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

Serial No.	16-222
NSS&L/MLC	R0
Docket No.	50-423
License No.	NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3
END OF CYCLE 17 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 17 (EOC17) Steam Generator (SG) Tube Inspection report. The report is submitted within 180 days after initial entry into MODE 4 following completion of the spring 2016 SG inspections performed in accordance with TS 6.8.4.g, "Steam Generator (SG) Program." Initial entry into Mode 4 occurred on May 10, 2016.

Enclosure 1 contains the EOC17 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. Jeffry A. Langan at (860) 444-5544.

Sincerely,

B. L. Stanley
Director, Nuclear Safety and Licensing – Millstone

Enclosures:

1) Millstone Power Station Unit 3, End of Cycle 17 Steam Generator Tube Inspection Report

2) Acronyms

Commitments made in this letter: None

cc: U. S. Nuclear Regulatory Commission
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Serial No. 16-222
Docket No. 50-423

ENCLOSURE 1

END OF CYCLE 17 STEAM GENERATOR TUBE INSPECTION REPORT

MILLSTONE POWER STATION UNIT 3
DOMINION NUCLEAR CONNECTICUT, INC. (DNC)

End of Cycle 17 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 spring 2016 refueling outage (3R17), SG inspections were completed in accordance with TS 6.8.4.g. Initial entry into Mode 4 occurred on May 10, 2016; therefore, this report is required to be submitted to the NRC by November 6, 2016.

This enclosure provides a summary of the SG primary side inspections performed during 3R17 and specific responses to each TS 6.9.1.7 reporting requirement. Enclosure 2 contains a list of acronyms.

Introduction

MPS3 is a four loop Westinghouse pressurized water reactor with Westinghouse Model F SGs. Each SG was fabricated with 5626 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.

The SGs have accrued 23.28 Effective Full Power Years (EFPY) of operation as of the end of Cycle (EOC) 17 (April 2016). MPS3 has the capacity to generate a maximum calculated gross output of approximately 1,296 MWe and operates with a hot leg temperature of 618°F.

EOC17 SG Tube Inspection Report

This section provides responses to each of the reporting requirements specified in 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 in SG B and SG D, a total of 11,136 tubes or approximately 50% of the total population of tubes, were inspected full length using eddy current examination techniques. The majority of the tubing length was examined with bobbin probes. The U-bends of rows 1 and 2 (481 in-service tubes) were examined by either Motorized Rotating Probe Coil (MRPC) technique or an array coil probe technique in addition to the bobbin probe examination of the straight legs of the tubes. An additional augmented sample of 528 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 additional augmented sample of 12,657 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 (11,136 tubes) and approximately 13% of the cold leg TTS locations (1,504 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 3R17, 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 the 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 B 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 3R17 included AVB wear, TSP wear, volumetric indications from fabrication, and volumetric degradation from foreign object wear. A summary of the eddy current test (ECT) result is provided in Table 1.

c. Nondestructive examination techniques utilized for each degradation mechanism,

Table 2 identifies the examination techniques used 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 3R17.

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

Based on the inspection results, no tubes were plugged during the 3R17 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 3R17	49	25	22	91
During 3R17	0	0	0	0
Total After 3R17	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 3R17.

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 17.

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 the 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 17; 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.

Tube slippage monitoring was performed on SG B and SG D using the bobbin coil data during 3R17. There was no detection of slippage during the 3R17 examination.

