Luminant

Rafael Flores
Senior Vice President
& Chief Nuclear Officer
rafael.flores@Luminant.com

Luminant Power
P O Box 1002
6322 North FM 56
Glen Rose, TX 76043

T 254 897 5550
C 817 559 0403
F 254 897 6652

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ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT
DOCKET NO. 50-446
UNIT 2 FOURTEENTH REFUELING OUTAGE (2RF14) STEAM GENERATOR
180 DAY REPORT

Dear Sir or Madam:

By means of the enclosure with this letter, Luminant Generation Company LLC (Luminant Power) submits the Comanche Peak Nuclear Power Plant (CPNPP) Unit 2 steam generator tube inspection report for 2RF14 as required by Technical Specification 5.6.9.

This communication contains no new licensing basis commitments regarding Comanche Peak Unit 2.

Should you have any questions, please contact Mr. Jim Barnette at (254) 897-5866 or james.barnette@luminant.com.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By: Fred W. Madden
Fred W. Madden
Director, External Affairs

Enclosure - Comanche Peak Nuclear Power Plant 2RF14 Steam Generator 180 Day Report

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c - Marc L. Dapas, Region IV
Balwant K. Singal, NRR
Resident Inspectors, Comanche Peak

Comanche Peak Nuclear Power Plant 2RF14 Steam Generator 180 Day Report

CPNPP

This report is being submitted pursuant to TS 5.6.9, "Steam Generator Tube Inspection Report," to provide the results of the most recent CPNPP Unit 2 Steam Generator inservice inspection.

Steam Generator Configuration

The Comanche Peak Nuclear Power Plant (CPNPP) Unit 2 Nuclear Steam Supply System (NSSS) has four Westinghouse Model D-5 SGs each with 4570 thermally treated Alloy 600 U-tubes. Each U-tube has a nominal outside diameter (OD) of 0.750 inch, a nominal tube wall thickness of 0.043 inch, and a straight length ranging from 303.73 inches (Row 1) to 305.49 inches (Row 49), based on the tube schedule drawing. The tubesheet is 21.23 inches thick with a full depth hydraulic expansion of the tubes in both the hot leg (HL) and the cold leg (CL). Approximately one inch of the tube at both ends was tack expanded prior to tube-end welding. On the hot leg side, the U-tubes are supported by seven (7) tube support plates (TSPs). A flow distribution baffle (FDB) plate located between the tubesheet and the first TSP helps distribute the secondary side flow over the tubesheet. On the cold leg side there are four (4) TSPs, six (6) preheater baffle plates and the FDB. The FDB and the lowest five preheater baffle plates are 0.75 inch thick whereas the TSPs and the top preheater baffle plate are 1.12 inches thick. The FDB and the preheater baffle plates have round drilled holes whereas the TSPs have concave quatrefoil holes. All plates are made of Type 405 stainless steel. In the U-bend, the tubes are supported by two (2) sets of chrome-plated Inconel anti-vibration bars (AVBs). Figures 3A shows schematic of the Model D-5 SG and Figure 3B shows the general location of the tube support plates and the baffle plates and the terminology used in the eddy current inspection designated plates. To reduce tube vibration, 140 tubes in each SG were hydraulically expanded at the B and D preheater baffle plates. This field modification was performed before the initial startup of CPNPP Unit 2.

Inspection Summary

The inservice inspection of the Unit 2 SGs was completed during the Unit 2 Refueling Outage 14 (2RF14). CPNPP Unit 2 entry into MODE 4 after the inspection was achieved on April 24, 2014.

The last inspection of these SGs, prior to 2RF14, was conducted at 2RF12 when the accumulated operating life was 15.91 effective full power years (EFPY). During the 2RF13 outage and since CPNPP U2 is allowed to skip inspections, neither primary side nor secondary side inspection of the SGs was performed. CPNPP Unit 2 implemented a Stretch Power Uprate of 4.5% of the original power rating at the beginning of Cycle 12 in the fall of 2009. The uprate changed the core thermal power from 3458 MWt (101.5% condition) to 3612 MWt. The cumulative operating experience at the current (2RF14) inspection is 18.71 EFPY. The next two fuel cycles are planned to be 1.45 (Cycle 15) and 1.41 (Cycle 16) EFPY.

Prior to 2RF14, tube wear at Anti-Vibration Bars (AVBs), tube wear at non-expanded preheater baffle plates, and tube wear due to foreign objects were identified as existing degradation mechanisms. These mechanisms were also reported during 2RF14, but no other (new) degradation mechanisms were reported.

AVB wear has been reported in prior inspections. A number of AVB wear indications were reported in each of the SGs during 2RF14. Two tubes were plugged due to AVB wear during this outage. One of the four AVB indications in a tube in SG 2 had through-wall (TW) depth equal to the tube repair limit of 40%. Hence, this tube was plugged as per the technical specification (TS) requirements. Another tube (in SG 1) had wear indications at three AVB locations, the deepest being 37% TW. An administrative decision was made to plug this tube preventively. The maximum depth of all AVB wear indications reported during 2RF14 was 40% TW.

Although wear at preheater baffle plates has been observed in U2 in prior inspections, these have been very few in number and had negligible growth rates. During 2RF10 and 2RF12, two baffle plate wear indications were reported, one each in SGs 1 and 3. Wear indications at these same locations were reported in 2RF14 and had insignificant change in TW depths from prior outages. The estimated depths of these indications, 3% and 7%, were far below the repair limit of 40% TW.

Several loose parts wear indications were reported in 2RF14. Some of them are pre-existing wear indications due to loose parts which were removed from the SGs in prior outages. Since the loose parts responsible for the wear were removed, these indications were returned to service. All of these pre-existing indications are in SG 2, in Tubes R6C1, R6C2, R3C114 and R4C114. These locations were inspected using +Point probes. No change in the wear indications were noted in these cases, other than those resulting from eddy current uncertainty.

In addition, several new loose parts wear indications were reported during 2RF14. In SG 1, a loose parts wear indication exists at Baffle Plate B (C2) in Tube R48C38, with an estimated wear depth of 4% TW. In SG 2, loose parts wear indications exist in three adjacent tubes at Baffle Plate H (C6). Three loose parts wear indications exists in SG 4 at Baffle Plate B (C2); these were in tubes R26C69, R32C71 and R34C77. The deepest of the three indications, 25% TW, was in Tube R32C71. The foreign object was from a feedwater heater drain valve shim. The shim design allowed for flow impingement to cause wear and material failure, thus multiple loose parts in the secondary system. The shim design has been modified to correct the flow issues and eliminate the loose parts issue.

The indications at Baffle Plate B (C2) were accessible for video inspection. The feedwater enters the SG tube bundle over this baffle plate and hence, loose parts are deposited over this plate. Extensive expansion of inspection was performed at this baffle plate elevation in all four SGs due to loose parts concern. The video inspection, together with the associated foreign object search and retrieval (FOSAR), confirmed that there were no objects remaining in the vicinity of these indications. Hence, the four affected tubes were returned to service.

In SG 2, the three new loose part wear indications are above Baffle Plate H (C6). These are in tubes R12C23, R13C23, and R12C24. This location is not accessible for video inspection or FOSAR. A possible loose part (PLP) indication without any wear signal was reported in only one of these tubes (R12C23) as far back as 2RF10 (April 2008); however, no PLP or tube wear was reported in this tube during 2RF12. The other two tubes were last inspected during 2RF10 with no reports of either PLP or wear indications. Based on the available data, engineering concluded that a loose part is present at this location and it is causing wear in these three tubes, though at a very slow rate of progression. All wear indications in these tubes were below the repair limit; nevertheless, a conservative decision was made to plug all three tubes. Stabilizers were installed in the cold leg of all three tubes prior to plugging.

The maximum depth of loose parts wear (including those in tubes previously returned to service with this degradation) is 27% TW (SG 2 R6C2) and the maximum axial extent is 0.41 inch (R26C69).

Seven tubes showing strong evidence of having high residual stress and hence, higher susceptibility to stress corrosion cracking were preventively plugged by administrative decision

With the two tubes plugged for wear at the AVB locations, the three tubes stabilized and plugged due to loose parts wear, and the seven tubes preventively plugged for high residual stress, a total of twelve tubes were plugged during 2RF14.

No primary-to-secondary leakage was reported during normal operation during the last two cycles.

Slippage monitoring was performed and no slippage was detected in any of the tubes inspected.

Video inspections were performed in the SG channel heads. A discoloration was observed in the cladding of SG 1 CL. Upon closer inspection, the discoloration was apparently caused by a flaw in the cladding, was located in the vicinity of the joint between the channel head shell and the tubesheet, and was near the peripheral tube R36C100. The channel head indication was documented in a condition report (CR-2014-004897). A photograph of the indication is included (Figure 3C); it appears as a yellow/orange discoloration in the cladding. Engineering judged that there was a breach in the cladding at this location and that the discoloration resulted from the magnetite formed at the base metal surface behind the cladding. The reported flaw was estimated, by review of the photographs taken of the flaw, to be approximately 5/8-inch long and approximately half as wide.

A precursory review of historical inspections was performed; this review determined that the discoloration was visible in 2003. Since the indication was observed as early as 2003, engineering judged that the corrosion has been slowly developing since the initial operation of the SGs. An assessment of the growth of the observed flaw starting from the beginning of plant operation in Cycle 1 was made. Based on the corrosion rate progression during outages (aerated condition in the channel head) and during plant operation (deaerated condition in the channel head), engineering determined that the depth of the surface flaw in the base metal could be up to 0.00122 inch in depth at present. Continued operation for three more fuel cycles (through 2RF17) would result in further increase in the flaw depth to 0.00148 inch.

