
47	85	AV1	11
49	95	AV2	17
50	76	AV4	12
50	87	AV4	11
51	31	AV2	11
51	64	AV4	11
53	81	AV5	11

Table 7
AVB Wear Listings, SG-C - Repeat Indications

Row	Col	AVB	%TW
15	66	AV1	8
25	116	AV6	18
34	14	AV2	9
34	14	AV5	11
36	15	AV5	8
36	15	AV6	12
37	15	AV2	20
37	15	AV3	9
37	15	AV4	11
37	15	AV5	28
37	15	AV6	16
37	88	AV3	10
39	17	AV2	14
39	17	AV3	13
39	17	AV4	18
39	17	AV5	20
39	17	AV6	14
39	79	AV3	16
41	105	AV6	9
41	42	AV3	21
41	54	AV1	13
41	54	AV3	17
41	54	AV4	15
41	54	AV5	21
41	62	AV2	21
41	62	AV3	15
41	62	AV3	21
41	62	AV4	17
41	62	AV4	25
41	62	AV5	28
41	62	AV6	9
41	65	AV4	15
41	65	AV5	17
42	103	AV3	11
42	20	AV2	15
42	20	AV3	22
42	20	AV4	24

Row	Col	AVB	%TW
42	20	AV5	25
42	20	AV6	15
42	23	AV3	19
42	23	AV4	26
42	23	AV5	25
45	100	AV5	9
45	100	AV6	10
45	57	AV2	9
46	33	AV6	18
47	99	AV6	12
48	98	AV3	10
48	98	AV4	9
48	98	AV6	11
49	96	AV5	20
49	96	AV6	20
50	28	AV2	9
50	28	AV5	17
50	93	AV5	13
50	93	AV6	24
51	92	AV6	11
54	35	AV5	13
54	36	AV4	17
54	36	AV5	11
54	86	AV1	9
56	41	AV2	10
56	41	AV4	15
56	41	AV5	24
56	41	AV6	12
56	44	AV4	7
58	49	AV5	11

Table 8
AVB Wear Listings, Steam Generator C – New Indications

Row	Col	Supp	%TW
25	8	AV1	10
38	65	AV6	10
39	107	AV6	11
46	97	AV1	10
46	97	AV3	10
48	26	AV4	10
50	95	AV6	10
54	85	AV6	11
57	69	AV1	11

Figure 1
STEAM GENERATOR ARRANGEMENT

[REDACTED]

ENCLOSURE 2

Acronyms

MILLSTONE POWER STATION UNIT 3
DOMINION NUCLEAR CONNECTICUT, INC.

Acronyms

AVB	Anti-Vibration Bar
BET	Bottom of the Expansion Transition
BLG	Bulge
C	Column
CL	Cold Leg
DDH	Ding or Dent Signal - Reviewed in History
DDI	Distorted Dent or Ding Indication
DDS	Ding or Dent Signal - Non-Confirming w/RPC
DNG	Ding
DNT	Dent Indication
ECT	Eddy Current Test
EFPY	Effective Full Power Years
EPRI	Electric Power Research Institute
ETSS	Examination Technique Specification Sheet
F/L	Full Length
FAC	Flow Accelerated Corrosion
FDB	Flow Distribution Baffle
FO	Foreign Object
FOTS	Foreign Object Tracking System
HL	Hot Leg
IGA	Intergranular Attack
INF	Indication Not Found
INR	Indication Not Reportable
LPI	Loose Part Indication
LPR	Loose Part Removed
LPS	Loose Part Signal
MRPC	Motorized Rotating Pancake Coil
NDD	No Detectable Degradation
NDE	Nondestructive Examination
NDF	No Degradation Found
NEI	Nuclear Energy Institute
NQH	Non-quantifiable Indication - Reviewed in History
NQI	Non-quantifiable Indication
OA	Operational Assessment
ODSCC	Outer Diameter Stress Corrosion Cracking
OVR	Above Tubesheet Over Expansion
OXP	Over Expansion
PID	Positive Identification
PLG	Tube is plugged
PLP	Possible Loose Part
PTE	Partial Tubesheet Expansion
PWR	Pressurized Water Reactor
PWSCC	Primary Water Stress Corrosion Cracking
R	Row
RAD	Retest Analyst Discretion
RBD	Retest - Bad Data
RIC	Retest - Incomplete
RRT	Retest - Restricted Tube
S/N	Signal-to-Noise Ratio
SAI	Single Axial Indication
SCC	Stress Corrosion Cracking
SCI	Single Circumferential Indication
SG	Steam Generator
SLG	Sludge
SSI	Secondary Side Inspection
SVI	Single Volumetric Indication
TEC	Tube End Cold Leg
TEH	Tube End Hot Leg
TFH	Tangential Flaw-Like Signal - Reviewed in History
TFS	Tangential Flaw-Like Signal - Non-Confirming w/RPC
TSC	Top of Tubesheet Cold Leg
TSH	Top of Tubesheet Hot Leg
TTS	Top of Tubesheet
TWD	Through-Wall Depth
% TW	Percent Through-Wall
VOL	Volumetric Indication