Table 1

ECT Examination Summary for 3R17

	SG A	SG B	SG C	SG D	Total
Number of Tubes Inservice at start of 3R17	5577	5601	5604	5535	22317
Number of Tubes Inspected F/L w/Bobbin Probe	N/A	4518	N/A	4452	8970
Number of Tubes Inspected w/Bobbin Probe Hot Leg Straights (Rows 1 through 9)	N/A	1083	N/A	1083	2166
Number of Tubes Inspected w/Bobbin Probe Cold Leg Candy Canes (Rows 3 through 9)	N/A	840	N/A	845	1685
Number of Tubes Inspected w/Bobbin Probe Cold Leg Straights (Rows 1 and 2)	N/A	243	N/A	238	481
Previously Plugged Tubes	49	25	22	91	187
Number of Tubes Incomplete w/Bobbin Probe due to Obstruction	N/A	0	N/A	0	0
Number of Examinations w/MRPC (Total)‡	N/A	533	N/A	459	992
◦ Row 1 and 2 U-Bends	N/A	240	N/A	224	464
◦ Hot Leg Misc. Special Interest - Diagnostic Exams and from Previous History	N/A	222	N/A	192	414
◦ Cold Leg Misc. Special Interest - Diagnostic Exams and from Previous History	N/A	24	N/A	16	40
◦ U-bend. Special Interest – Diagnostic Exams and from Previous History	N/A	5	N/A	11	16
• Other Extent-Based Exams (e.g., foreign object bounding)	N/A	42	N/A	16	58
Number of Examinations w/ARRAY (Total)	N/A	6356	N/A	6320	12676
• Hot Leg Tubesheet (Baffle Plate)*	N/A	4362	N/A	4290	8652
• Hot Leg Tubesheet (Non-Baffle)*	N/A	1239	N/A	1245	2484
• Cold Leg Tubesheet (Baffle Plate)*	N/A	632	N/A	631	1263
◦ Cold Leg Tubesheet (Non-Baffle)*	N/A	120	N/A	121	241
• Foreign Object Wear Bounding	N/A	0	N/A	17	17
• Row 1 and 2 U-Bends	N/A	3		16****	19
• Hot Leg OXP/OVR Array Exam Sample Size **	N/A	100%	N/A	100%	100%
◦ Cold Leg OXP/OVR Array Exam Sample Size **	N/A	21%	N/A	19%	20%
Tubes w/ Max AVB Wear ≥ 40 % ***	N/A	0	N/A	0	0
Tubes w/ Max AVB Wear ≥20% but <40% ***	N/A	12	N/A	23	35
Tubes w/ Max AVB Wear <20% ***	N/A	42	N/A	77	119
Tubes w/ Max TSP Wear ≥ 40 %	N/A	0	N/A	0	0
Tubes w/ Max TSP Wear ≥20% but <40%	N/A	0	N/A	2	2
Tubes w/ Max TSP Wear <20%	N/A	2	N/A	0	2
Tubes w/ Max Non-Structure Vol. Deg. ≥ 40 %	N/A	0	N/A	0	0
Tubes w/ Max Non-Structure Vol. Deg. ≥20% but <40%	N/A	7	N/A	6	13
Tubes w/ Max Non-Structure Vol. Deg. <20%	N/A	1	N/A	1	2
Total Tubes Plugged as a Result of this Inspection:	N/A	0	N/A	0	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).

** Percent sample is based on the number of OXPs/OVRs located within the upper 15.2 inches of the tubesheet.

*** Tubes with multiple AVB wear indications are counted only once in the highest depth category.

**** The U-bends of two low row tubes in SG D were inspected with both +Point™ and array coil probes.

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	Array - Detection +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 was not necessary under the permanent alternate repair criteria.

Table 3

3R17 Volumetric Degradation Summary SG B (Excludes AVB Wear)

Row	Col	Location	Maximum Depth 3R17 (%TW)	Signal History Comment	Cause	Foreign Object Remaining?	Plugged?
1	37	03C + 0.33"	14	No signal change since previous inspection	TSP Wear	NA	No
30	52	05H - 0.58"	13	No signal change since previous inspection	TSP Wear	NA	No
1	119	TSC + 3.84"	30	No signal change since previous inspection	Foreign Object	No	No
1	120	TSC + 3.85"	23	No signal change since previous inspection	Foreign Object	No	No
1	121	TSC + 6.40"	9	No signal change since previous inspection	Foreign Object	No	No
15	99	03H - 0.65"	32	No signal change since previous inspection	Foreign Object	No	No
29	65	08C - 0.81"	28	No signal change since previous inspection	Foreign Object	No	No
29	109	04H - 0.53"	25	No signal change since previous inspection	Foreign Object	No	No
32	30	06H - 1.00"	37	No signal change since previous inspection	Foreign Object	No	No
44	98	02H + 15.81"	21	Present in Baseline	Fabrication	NA	No