The acceptability of the flaw for continued operation was evaluated by comparison to the allowable planar flaws for ferritic steel in Table IWB-3510-1 of the ASME Boiler and Pressure Vessel Code, Section XI, 1998 Edition through 2000 Addenda. The allowable surface flaw depth of 1.9% of the bowl thickness is taken from Table IWB-3510-1 for the conservative flaw depth to the length ratio of zero. The SG bowl thickness is approximately 5.3 inches, giving an allowable surface flaw depth of 0.10 inch. Since the estimated depth of the flaw, projected to the end of Cycle 17, is significantly less than the allowable depth, the flaw is acceptable for continued operation for at least three more fuel cycles.

Based on the assessment, no additional action was performed during 2RF14 and inspection and re-characterization is recommended during the next inspection outage of the SGs in 2RF16.

All other channel head cladding was found to be intact with no anomalies observed.

Secondary side maintenance and inspections were also performed:

The SG secondary side maintenance activities during 2RF14 consisted of sludge lancing, Advanced Scale Conditioning Agent (ASCA) application, Consolidated Deposit Extraction (CODE), tube bundle video inspection, and FOSAR. These services were performed in all four SGs. In addition, upper bundle video inspection was performed in SG 2.

A total of 78.5 pounds of sludge was removed from the four SGs by sludge lance. The estimate of the amount removed by the application of ASCA and CODE is a total of 146.4 pounds from all four SGs. Taking into account that these processes loosened some sludge allowing removal by post-ASCA sludge lance, the increase above prior sludge lance operations appears reasonable and is consistent with the prior history of sludge removal from Unit 2. The total amount of deposit removed during 2RF14 is estimated to be 224.9 pounds, which is more than the combined amount removed in all prior sludge lance operations in the Unit 2 SGs.

The purpose of the chemically enhanced cleaning (ASCA and CODE) was to clean the consolidated sludge deposits in the "collars" (crevices around the tube above the TTS) of several tubes. Video inspection of this area indicates that this objective was satisfied.

An upper bundle inspection of SG2 support plates revealed tube OD surface and TSP crevices to be clean and free of deposit accumulation. No anomalous conditions were reported.

All possible loose parts (PLP) reported from eddy current inspection were reviewed for FOSAR. Areas of the tube bundle accessible for retrieval include the top of the tubesheet and a large portion of the area over BPB. FOSAR was conducted for all PLPs located in these areas. The video inspection also resulted in the identification of parts located on the tubesheet and on BPB. The parts judged to have possibly caused tube wear (based on size and location) were identified and eddy current inspection of the potentially affected tubes was conducted.

All loose parts left in the SGs were dispositioned by engineering. The engineering evaluation concluded that SG performance criteria will be satisfied with these objects remaining in the SGs during the next two fuel cycles until the next planned inspection of the SGs during 2RF16.The condition of the SGs has met all industry and regulatory structural and leakage integrity requirements.

Section 1 of this report describes the scope of inspections performed, including the nondestructive examination techniques utilized for each degradation mechanism and the scope expansion.

Section 2 contains the inspection results, which include:

a. Degradation mechanisms found,
b. Number of tubes plugged during the inspection outage for each degradation mechanism,
c. Number and percentage of tubes plugged to date,
d. The results of condition monitoring, including the results of tube pulls and in-situ testing,
e. The primary to secondary leakage rate observed,
f. The results of monitoring for slippage.

Section 3 contains the location, orientation (if linear), and measured sizes (if available) of service induced indications.

Section 1: Scope and Examination Techniques of Inspections Performed

The actual inspections performed during 2RF14 met or exceeded both the Technical Specification minimum requirements and the requirements of the Electric Power Research Institute (EPRI) Pressurized Water Reactor (PWR) Steam Generator Examination Guidelines. The following primary side inspections were performed in all four SGs (unless specified):

- 34% full length bobbin inspection (straight legs only in Rows 1 through 2)
- 34% +Point probe inspection of HL top of tubesheet (TTS) from 3 inches above to 15 inches (H* distance = 14.01 inches) below TTS
- 34% +Point inspection of the U-bends in Rows 1 through 2 (same tubes as in the bobbin program)
- 50% +Point inspection of all dents/dings ≥ 5 volts
- 100% +Point inspection of dents ≥ 2 volts at H3 TSP
- 100% +Point inspection of tubes expanded at Preheater Baffle Plate B
- 50% +Point inspection of tubes expanded at Preheater Baffle Plate D
- +Point inspection of legacy loose parts
- Special interest rotating pancake coil (RPC)
- 100% tube plug video inspection in HL and CL
- Video scan of channel head bowl in HL and CL as recommended by Westinghouse Nuclear Safety Advisory Letter (NSAL)12-1

In addition, the following secondary side maintenance and inspections were performed:

- Sludge Lancing in all four SGs
- TTS and Baffle Plate B (BPB) video inspection including FOSAR in all four SGs
- Upper bundle video inspection in SG 2
- Gasket replacements
- TTS ASCA/CODE application

During 2RF14, foreign objects observed in the SGs included several items identified as pieces of shim from a feed water heater drain valve. In order to address similar objects elsewhere in the SGs, an expansion of inspection was performed.

Based on Westinghouse's recommendation, the initial expansion was in all tubes in the high velocity region (Rows 21 and higher) located above BPB in all SGs. This expansion was intended to identify and address all loose parts in the high velocity region over BPB and was applied as either eddy current inspection by +Point probe or as video inspection. The inspection scope for each was based on the outage schedule. In SGs 1 and 4, +Point probe inspection over BPB was performed in all tubes in Rows 21 and higher. If any PLPs were reported, they were addressed by performing a FOSAR. In SGs 2 and 3, FOSAR was applied for the inspection of tubes in the high velocity region, except several dozen tubes behind two stayrods that were not accessible to FOSAR (these tubes were inspected by +Point probe instead). If an object was found during FOSAR, irrespective of retrieval of the loose part, a +Point probe inspection was performed in adjacent tubes to identify if any tube defect was present.

Subsequently, the concern shifted to the impact of leaving loose parts in the low velocity region over BPB on the tube integrity and on the advisability of skipping SG inspection during the next refueling outage (2RF15). Based on the results of an evaluation conducted for the low velocity region, an expansion of inspection in this region was also carried out. This expansion was in the form of bobbin inspection in the CL covering BPB. All tubes that were not in the base scope bobbin program in Rows 1 through 20 in all SGs were inspected by bobbin as a part of this second (in terms of authorization, but not necessarily in terms of execution) expansion. Whereas the first expansion was intended to detect and disposition all loose parts in the high velocity region, the second expansion was intended to detect loose parts wear in the low velocity region. This is because the evaluation of the low velocity region had shown that if there was no tube wear in a tube adjacent to an object of the type evaluated (piece of shim), then progression of wear would be slow enough to allow operation for more than two cycles without breaching SG performance criteria.

Section 2: Inspection Results

Degradation mechanisms found:

The existing degradation mechanisms in the Unit 2 SGs were tube wear at AVBs, tube wear at non-expanded preheater baffle plates, and tube wear due to loose parts. These three mechanisms were reported during 2RF14, but no other (new) degradation mechanisms were found. Table 2B provides a list of nondestructive examination (NDE) techniques utilized for each existing degradation mechanism.

Identification of Tubes Plugged:

A total of twelve tubes were plugged during 2RF14, two in SG 1 and ten in SG 2. Seven of these tubes (one in SG 1 and six in SG 2) were preventively plugged because of strong evidence that these tubes had high residual stress and hence, higher susceptibility to stress corrosion cracking Two tubes were plugged for AVB wear; one tube in SG 1 was preventively plugged because it had an AVB wear indication (37% TW) which was close to the plugging limit and one tube in SG 2 was plugged because it had an AVB wear indication that was 40% TW. Three tubes in SG 2 were stabilized in the CL and plugged for loose parts wear at Baffle Plate H (C6). Table 2A provides a summary of all plugged tubes through 2RF14.

Total Number and percentage of tubes plugged to date:

A total of ninety-three tubes have been plugged in the Unit 2 SGs, which is equal to 0.51% of the tubes. Table 2A lists the Unit 2 SG tube plugging information.

Table 2A: Summary of All Plugged Tubes through 2RF14

Outage	Date	EFPY	SG 1	SG 2	SG 3	SG 4	Total	Percent
Pre-service	Pre-serv.	0.000	5	3	3	9	**20**	**0.11%**
2RF01	Nov-94	0.910	0	0	0	0	**0**	**0.00%**
2RF02	Mar-96	2.090	0	0	0	0	**0**	**0.00%**
2RF03	Nov-97	3.489	3	5	0	0	**8**	**0.04%**
2RF04	Apr-99	4.706	1	0	0	4	**5**	**0.03%**
2RF05	Oct-00	6.138	3	0	0	1	**4**	**0.02%**
2RF06	Apr-02	7.520	0	4	7	0	**11**	**0.06%**
2RF07	Oct-03	8.825	3	0	0	1	**4**	**0.02%**
2RF08	Apr-05	10.204	5	2	4	2	**13**	**0.07%**
2RF09	Oct-06	11.637	No SG Inspection				**0**	**0.00%**
2RF10	Apr-08	13.044	1	7	3	2	**13**	**0.07%**
2RF11	Oct-09	14.502	No SG Inspection				**0**	**0.00%**
2RF12	Apr-11	15.910	0	2	1	0	**3**	**0.02%**
2RF13	Oct-12	17.330	No SG Inspection				**0**	**0.00%**
2RF14	Apr-14	18.709	2	10	0	0	**12**	**0.07%**
Total			**23**	**33**	**18**	**19**	**93**	**0.51%**
Percent			**0.50%**	**0.72%**	**0.39%**	**0.42%**	**0.51%**	

Table 2B: NDE Examination Techniques for Existing and Potential Degradation Mechanisms

Degradation Mechanisms	Inspection Requirements	Inspection Program % Sample	Detection Technique ETSS #	ETSS Qualification POD	Sizing Technique ETSS #	Sizing Technique Uncertainty
Existing Mechanisms						
Wear at AVBs	33.3% in each of 3 inspections in period	34% Bobbin	96004.3	0.909 at 40% TW	96004.3	3.10% TW
Wear at TSPs, PBPs & FDB	33.3% in each of 3 inspections in period	34% Bobbin, +Point SI	96004.3 96910.1	0.909 at 40% TW 0.924 at 40% TW	96910.1	6.68% TW
Wear due to Foreign Objects	33.3% in each of 3 inspections in period	34% Bobbin, +Point SI, and +Point of expanded tubes at PBP-	27091.2 21998.1 2790X.3	0.989 at 36% TW 0.926 at 40% TW	21998.1 2790X.3	6.28% TW
Potential Mechanisms						
Axial ODSCC at TSP	33.3% in each of 3 inspections in period	34% Bobbin, +Point all DSIs	I28411, I28413, I28424, I28425		I28431 I28432	NA 11.856% 12.329%
Axial ODSCC at Dings	33.3%Bobbin; 33.3% +Point of dings/dents ≥ 5V	34% Bobbin 50% +Point dings/dents ≥ 5V	10013.1, 24013.1, I28413 A I28424 A I28425 A 22841.3	0.861 at 60% TW 0.875 at 60% TW	I28431 I28432	NA 11.856% 12.329%
Axial and Circ. ODSCC at HL TTS	33.3% +Point at HL TTS ±3"	33.3% +Point at HL TTS +3" to -15"	I28424 A I28425 A 21410.1 C		I28431 A I28432 A Note 5 C	11.856% 12.329% 13.43% PDA
PWSCC at BLG/OXP in HL TS	33.3% +Point of BLG/OXP in HL TS	33.3% +Point at HL TTS +3" to -15"	20511.1 A 20510.1 C	0.931 @≥40% 0.935 @≥40%	20511.1 A 20510.1 C	0% PDA for PDA>50% 6.98% PDA
PWSCC at HL TS Expansion Transition	33.3% +Point of HL TTS	33.3% +Point at HL TTS +3" to -15"	20511.1 A 20510.1 C I11524 C	0.931 @≥40% 0.935 @≥40%	20511.1 A 20510.1 C	0% PDA for PDA>50% 6.98% PDA
Axial PWSCC at Row 1 and 2 U-bends	33.3% +Point of Row 1 and 2 U-bends	33.3% +Point of Row 1 and 2 U-bends	96511.2	0.909 at 27% TW	96511.2	14.97%

Table Acronym Definitions

%TW: Percent Through-Wall
A: Axial
C: Circumferential
CL: Cold Leg
ETSS: Eddy Current Technique Specification Sheet
HL: Hot Leg
I: Appendix I ETSS
POD: Probability of Detection
SI: Special Interest

Results of Condition Monitoring (CM), including the results of tube pulls and in-situ testing:

CM is a "backward looking" evaluation to determine if SG performance criteria were satisfied during the operating period prior to the shut down and inspection. The SG inspection results are used as the input for this assessment.

Existing degradation mechanisms are those tube degradation mechanisms that were present in these SGs as determined by SG inspections prior to 2RF14 including:

- Tube wear at AVBs
- Tube wear at non-expanded preheater baffle plates
- Tube wear due to foreign objects

The existing degradation mechanisms were also reported during 2RF14, but no other (new) degradation mechanisms were reported.

Potential degradation mechanisms are those mechanical and corrosive processes that have not been reported in prior inspections in the SGs but are judged to have a potential to occur in the current inspection period based on industry experience and/or laboratory data. Based on the assessment of industry experience and laboratory data, the following potential degradation mechanisms were identified for CPNPP 2RF14:

- Axial ODSCC at TSP
- Axial ODSCC at dings
- Axial and circumferential ODSCC at top of HL tubesheet
- Axial and circumferential PWSCC at BLG/OXP locations within HL tubesheet
- Axial and circumferential PWSCC at HL tubesheet expansion transition
- Axial PWSCC at Row 1 and 2 U-bends

During a SG1 channel head bowl scan and as previously discussed, a discoloration was observed in the cladding. An evaluation of this condition was performed which concluded that the surface flaw is of a very small magnitude, such that no detrimental impact of the SG performance criteria would be realized.

Each of the four SGs met the performance criteria outlined in NEI 97-06, i.e., condition monitoring, during the last two operating cycles, between the last inspection at 2RF12 and the current inspection at 2RF14.

Also, comparing the maximum AVB wear observed (40%) to the maximum predicted (39.5%) in the 2RF12 CMOA provides confidence in the predictive methodology for AVB wear.

No tube pulls or in-situ testing was performed during 2RF14.

Primary to secondary leakage rate observed:

No primary-to-secondary leakage was reported during normal operation during the last two cycles.

Results of monitoring for slippage:

Slippage monitoring was performed using automated analysis of the eddy current data. The results were spot-checked by eddy current analysts. No slippage was detected in any of the tubes inspected.

None of the eddy current indications were deep enough to cause primary-to-secondary leakage (all indications had depths below the CM limit). Hence, leakage integrity was maintained during Cycle 14.

During the 2RF14, tube plugging due to degradation was performed for tube wear at AVB locations and tube wear due to loose parts. Since the TW depths of all indications were below the CM limit, they met the burst strength requirements in the CM criteria. Being volumetric indications, they will have even higher margin against pop-through during accident conditions and thus will not leak at such conditions. Hence, these indications also satisfy the leakage criteria for CM.

Section 3: Indication Listing

Tables 3A, 3B, 3C, 3D and 3E contain listed indications for 2RF14 for the existing degradation mechanisms:

Table 3A: Summary of AVB Wear Indications in 2RF14

	SG1	SG2	SG3	SG4	Total
Number of AVB Indications	185	50	58	36	329
Maximum Depth, % TW	38	40	31	24	40
Number of "New" Indications	25	8	5	14	52
Number of > 20% TW "New" Indications	1	0	0	0	1

Table 3B: AVB Wear Indications in Tubes Plugged in 2RF14

SGID	Outage	Row	Col	Volts	Deg	Ind	Per	Chn	Locn	Inch1	BegT	EndT	PDia	PType	Cal
1	U2RF14	46	86	0.67	0	PCT	11	P2	AV1	0	CTE	HTE	0.61	SBACC	75
1	U2RF14	46	86	4.18	0	PCT	37	P2	AV2	0	CTE	HTE	0.61	SBACC	75
1	U2RF14	46	86	1.44	0	PCT	21	P2	AV3	0	CTE	HTE	0.61	SBACC	75
2	U2RF14	47	59	2.89	0	PCT	28	P2	AV1	0.03	CTE	HTE	0.61	ZBAZC	35
2	U2RF14	47	59	1.02	0	PCT	15	P2	AV2	0.07	CTE	HTE	0.61	ZBAZC	35
2	U2RF14	47	59	5.8	0	PCT	40	P2	AV3	0.34	CTE	HTE	0.61	ZBAZC	35
2	U2RF14	47	59	3.26	73	PCT	30	P2	AV4	0.46	CTE	HTE	0.61	ZBAZC	35

Table 3C: Summary of Baffle Plate Wear Indications

SGID	Outage	Row	Col	Volts	Deg	Ind	Per	Chn	Locn	Inch1	BegT	EndT	PDia	PType
1	U2RF14	49	56	0.19	0	PCT	3	P3	C5	-0.4	CTE	HTE	0.61	SBACC
3	U2RF14	45	55	0.33	0	PCT	7	P3	C2	-0.15	CTE	HTE	0.61	ZBAZC

Table 3D: Summary of Loose Part Wear Indications

SGID	Outage	Row	Col	Volts	Deg	Ind	Per	CrLen	CrWid	Chn	Locn	Inch1	BegT	EndT	PDia	PType	Cal
1	U2RF14	48	38	0.22	0	PCT	4			P3	C2	0.14	C11	CTE	0.61	ZBAZC	54
2	U2RF14	6	1	0.12	0	VOL	17	0.14	0.2	P4	C1	0.51	C1	C1	0.61	ZPS3C	16
2	U2RF14	6	2	0.3	0	VOL	27	0.14	0.17	6	C1	0.44	C1	C1	0.61	ZPS3C	16
2	U2RF14	6	2	0.14	0	VOL	16	0.11	0.19	6	C1	0.91	C1	C1	0.61	ZPS3C	16
2	U2RF14	12	23	0.07	0	PCT	10	0.16	0.30	P4	C6	0.35	C6	C6	0.61	ZPS3C	32
2	U2RF14	13	23	0.04	0	PCT	6	0.20	0.35	P4	C6	0.39	C6	C6	0.61	ZPS3C	32
2	U2RF14	12	24	0.22	98	VOL	19	0.15	0.33	6	C6	0.55	C6	C6	0.61	ZPS3C	14
2	U2RF14	3	114	0.2	260	PCT	24	0.18	0.21	P4	C4	0.41	C4	C4	0.61	ZPS3C	14
2	U2RF14	4	114	0.14	0	PCT	17	0.18	0.2	P4	C4	0.43	C4	C4	0.61	ZPS3C	14
4	U2RF14	26	69	0.18	0	PCT	19	0.41	0.43	6	C2	1.31	C2	C2	0.61	ZPS3C	52
4	U2RF14	32	71	0.28	0	PCT	25	0.24	0.34	6	C2	0.55	C2	C2	0.61	ZPS3C	52
4	U2RF14	34	77	0.15	0	PCT	16	0.21	0.31	6	C2	0.5	C2	C2	0.61	ZPS3C	52

Legacy indications resulting from parts removed from their vicinity in prior outages are shown in blue/italic font. Those in black/straight font represent new indications.