Table 4: 3R17 Volumetric Degradation Summary SG D (Excludes AVB Wear)

Row	Col	Location	Maximum Depth 3R17 (%TW)	Signal History Comment	Cause	Foreign Object Remaining?	Plugged?
17	24	07C – 0.67"	31	Small signal present in previous inspection	TSP Wear	NA	No
35	73	04H - 0.48"	22	No signal change since previous inspection	TSP Wear	NA	No
24	89	06C - 0.74"	21	No signal change since previous inspection	Foreign Object	No	No
27	39	08C - 0.90"	27	No signal change since previous inspection	Foreign Object	No	No
46	99	01H + 0.51"	26	No signal change since previous inspection	Foreign Object	No	No
52	42	01H + 0.57"	24	No signal change since previous inspection	Foreign Object	No	No
52	91	01H + 2.47"	31	No signal change since previous inspection	Foreign Object	No	No
58	50	01C + 0.42"	17	No signal change since previous inspection	Foreign Object	No	No
58	51	01C + 0.55"	25	No signal change since previous inspection	Foreign Object	No	No

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

SG	Row	Col	AVB	%TW
SGB	30	12	AV5	15
SGB	30	12	AV2	11
SGB	32	108	AV4	14
SGB	33	12	AV5	17
SGB	33	12	AV2	15
SGB	33	39	AV3	10
SGB	33	109	AV3	18
SGB	33	109	AV2	13
SGB	33	109	AV6	8
SGB	34	18	AV4	8
SGB	34	18	AV3	9
SGB	34	109	AV3	19
SGB	34	109	AV5	13
SGB	34	109	AV6	8
SGB	34	109	AV2	9
SGB	34	110	AV3	10
SGB	35	103	AV6	7
SGB	35	106	AV4	15
SGB	35	106	AV6	9
SGB	35	106	AV3	10
SGB	36	22	AV6	9
SGB	36	39	AV5	18
SGB	36	39	AV6	13
SGB	36	39	AV3	11
SGB	36	39	AV2	10
SGB	36	67	AV6	8
SGB	37	100	AV4	11
SGB	37	103	AV2	10
SGB	37	104	AV3	13
SGB	37	104	AV4	10
SGB	38	104	AV4	23
SGB	38	104	AV3	13
SGB	38	104	AV5	11
SGB	39	30	AV2	11
SGB	39	30	AV5	10
SGB	39	30	AV4	10
SGB	39	96	AV3	11

SG	Row	Col	AVB	%TW
SGB	40	23	AV5	13
SGB	40	23	AV4	12
SGB	40	23	AV2	12
SGB	40	23	AV3	11
SGB	40	24	AV4	18
SGB	40	24	AV3	17
SGB	40	24	AV5	12
SGB	41	34	AV4	33
SGB	41	34	AV5	31
SGB	41	34	AV3	15
SGB	41	34	AV2	16
SGB	41	34	AV6	12
SGB	41	50	AV4	27
SGB	41	50	AV3	16
SGB	41	69	AV5	30
SGB	41	69	AV4	17
SGB	41	69	AV3	10
SGB	41	77	AV5	20
SGB	41	77	AV3	14
SGB	41	77	AV4	14
SGB	42	19	AV1	10
SGB	42	21	AV5	25
SGB	42	21	AV4	21
SGB	42	21	AV2	15
SGB	42	21	AV6	14
SGB	42	21	AV3	11
SGB	42	33	AV2	13
SGB	42	96	AV2	20
SGB	42	96	AV4	12
SGB	42	96	AV3	13
SGB	42	96	AV5	9
SGB	42	98	AV2	30
SGB	42	98	AV3	31
SGB	42	98	AV5	10
SGB	43	86	AV4	10
SGB	43	100	AV4	26
SGB	43	100	AV3	22