Table 3E: List of Tube Indications

SGID	Outage	Row	Col	Volts	Deg	Ind	Per	Chn	Locn	Inch1	Inch2	BegT	EndT	PDia	PType	Cal
1	U2RF14	25	8	1.00	0	PCT	15	P2	AV3	0.00		CTE	HTE	0.61	SBACC	11
1	U2RF14	30	11	0.91	0	PCT	14	P2	AV1	0.00		CTE	HTE	0.61	SBACC	75
1	U2RF14	30	11	1.53	0	PCT	22	P2	AV3	0.03		CTE	HTE	0.61	SBACC	75
1	U2RF14	31	11	0.60	0	PCT	9	P2	AV1	0.06		CTE	HTE	0.61	SBACC	11
1	U2RF14	31	11	0.96	0	PCT	14	P2	AV3	0.05		CTE	HTE	0.61	SBACC	11
1	U2RF14	31	11	0.55	0	PCT	8	P2	AV4	-0.12		CTE	HTE	0.61	SBACC	11
1	U2RF14	30	12	1.83	0	PCT	25	P2	AV2	-0.08		CTE	HTE	0.61	SBACC	9
1	U2RF14	31	12	1.46	0	PCT	21	P2	AV3	-0.11		CTE	HTE	0.61	SBACC	9
1	U2RF14	32	12	1.35	0	PCT	20	P2	AV2	-0.05		CTE	HTE	0.61	SBACC	9
1	U2RF14	34	13	2.62	0	PCT	28	P2	AV2	0.00		CTE	HTE	0.61	SBACC	11
1	U2RF14	34	14	0.87	0	PCT	15	P2	AV3	0.06		CTE	HTE	0.61	SBACC	9
1	U2RF14	35	14	0.83	0	PCT	14	P2	AV2	-0.07		CTE	HTE	0.61	SBACC	9
1	U2RF14	36	15	0.94	0	PCT	14	P2	AV2	0.03		CTE	HTE	0.61	SBACC	11
1	U2RF14	36	15	0.71	0	PCT	11	P2	AV3	0.00		CTE	HTE	0.61	SBACC	11
1	U2RF14	35	16	0.92	0	PCT	15	P2	AV2	-0.11		CTE	HTE	0.61	SBACC	9
1	U2RF14	36	16	1.70	0	PCT	24	P2	AV3	0.06		CTE	HTE	0.61	SBACC	9
1	U2RF14	37	16	2.39	0	PCT	29	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	38	16	3.44	0	PCT	35	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	35	17	0.92	0	PCT	15	P2	AV1	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	35	17	0.64	0	PCT	11	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	37	17	3.71	0	PCT	36	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	38	17	0.82	0	PCT	14	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	38	17	0.72	0	PCT	12	P2	AV3	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	38	17	0.92	0	PCT	15	P2	AV4	-0.32		CTE	HTE	0.61	SBACC	9
1	U2RF14	39	17	1.92	0	PCT	25	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	39	17	1.26	0	PCT	19	P2	AV3	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	39	17	0.79	0	PCT	14	P2	AV4	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	37	18	0.96	0	PCT	14	P2	AV2	-0.06		CTE	HTE	0.61	SBACC	11
1	U2RF14	39	20	2.94	0	PCT	33	P2	AV2	0.21		CTE	HTE	0.61	SBACC	9
1	U2RF14	40	20	4.12	0	PCT	38	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	40	20	1.26	0	PCT	19	P2	AV3	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	40	20	1.13	0	PCT	18	P2	AV4	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	41	20	0.77	0	PCT	13	P2	AV2	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	41	20	1.49	0	PCT	22	P2	AV3	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	41	22	0.68	0	PCT	12	P2	AV2	0.03		CTE	HTE	0.61	SBACC	9
1	U2RF14	42	23	0.53	0	PCT	9	P2	AV1	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	42	23	0.75	0	PCT	12	P2	AV2	-0.06		CTE	HTE	0.61	SBACC	9
1	U2RF14	44	23	0.62	0	PCT	11	P2	AV4	0.00		CTE	HTE	0.61	SBACC	9
1	U2RF14	44	25	2.40	0	PCT	26	P2	AV2	0.08		CTE	HTE	0.61	SBACC	13
1	U2RF14	45	26	2.54	0	PCT	28	P2	AV2	0.22		CTE	HTE	0.61	SBACC	15
1	U2RF14	45	26	0.93	0	PCT	14	P2	AV3	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	44	27	1.57	0	PCT	19	P2	AV2	0.00		CTE	HTE	0.61	SBACC	13

1	U2RF14	46	27	1.11	0	PCT	14	P2	AV1	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	46	27	1.72	0	PCT	20	P2	AV2	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	46	27	0.75	0	PCT	10	P2	AV4	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	45	29	1.54	0	PCT	18	P2	AV1	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	45	29	1.08	0	PCT	14	P2	AV2	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	45	29	1.77	0	PCT	21	P2	AV3	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	40	30	1.47	0	PCT	20	P2	AV2	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	40	30	1.49	0	PCT	20	P2	AV3	-0.03		CTE	HTE	0.61	SBACC	15
1	U2RF14	40	30	1.48	0	PCT	20	P2	AV4	-0.03		CTE	HTE	0.61	SBACC	15
1	U2RF14	48	30	0.51	0	PCT	9	P2	AV1	-0.19		CTE	HTE	0.61	SBACC	15
1	U2RF14	40	31	0.70	0	PCT	12	P2	AV1	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	40	31	1.35	0	PCT	19	P2	AV2	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	40	31	1.52	0	PCT	20	P2	AV3	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	40	31	1.41	0	PCT	20	P2	AV4	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	46	31	1.19	0	PCT	15	P2	AV1	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	46	31	2.43	0	PCT	26	P2	AV2	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	46	31	1.83	0	PCT	21	P2	AV3	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	46	31	3.01	0	PCT	30	P2	AV4	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	41	32	0.59	0	PCT	10	P2	AV2	0.16		CTE	HTE	0.61	SBACC	15
1	U2RF14	35	34	1.32	0	PCT	16	P2	AV2	0.03		CTE	HTE	0.61	SBACC	13
1	U2RF14	35	34	1.08	0	PCT	14	P2	AV3	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	45	34	0.78	0	PCT	12	P2	AV1	0.12		CTE	HTE	0.61	SBACC	15
1	U2RF14	45	34	0.85	0	PCT	14	P2	AV2	0.00		CTE	HTE	0.61	SBACC	15
1	U2RF14	45	34	0.99	0	PCT	15	P2	AV3	0.09		CTE	HTE	0.61	SBACC	15
1	U2RF14	43	35	0.66	0	PCT	11	P2	AV2	-0.05		CTE	HTE	0.61	SBACC	15
1	U2RF14	34	36	1.11	0	PCT	14	P2	AV4	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	38	36	0.99	0	PCT	12	P2	AV2	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	48	38	0.22	0	PCT	4	P3	C2	0.14		C11	CTE	0.61	ZBAZC	54
1	U2RF14	40	41	1.38	0	PCT	17	P2	AV4	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	40	43	2.50	0	PCT	27	P2	AV2	0.00		CTE	HTE	0.61	SBACC	13
1	U2RF14	40	43	4.09	0	PCT	37	P2	AV3	-0.03		CTE	HTE	0.61	SBACC	13
1	U2RF14	40	43	2.87	0	PCT	30	P2	AV4	0.06		CTE	HTE	0.61	SBACC	13
1	U2RF14	40	45	1.93	0	PCT	22	P2	AV2	0.11		CTE	HTE	0.61	SBACC	17
1	U2RF14	47	50	0.81	0	PCT	13	P2	AV4	-0.03		CTE	HTE	0.61	SBACC	19
1	U2RF14	33	56	0.65	0	PCT	10	P2	AV3	0.03		CTE	HTE	0.61	SBACC	17
1	U2RF14	49	56	0.85	0	PCT	14	P2	AV4	0.00		CTE	HTE	0.61	SBACC	73
1	U2RF14	49	56	0.19	0	PCT	3	P3	C5	-0.40		CTE	HTE	0.61	SBACC	73
1	U2RF14	40	60	1.51	0	PCT	21	P2	AV4	0.34		CTE	HTE	0.61	SBACC	21
1	U2RF14	44	60	0.58	0	PCT	10	P2	AV3	-0.19		CTE	HTE	0.61	SBACC	21
1	U2RF14	45	69	0.61	0	PCT	10	P2	AV3	-0.03		CTE	HTE	0.61	SBACC	21
1	U2RF14	40	71	1.01	0	PCT	16	P2	AV1	0.08		CTE	HTE	0.61	SBACC	21
1	U2RF14	40	71	0.87	0	PCT	14	P2	AV2	0.14		CTE	HTE	0.61	SBACC	21
1	U2RF14	40	74	0.86	0	PCT	13	P2	AV1	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	43	77	1.27	0	PCT	18	P2	AV4	0.09		CTE	HTE	0.61	SBACC	21
1	U2RF14	39	78	1.39	0	PCT	20	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21