SG	Row	Col	AVB	%TW
SGB	43	100	AV6	10
SGB	45	22	AV6	10
SGB	46	99	AV4	12
SGB	48	25	AV6	7
SGB	49	27	AV1	11
SGB	49	27	AV5	13
SGB	49	27	AV2	10
SGB	50	29	AV2	18
SGB	50	29	AV6	12
SGB	50	72	AV3	13
SGB	50	88	AV3	22
SGB	50	88	AV2	18
SGB	50	88	AV4	16
SGB	50	88	AV5	12
SGB	50	88	AV6	7
SGB	51	91	AV5	15
SGB	51	91	AV4	11
SGB	51	91	AV6	9
SGB	54	35	AV5	13
SGB	54	35	AV2	12
SGB	54	35	AV4	10
SGB	54	35	AV6	10
SGB	54	36	AV5	31
SGB	54	36	AV6	15
SGB	54	45	AV2	10
SGB	56	41	AV3	9
SGB	56	42	AV6	11
SGB	56	71	AV2	10
SGB	56	81	AV1	11
SGB	57	70	AV2	11
SGB	58	75	AV5	21
SGB	59	65	AV2	13

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

SG	Row	Col	AVB	%TW
SGB	34	71	AV3	11
SGB	36	39	AV4	11
SGB	42	98	AV1	10
SGB	42	98	AV4	10
SGB	54	37	AV1	12
SGB	55	84	AV6	14
SGB	58	74	AV4	10

Table 7
AVB Wear Listings, Steam Generator D – Repeat Indications

SG	Row	Col	AVB	%TW
SGD	9	121	AV6	13
SGD	23	10	AV6	10
SGD	26	8	AV6	15
SGD	28	8	AV6	14
SGD	28	8	AV1	13
SGD	28	114	AV2	29
SGD	28	114	AV5	11
SGD	29	113	AV2	17
SGD	29	113	AV5	17
SGD	30	113	AV2	13
SGD	30	114	AV6	22
SGD	30	114	AV1	11
SGD	31	99	AV2	10
SGD	31	99	AV5	11
SGD	31	99	AV6	10
SGD	32	112	AV5	11
SGD	33	86	AV3	11
SGD	33	86	AV4	14
SGD	33	109	AV5	20
SGD	33	109	AV2	12
SGD	34	109	AV2	12
SGD	35	99	AV5	13
SGD	35	99	AV2	13
SGD	35	102	AV5	15
SGD	35	103	AV5	16
SGD	35	107	AV4	10
SGD	35	108	AV3	15
SGD	35	108	AV4	11
SGD	35	109	AV4	16
SGD	35	109	AV5	10
SGD	36	82	AV3	13
SGD	36	97	AV2	12
SGD	37	93	AV3	18
SGD	37	93	AV2	13
SGD	37	101	AV2	20
SGD	37	101	AV3	15
SGD	37	101	AV4	14

SG	Row	Col	AVB	%TW
SGD	37	103	AV5	15
SGD	37	103	AV2	12
SGD	37	103	AV3	11
SGD	37	106	AV4	33
SGD	37	106	AV5	24
SGD	37	106	AV3	23
SGD	37	106	AV6	16
SGD	37	106	AV1	13
SGD	38	21	AV5	13
SGD	38	21	AV6	8
SGD	38	98	AV4	17
SGD	38	98	AV2	12
SGD	40	32	AV2	13
SGD	40	99	AV5	31
SGD	40	99	AV4	28
SGD	40	99	AV2	14
SGD	40	99	AV3	10
SGD	40	100	AV4	15
SGD	40	100	AV6	14
SGD	40	100	AV5	18
SGD	40	101	AV3	16
SGD	40	101	AV5	14
SGD	40	101	AV6	11
SGD	40	101	AV4	12
SGD	40	102	AV4	25
SGD	40	102	AV5	19
SGD	40	102	AV3	14
SGD	40	102	AV6	10
SGD	40	103	AV4	35
SGD	40	103	AV5	29
SGD	40	103	AV3	27
SGD	40	103	AV2	22
SGD	40	103	AV6	17
SGD	40	103	AV1	15
SGD	41	26	AV6	32
SGD	41	26	AV5	32
SGD	41	26	AV2	17