1	U2RF14	39	78	1.94	0	PCT	24	P2	AV4	0.32		CTE	HTE	0.61	SBACC	21
1	U2RF14	45	79	3.17	0	PCT	33	P2	AV4	0.09		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	81	1.36	0	PCT	19	P2	AV1	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	81	2.56	0	PCT	29	P2	AV2	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	81	2.76	0	PCT	30	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	45	82	0.74	0	PCT	12	P2	AV1	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	82	0.88	0	PCT	13	P2	AV2	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	82	0.90	0	PCT	14	P2	AV4	0.36		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	83	2.34	0	PCT	27	P2	AV2	-0.11		CTE	HTE	0.61	SBACC	23
1	U2RF14	46	83	1.38	0	PCT	19	P2	AV1	-0.09		CTE	HTE	0.61	SBACC	23
1	U2RF14	46	83	2.28	0	PCT	28	P2	AV2	0.24		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	84	1.65	0	PCT	22	P2	AV2	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	45	84	1.80	0	PCT	23	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	45	84	2.33	0	PCT	27	P2	AV4	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	33	86	1.16	0	PCT	19	P2	AV2	0.08		CTE	HTE	0.61	SBACC	23
1	U2RF14	33	86	0.79	0	PCT	12	P2	AV3	-0.06		CTE	HTE	0.61	SBACC	23
1	U2RF14	46	86	0.67	0	PCT	11	P2	AV1	0.00		CTE	HTE	0.61	SBACC	75
1	U2RF14	46	86	4.18	0	PCT	37	P2	AV2	0.00		CTE	HTE	0.61	SBACC	75
1	U2RF14	46	86	1.44	0	PCT	21	P2	AV3	0.00		CTE	HTE	0.61	SBACC	75
1	U2RF14	43	87	1.03	0	PCT	16	P2	AV1	-0.05		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	87	2.45	0	PCT	28	P2	AV2	0.08		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	87	1.69	0	PCT	22	P2	AV3	0.05		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	87	0.89	0	PCT	14	P2	AV4	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	45	87	1.32	0	PCT	21	P2	AV1	-0.16		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	87	1.24	0	PCT	18	P2	AV2	-0.19		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	87	2.97	0	PCT	32	P2	AV3	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	45	87	1.45	0	PCT	22	P2	AV4	0.03		CTE	HTE	0.61	SBACC	23
1	U2RF14	41	88	1.36	0	PCT	19	P2	AV2	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	42	88	1.37	0	PCT	19	P2	AV3	-0.33		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	89	1.91	0	PCT	24	P2	AV1	-0.11		CTE	HTE	0.61	SBACC	21
1	U2RF14	38	89	3.01	0	PCT	32	P2	AV2	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	38	89	1.94	0	PCT	24	P2	AV4	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	39	89	1.24	0	PCT	18	P2	AV2	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	46	89	1.40	0	PCT	19	P2	AV2	-0.11		CTE	HTE	0.61	SBACC	23
1	U2RF14	46	89	2.09	0	PCT	25	P2	AV4	-0.24		CTE	HTE	0.61	SBACC	23
1	U2RF14	32	90	0.95	0	PCT	17	P2	AV4	0.17		CTE	HTE	0.61	SBACC	23
1	U2RF14	36	90	0.68	0	PCT	11	P2	AV2	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	36	90	0.67	0	PCT	12	P2	AV4	0.04		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	90	0.88	0	PCT	15	P2	AV1	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	90	0.68	0	PCT	12	P2	AV2	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	90	0.74	0	PCT	14	P2	AV4	0.14		CTE	HTE	0.61	SBACC	23
1	U2RF14	41	90	2.37	0	PCT	29	P2	AV2	0.14		CTE	HTE	0.61	SBACC	23
1	U2RF14	41	90	0.84	0	PCT	16	P2	AV4	-0.16		CTE	HTE	0.61	SBACC	23
1	U2RF14	39	91	1.09	0	PCT	16	P2	AV1	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	39	91	0.89	0	PCT	14	P2	AV2	0.03		CTE	HTE	0.61	SBACC	21

1	U2RF14	39	91	1.03	0	PCT	16	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	39	91	1.63	0	PCT	22	P2	AV4	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	41	93	1.35	0	PCT	19	P2	AV2	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	41	93	1.58	0	PCT	22	P2	AV3	0.11		CTE	HTE	0.61	SBACC	21
1	U2RF14	43	93	1.18	0	PCT	18	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	41	94	2.61	0	PCT	30	P2	AV2	0.12		CTE	HTE	0.61	SBACC	23
1	U2RF14	41	94	0.71	0	PCT	12	P2	AV3	0.11		CTE	HTE	0.61	SBACC	23
1	U2RF14	42	94	3.15	0	PCT	33	P2	AV2	-0.39		CTE	HTE	0.61	SBACC	23
1	U2RF14	41	95	0.64	0	PCT	10	P2	AV1	0.00		CTE	HTE	0.61	SBACC	75
1	U2RF14	41	95	1.28	0	PCT	20	P2	AV3	0.00		CTE	HTE	0.61	SBACC	75
1	U2RF14	41	95	0.66	0	PCT	12	P2	AV4	-0.03		CTE	HTE	0.61	SBACC	75
1	U2RF14	39	96	1.43	0	PCT	21	P2	AV4	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	33	97	0.71	0	PCT	11	P2	AV1	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	40	97	1.22	0	PCT	18	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	36	98	0.87	0	PCT	13	P2	AV1	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	36	98	0.85	0	PCT	13	P2	AV3	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	38	98	0.91	0	PCT	14	P2	AV1	-0.11		CTE	HTE	0.61	SBACC	21
1	U2RF14	38	98	0.76	0	PCT	12	P2	AV2	0.16		CTE	HTE	0.61	SBACC	21
1	U2RF14	38	98	1.02	0	PCT	16	P2	AV3	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	38	98	1.06	0	PCT	16	P2	AV4	0.00		CTE	HTE	0.61	SBACC	21
1	U2RF14	32	99	0.74	0	PCT	12	P2	AV3	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	36	99	0.52	0	PCT	10	P2	AV2	0.11		CTE	HTE	0.61	SBACC	27
1	U2RF14	36	99	2.64	0	PCT	30	P2	AV3	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	37	99	0.66	0	PCT	13	P2	AV2	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	37	99	1.20	0	PCT	18	P2	AV3	0.06		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	99	1.10	0	PCT	17	P2	AV1	0.16		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	99	1.20	0	PCT	20	P2	AV2	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	99	1.64	0	PCT	23	P2	AV3	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	38	99	0.89	0	PCT	16	P2	AV4	0.00		CTE	HTE	0.61	SBACC	23
1	U2RF14	33	100	0.57	0	PCT	11	P2	AV1	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	33	100	0.83	0	PCT	15	P2	AV3	0.08		CTE	HTE	0.61	SBACC	27
1	U2RF14	34	100	0.47	0	PCT	10	P2	AV1	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	34	100	0.57	0	PCT	11	P2	AV2	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	34	100	1.46	0	PCT	21	P2	AV3	0.05		CTE	HTE	0.61	SBACC	27
1	U2RF14	35	100	1.12	0	PCT	18	P2	AV3	-0.03		CTE	HTE	0.61	SBACC	27
1	U2RF14	36	100	1.15	0	PCT	16	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	35	101	1.04	0	PCT	17	P2	AV1	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	35	101	1.71	0	PCT	23	P2	AV2	-0.16		CTE	HTE	0.61	SBACC	27
1	U2RF14	35	101	1.02	0	PCT	17	P2	AV3	0.33		CTE	HTE	0.61	SBACC	27
1	U2RF14	35	101	1.58	0	PCT	22	P2	AV4	0.26		CTE	HTE	0.61	SBACC	27
1	U2RF14	33	102	1.37	0	PCT	19	P2	AV1	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	33	102	2.51	0	PCT	28	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	34	102	1.19	0	PCT	17	P2	AV1	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	34	102	1.15	0	PCT	16	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	34	102	1.92	0	PCT	24	P2	AV4	0.00		CTE	HTE	0.61	SBACC	25