SG	Row	Col	AVB	%TW
SGD	41	29	AV4	11
SGD	41	29	AV6	9
SGD	41	30	AV4	21
SGD	41	30	AV5	16
SGD	41	30	AV3	15
SGD	41	30	AV2	10
SGD	41	31	AV2	13
SGD	41	39	AV5	30
SGD	41	39	AV4	25
SGD	41	39	AV3	25
SGD	41	39	AV2	21
SGD	41	39	AV6	11
SGD	41	78	AV3	23
SGD	41	78	AV4	21
SGD	41	78	AV5	15
SGD	41	78	AV2	10
SGD	41	87	AV3	9
SGD	41	90	AV1	16
SGD	41	90	AV3	11
SGD	42	103	AV2	13
SGD	43	20	AV6	10
SGD	43	25	AV5	10
SGD	43	33	AV3	13
SGD	43	95	AV5	16
SGD	43	95	AV4	11
SGD	43	100	AV4	20
SGD	43	100	AV6	11
SGD	43	100	AV5	11
SGD	43	102	AV6	12
SGD	43	102	AV5	14
SGD	44	21	AV1	13
SGD	45	22	AV6	12
SGD	45	41	AV3	18
SGD	45	47	AV6	12
SGD	45	96	AV3	12
SGD	45	96	AV2	11
SGD	47	24	AV1	11
SGD	47	96	AV5	15
SGD	47	98	AV5	12
SGD	48	25	AV6	10

SG	Row	Col	AVB	%TW
SGD	48	96	AV5	18
SGD	49	62	AV3	30
SGD	49	62	AV2	23
SGD	49	62	AV1	20
SGD	49	62	AV4	16
SGD	49	66	AV2	32
SGD	49	66	AV3	17
SGD	49	66	AV1	14
SGD	49	67	AV2	25
SGD	49	67	AV3	23
SGD	49	69	AV2	9
SGD	49	70	AV2	14
SGD	49	86	AV3	11
SGD	49	95	AV2	20
SGD	49	95	AV3	19
SGD	49	95	AV4	16
SGD	50	28	AV6	11
SGD	50	80	AV3	13
SGD	50	80	AV2	11
SGD	50	83	AV2	20
SGD	50	83	AV3	10
SGD	51	89	AV6	14
SGD	52	33	AV5	11
SGD	52	67	AV4	20
SGD	52	67	AV5	17
SGD	52	69	AV2	13
SGD	52	87	AV5	15
SGD	52	87	AV6	16
SGD	52	88	AV4	17
SGD	52	88	AV2	16
SGD	52	88	AV1	12
SGD	53	33	AV6	15
SGD	53	35	AV5	18
SGD	53	35	AV6	13
SGD	53	35	AV4	12
SGD	53	70	AV2	13
SGD	54	49	AV3	23
SGD	54	49	AV2	16
SGD	54	49	AV4	12
SGD	54	87	AV1	13

SG	Row	Col	AVB	%TW
SGD	55	40	AV6	21
SGD	55	75	AV6	19
SGD	55	84	AV5	25

SG	Row	Col	AVB	%TW
SGD	55	84	AV6	10
SGD	56	43	AV1	11
SGD	58	59	AV1	11

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

SG	Row	Col	AVB	%TW
SGD	24	117	AV1	20
SGD	25	93	AV5	10
SGD	25	115	AV1	10
SGD	26	115	AV1	15
SGD	26	116	AV1	10
SGD	27	115	AV1	17
SGD	27	115	AV6	13
SGD	36	34	AV2	11
SGD	36	88	AV2	12
SGD	36	88	AV3	11
SGD	36	88	AV5	11
SGD	38	95	AV5	14
SGD	40	102	AV2	10
SGD	42	19	AV5	16
SGD	45	41	AV4	11
SGD	45	92	AV2	12
SGD	45	96	AV5	11
SGD	48	94	AV6	14
SGD	49	67	AV4	12
SGD	50	83	AV1	16
SGD	50	90	AV1	13
SGD	51	87	AV5	12
SGD	52	67	AV3	10
SGD	52	88	AV3	11
SGD	53	34	AV6	12
SGD	53	36	AV6	10

ENCLOSURE 2

ACRONYMS

MILLSTONE POWER STATION UNIT 3
DOMINION NUCLEAR CONNECTICUT, INC. (DNC)

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
TSP	Tube Support Plate
TTS	Top of Tubesheet
TWD	Through-Wall Depth
% TW	Percent Through-Wall
VOL	Volumetric Indication