1	U2RF14	31	103	1.45	0	PCT	19	P2	AV3	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	32	103	1.06	0	PCT	15	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	33	103	0.99	0	PCT	17	P2	AV1	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	33	103	1.31	0	PCT	20	P2	AV2	-0.20		CTE	HTE	0.61	SBACC	27
1	U2RF14	28	104	0.95	0	PCT	16	P2	AV1	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	28	104	0.78	0	PCT	14	P2	AV4	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	30	104	0.48	0	PCT	10	P2	AV1	0.00		CTE	HTE	0.61	SBACC	27
1	U2RF14	27	105	0.73	0	PCT	11	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
1	U2RF14	28	105	1.08	0	PCT	16	P2	AV2	0.03		CTE	HTE	0.61	SBACC	25
1	U2RF14	23	108	1.15	0	PCT	16	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
2	U2RF14	6	1	0.12	0	PCT	17	P4	C1	0.51		C1	C1	0.61	ZPS3C	16
2	U2RF14	6	1	0.12	0	VOL	17	P4	C1	0.51		C1	C1	0.61	ZPS3C	16
2	U2RF14	6	2	0.30	0	VOL	27	6	C1	0.44		C1	C1	0.61	ZPS3C	16
2	U2RF14	6	2	0.30	0	PCT	27	6	C1	0.44		C1	C1	0.61	ZPS3C	16
2	U2RF14	6	2	0.14	0	PCT	16	6	C1	0.91		C1	C1	0.61	ZPS3C	16
2	U2RF14	6	2	0.14	0	VOL	16	6	C1	0.91		C1	C1	0.61	ZPS3C	16
2	U2RF14	26	9	0.83	0	PCT	13	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	23
2	U2RF14	26	9	0.69	0	PCT	12	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	23
2	U2RF14	30	11	1.56	0	PCT	19	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	30	11	1.14	0	PCT	17	P2	AV3	0.02		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	34	13	2.36	0	PCT	25	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	34	13	1.31	0	PCT	18	P2	AV3	-0.14		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	39	19	1.84	0	PCT	22	P2	AV2	-0.09		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	39	19	1.34	0	PCT	18	P2	AV3	-0.12		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	39	19	1.16	0	PCT	16	P2	AV4	-0.02		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	12	23	0.12	69	VOL		6	C6	0.35		C6	C6	0.61	ZPS3C	30
2	U2RF14	12	23	0.07	0	PCT	10	P4	C6	0.35		C6	C6	0.61	ZPS3C	32
2	U2RF14	13	23	0.21	96	VOL		6	C6	0.39		C6	C6	0.61	ZPS3C	30
2	U2RF14	13	23	0.04	0	PCT	6	P4	C6	0.39		C6	C6	0.61	ZPS3C	32
2	U2RF14	12	24	0.22	98	VOL	19	6	C6	0.55		C6	C6	0.61	ZPS3C	14
2	U2RF14	12	24	0.15	83	PCT	19	P4	C6	0.55		C6	C6	0.61	ZPS3C	14
2	U2RF14	40	29	1.19	0	PCT	17	P2	AV2	0.17		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	40	29	2.01	0	PCT	23	P2	AV3	0.14		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	40	29	1.09	0	PCT	16	P2	AV4	0.30		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	39	34	1.57	0	PCT	19	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	39	34	1.61	0	PCT	19	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	41	34	1.20	0	PCT	17	P2	AV3	-0.05		CTE	HTE	0.61	ZBAZC	37
2	U2RF14	45	37	0.80	0	PCT	12	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	44	47	0.73	0	PCT	11	P2	AV3	-0.09		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	44	47	1.24	0	PCT	17	P2	AV4	-0.02		CTE	HTE	0.61	ZBAZC	39
2	U2RF14	38	56	1.21	0	PCT	15	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	27
2	U2RF14	48	56	0.71	0	PCT	12	P2	AV2	0.02		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	47	59	2.89	0	PCT	28	P2	AV1	0.03		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	47	59	1.02	0	PCT	15	P2	AV2	0.07		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	47	59	5.80	0	PCT	40	P2	AV3	0.34		CTE	HTE	0.61	ZBAZC	35

2	U2RF14	47	59	3.26	73	PCT	30	P2	AV4	0.46		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	48	69	1.74	0	PCT	22	P2	AV4	0.05		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	37	72	0.68	0	PCT	11	P2	AV1	0.09		CTE	HTE	0.61	ZBAZC	27
2	U2RF14	37	72	0.76	0	PCT	12	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	27
2	U2RF14	37	72	0.61	0	PCT	10	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	27
2	U2RF14	46	75	0.89	0	PCT	13	P2	AV3	-0.33		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	46	75	1.46	0	PCT	19	P2	AV4	0.02		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	37	76	0.64	0	PCT	11	P2	AV1	-0.03		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	37	76	1.08	0	PCT	16	P2	AV2	-0.16		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	38	76	1.09	0	PCT	16	P2	AV2	-0.14		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	40	76	0.94	0	PCT	15	P2	AV2	-0.02		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	33	86	1.13	0	PCT	15	P2	AV2	-0.32		CTE	HTE	0.61	ZBAZC	29
2	U2RF14	33	86	0.78	0	PCT	11	P2	AV3	-0.09		CTE	HTE	0.61	ZBAZC	29
2	U2RF14	40	86	1.26	0	PCT	17	P2	AV2	-0.09		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	40	86	0.74	0	PCT	12	P2	AV3	-0.09		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	33	88	0.79	0	PCT	11	P2	AV2	-0.10		CTE	HTE	0.61	ZBAZC	31
2	U2RF14	47	88	1.20	0	PCT	16	P2	AV4	-0.14		CTE	HTE	0.61	ZBAZC	35
2	U2RF14	44	89	3.17	0	PCT	30	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	44	89	2.27	0	PCT	25	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	44	89	1.22	0	PCT	18	P2	AV4	0.00		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	44	91	1.22	0	PCT	17	P2	AV3	0.07		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	45	91	1.57	0	PCT	20	P2	AV3	0.07		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	45	91	1.44	0	PCT	19	P2	AV4	0.00		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	36	99	2.62	0	PCT	27	P2	AV2	-0.02		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	30	104	1.01	0	PCT	15	P2	AV1	0.06		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	30	104	0.52	0	PCT	10	P2	AV4	-0.14		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	24	108	0.87	0	PCT	14	P2	AV4	0.05		CTE	HTE	0.61	ZBAZC	33
2	U2RF14	3	114	0.30	99	VOL		6	C4	0.40		C4	C4	0.61	ZPS3C	14
2	U2RF14	3	114	0.20	260	PCT	24	P4	C4	0.41		C4	C4	0.61	ZPS3C	14
2	U2RF14	4	114	0.18	104	VOL		6	C4	0.42		C4	C4	0.61	ZPS3C	14
2	U2RF14	4	114	0.14	0	PCT	17	P4	C4	0.43		C4	C4	0.61	ZPS3C	14
3	U2RF14	32	12	1.58	0	PCT	22	P2	AV2	0.17		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	33	17	1.15	0	PCT	18	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	41	24	0.84	0	PCT	15	P2	AV3	-0.10		CTE	HTE	0.61	ZBAZC	23
3	U2RF14	41	24	0.55	0	PCT	11	P2	AV4	0.17		CTE	HTE	0.61	ZBAZC	23
3	U2RF14	43	24	0.74	0	PCT	13	P2	AV2	-0.17		CTE	HTE	0.61	ZBAZC	23
3	U2RF14	49	35	0.82	0	PCT	14	P2	AV4	-0.08		CTE	HTE	0.61	ZBAZC	23
3	U2RF14	49	36	0.71	0	PCT	13	P2	AV4	0.00		CTE	HTE	0.61	ZBAZC	23
3	U2RF14	49	38	0.86	0	PCT	15	P2	AV1	-0.03		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	38	0.67	0	PCT	13	P2	AV4	-0.03		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	42	0.72	0	PCT	13	P2	AV4	0.06		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	43	0.69	0	PCT	13	P2	AV1	-0.20		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	43	0.98	0	PCT	16	P2	AV4	0.20		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	47	0.55	0	PCT	11	P2	AV1	-0.22		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	49	0.47	0	PCT	10	P2	AV1	-0.17		CTE	HTE	0.61	ZBAZC	1

3	U2RF14	49	49	0.56	0	PCT	11	P2	AV4	-0.03		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	45	55	0.33	0	PCT	7	P3	C2	-0.15		CTE	HTE	0.61	ZBAZC	71
3	U2RF14	17	56	2.55	0	PCT	27	P2	AV4	0.18		CTE	HTE	0.61	ZBAZC	63
3	U2RF14	48	62	0.86	0	PCT	14	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	49	64	0.67	0	PCT	12	P2	AV1	-0.07		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	49	67	0.57	0	PCT	10	P2	AV1	-0.14		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	43	68	1.21	0	PCT	18	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	43	68	0.80	0	PCT	14	P2	AV3	0.02		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	43	68	0.81	0	PCT	14	P2	AV4	0.02		CTE	HTE	0.61	ZBAZC	1
3	U2RF14	49	68	0.91	0	PCT	14	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	43	82	0.69	0	PCT	10	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	15
3	U2RF14	43	82	2.45	0	PCT	28	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	15
3	U2RF14	43	82	2.68	0	PCT	29	P2	AV3	-0.35		CTE	HTE	0.61	ZBAZC	15
3	U2RF14	43	82	2.14	0	PCT	26	P2	AV4	-0.21		CTE	HTE	0.61	ZBAZC	15
3	U2RF14	41	83	0.82	0	PCT	14	P2	AV2	0.05		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	41	83	0.62	0	PCT	11	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	41	85	1.42	0	PCT	19	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	33	87	1.95	0	PCT	23	P2	AV4	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	40	87	0.97	0	PCT	15	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	41	87	1.14	0	PCT	17	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	41	87	1.57	0	PCT	21	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	41	87	1.75	0	PCT	22	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	40	88	0.74	0	PCT	13	P2	AV2	-0.02		CTE	HTE	0.61	ZBAZC	15
3	U2RF14	39	93	0.84	0	PCT	14	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	43	93	1.06	0	PCT	16	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	13
3	U2RF14	40	94	0.92	0	PCT	13	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	15
3	U2RF14	40	95	1.12	0	PCT	18	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	40	95	1.02	0	PCT	17	P2	AV2	-0.05		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	40	95	0.74	0	PCT	14	P2	AV3	-0.08		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	40	95	0.58	0	PCT	11	P2	AV4	-0.03		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	38	98	2.48	0	PCT	29	P2	AV2	-0.36		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	38	98	0.95	0	PCT	16	P2	AV3	-0.02		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	35	100	1.08	0	PCT	17	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	34	101	2.89	0	PCT	31	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	35	101	0.78	0	PCT	14	P2	AV1	-0.17		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	35	101	0.73	0	PCT	14	P2	AV4	-0.19		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	31	103	1.28	0	PCT	20	P2	AV1	-0.27		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	33	103	1.39	0	PCT	21	P2	AV1	0.00		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	33	103	0.91	0	PCT	16	P2	AV2	0.44		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	33	103	2.13	0	PCT	27	P2	AV3	0.00		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	33	103	0.70	0	PCT	15	P2	AV4	0.08		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	31	104	0.66	0	PCT	13	P2	AV4	0.00		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	30	105	2.04	0	PCT	26	P2	AV2	-0.35		CTE	HTE	0.61	ZBAZC	19
3	U2RF14	24	107	1.56	0	PCT	21	P2	AV2	0.00		CTE	HTE	0.61	ZBAZC	17
3	U2RF14	26	107	1.62	0	PCT	22	P2	AV2	0.05		CTE	HTE	0.61	ZBAZC	17

4	U2RF14	39	19	0.78	0	PCT	14	P2	AV2	-0.15		CTE	HTE	0.61	SBACC	61
4	U2RF14	39	22	0.67	0	PCT	14	P2	AV4	0.11		CTE	HTE	0.61	SBACC	63
4	U2RF14	45	24	0.93	0	PCT	16	P2	AV4	0.00		CTE	HTE	0.61	SBACC	61
4	U2RF14	45	25	0.45	0	PCT	10	P2	AV4	0.00		CTE	HTE	0.61	SBACC	63
4	U2RF14	45	32	0.57	0	PCT	11	P2	AV4	0.05		CTE	HTE	0.61	SBACC	69
4	U2RF14	27	50	1.24	0	PCT	20	P2	AV4	0.00		CTE	HTE	0.61	SBACC	39
4	U2RF14	47	59	0.76	0	PCT	14	P2	AV4	-0.13		CTE	HTE	0.61	SBACC	29
4	U2RF14	38	68	0.81	0	PCT	14	P2	AV2	0.00		CTE	HTE	0.61	SBACC	65
4	U2RF14	26	69	0.21	109	VOL	0	6	C2	1.29		C2	C2	0.61	ZPS3C	34
4	U2RF14	26	69	0.18	0	PCT	19	6	C2	1.31		C2	C2	0.61	ZPS3C	52
4	U2RF14	32	71	0.28	92	VOL		6	C2	0.64		C2	C2	0.61	ZPS3C	34
4	U2RF14	32	71	0.28	0	PCT	25	6	C2	0.55		C2	C2	0.61	ZPS3C	52
4	U2RF14	38	71	1.24	0	PCT	20	P2	AV2	-0.24		CTE	HTE	0.61	SBACC	67
4	U2RF14	38	71	0.79	0	PCT	14	P2	AV3	-0.24		CTE	HTE	0.61	SBACC	67
4	U2RF14	48	74	0.57	0	PCT	11	P2	AV4	-0.08		CTE	HTE	0.61	SBACC	67
4	U2RF14	34	77	0.16	93	VOL		6	C2	0.53		C2	C2	0.61	ZPS3C	30
4	U2RF14	34	77	0.15	0	PCT	16	6	C2	0.50		C2	C2	0.61	ZPS3C	52
4	U2RF14	38	79	1.02	0	PCT	16	P2	AV3	0.00		CTE	HTE	0.61	SBACC	31
4	U2RF14	35	82	1.29	0	PCT	20	P2	AV2	0.17		CTE	HTE	0.61	SBACC	67
4	U2RF14	35	82	0.81	0	PCT	14	P2	AV3	0.00		CTE	HTE	0.61	SBACC	67
4	U2RF14	37	84	1.40	0	PCT	21	P2	AV2	0.12		CTE	HTE	0.61	SBACC	67
4	U2RF14	37	84	1.73	0	PCT	24	P2	AV3	-0.17		CTE	HTE	0.61	SBACC	67
4	U2RF14	37	84	0.64	0	PCT	12	P2	AV4	-0.19		CTE	HTE	0.61	SBACC	67
4	U2RF14	44	89	0.78	0	PCT	14	P2	AV2	-0.11		CTE	HTE	0.61	SBACC	31
4	U2RF14	44	89	0.87	0	PCT	15	P2	AV3	0.11		CTE	HTE	0.61	SBACC	31
4	U2RF14	44	89	0.89	0	PCT	15	P2	AV4	-0.06		CTE	HTE	0.61	SBACC	31
4	U2RF14	36	90	1.04	0	PCT	16	P2	AV4	0.00		CTE	HTE	0.61	SBACC	27
4	U2RF14	40	90	0.71	0	PCT	13	P2	AV2	0.00		CTE	HTE	0.61	SBACC	29
4	U2RF14	37	92	1.01	0	PCT	17	P2	AV2	-0.22		CTE	HTE	0.61	SBACC	67
4	U2RF14	37	92	0.60	0	PCT	11	P2	AV3	-0.05		CTE	HTE	0.61	SBACC	67
4	U2RF14	37	92	0.53	0	PCT	10	P2	AV4	0.07		CTE	HTE	0.61	SBACC	67
4	U2RF14	23	93	0.56	0	PCT	12	P2	AV2	0.00		CTE	HTE	0.61	SBACC	25
4	U2RF14	37	96	0.92	0	PCT	16	P2	AV2	0.00		CTE	HTE	0.61	SBACC	29
4	U2RF14	36	97	0.85	0	PCT	15	P2	AV1	0.07		CTE	HTE	0.61	SBACC	67
4	U2RF14	36	97	0.84	0	PCT	15	P2	AV2	-0.15		CTE	HTE	0.61	SBACC	67
4	U2RF14	38	97	0.91	0	PCT	15	P2	AV2	0.00		CTE	HTE	0.61	SBACC	31
4	U2RF14	38	97	0.91	0	PCT	15	P2	AV3	-0.03		CTE	HTE	0.61	SBACC	31
4	U2RF14	40	97	0.96	0	PCT	16	P2	AV3	0.00		CTE	HTE	0.61	SBACC	31
4	U2RF14	40	97	0.99	0	PCT	16	P2	AV4	0.00		CTE	HTE	0.61	SBACC	31
4	U2RF14	31	98	0.92	0	PCT	15	P2	AV2	0.07		CTE	HTE	0.61	SBACC	67
4	U2RF14	31	98	0.53	0	PCT	10	P2	AV3	0.10		CTE	HTE	0.61	SBACC	67
4	U2RF14	29	99	0.60	0	PCT	12	P2	AV3	0.00		CTE	HTE	0.61	SBACC	29

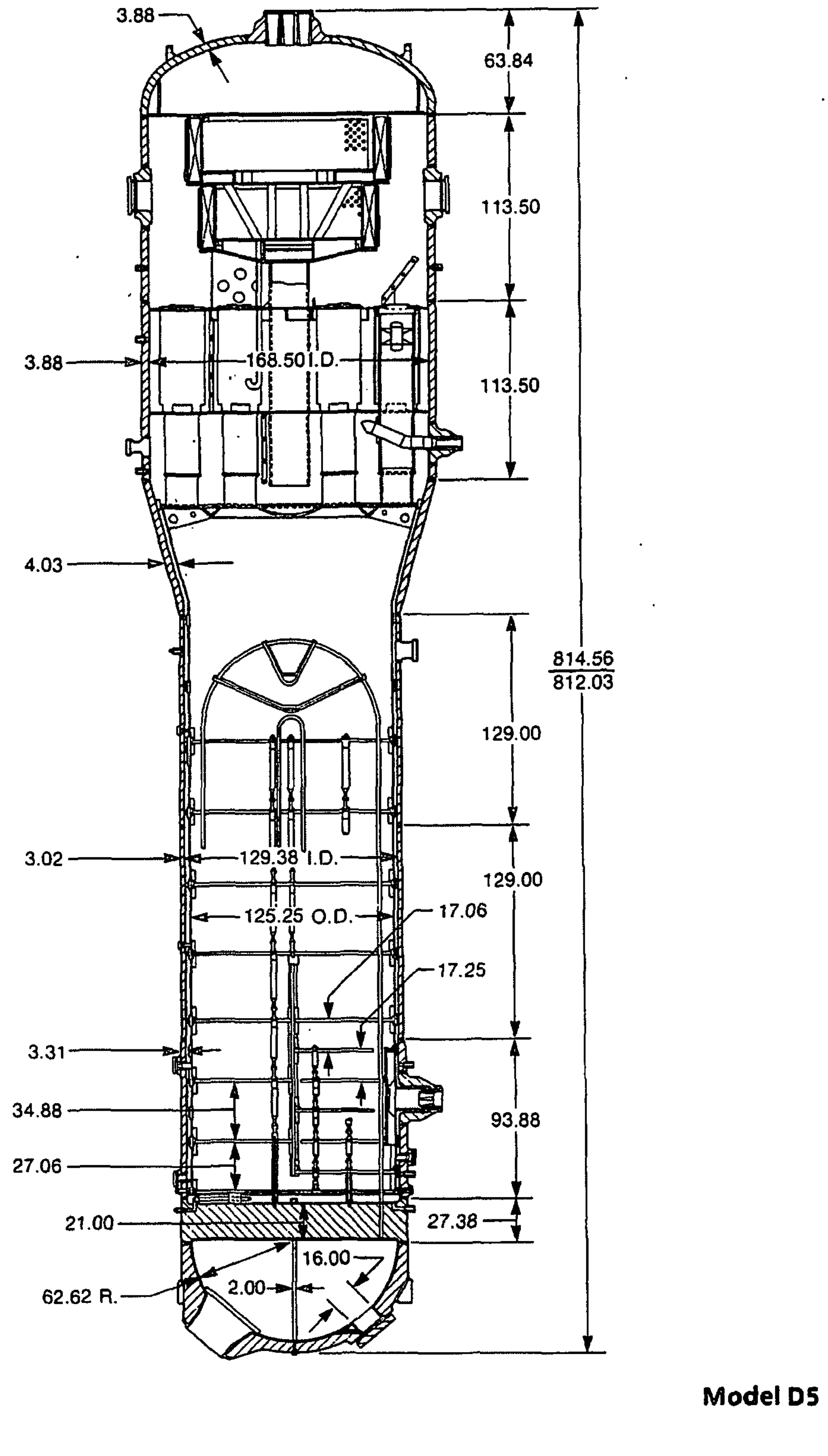

Figure 3A: Unit 2 Model D-5 Steam Generator General Arrangement

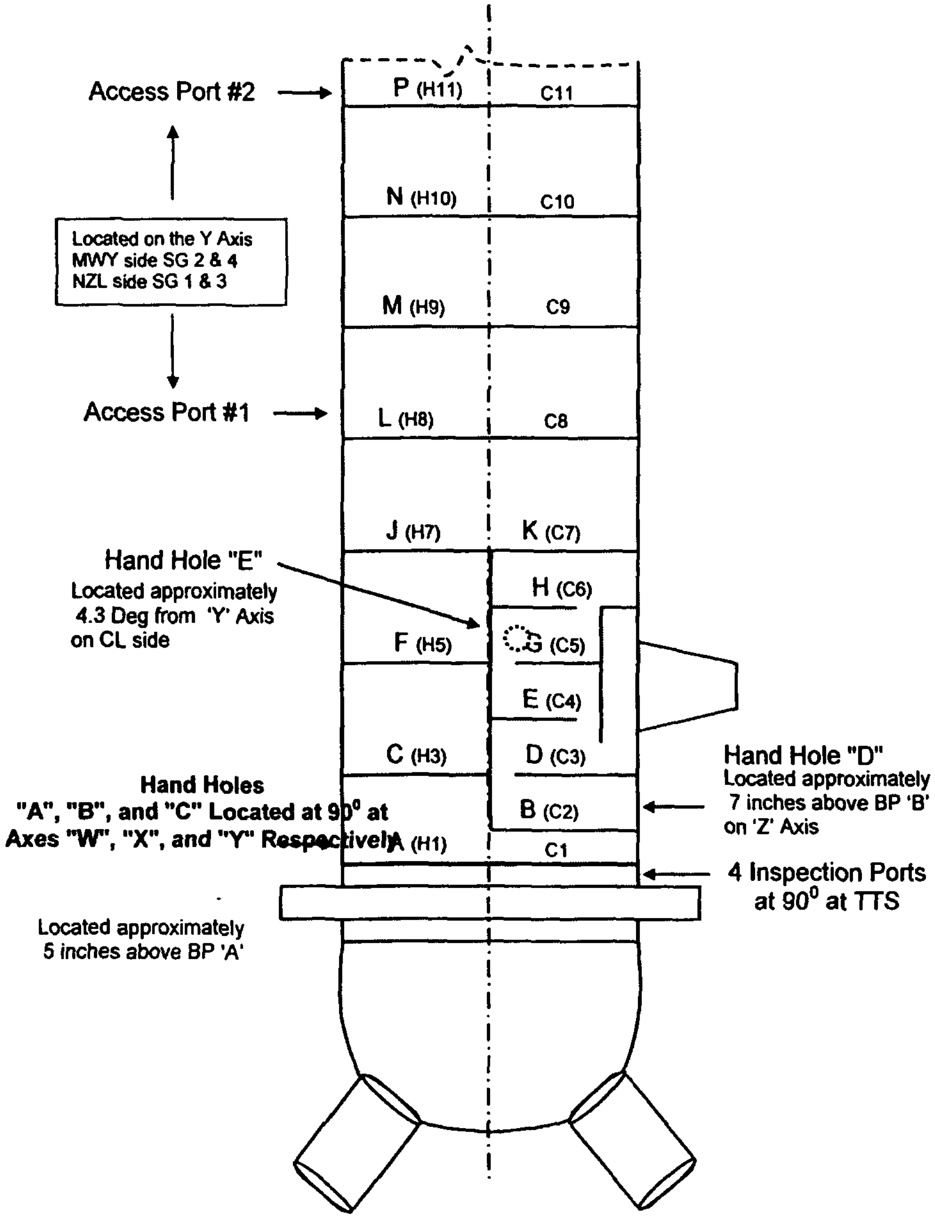

Figure 3B: Unit 2 Model D-5 SG General Location and Designation of Tube Support /Baffle Plates
(Designations in parentheses show eddy current test terminology)

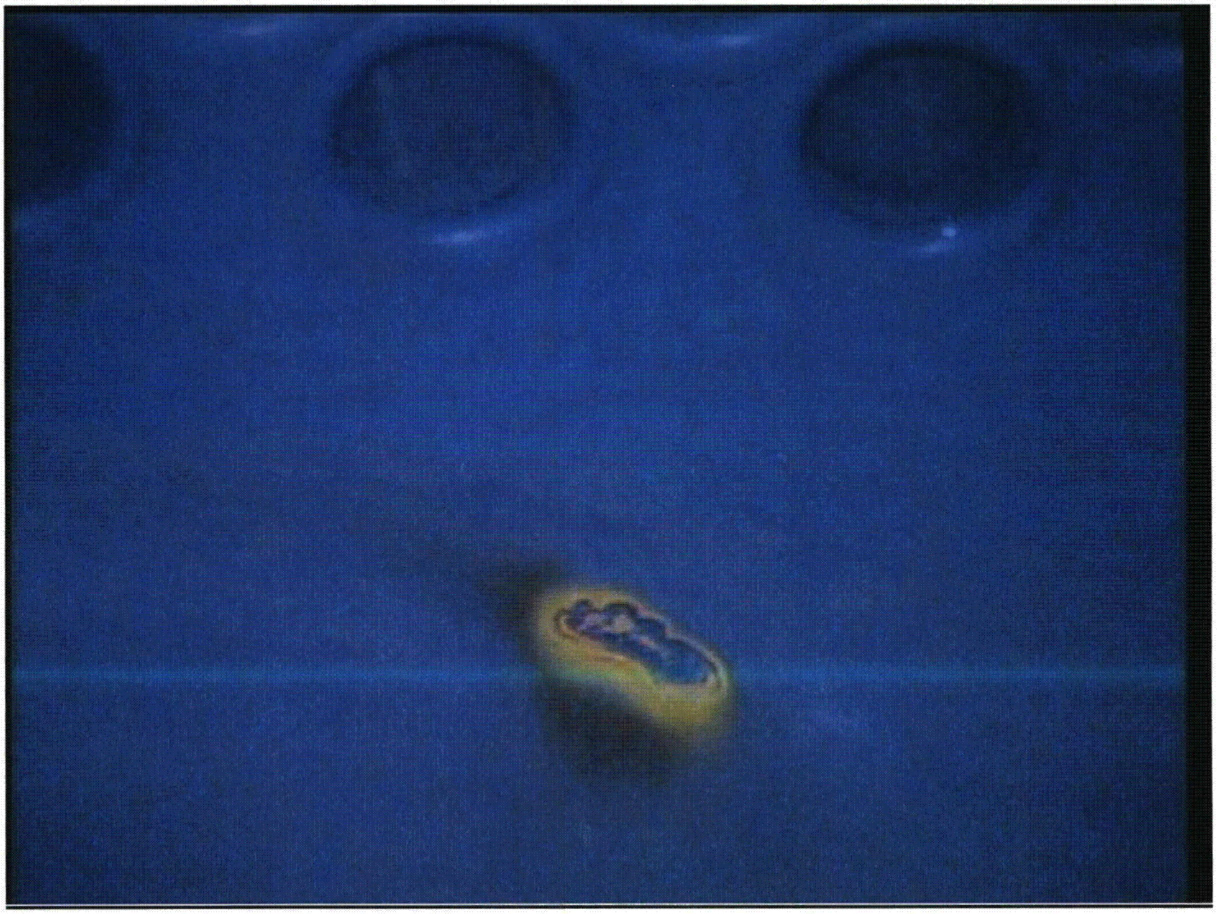

Figure 3C: Photograph of Indication in SG1 Cold Leg Channel Head Cladding