



**Wyle Letter Reference No. EWS-GT21-020**

May 22, 2002

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

**Subject:** Part 21 on Irradiation performed with the Cobalt-60 Sources in the Georgia Tech Hot Cell

Dear Sirs:

Pursuant to 10 CFR Part 21, this letter notifies the NRC of the existence of a reportable defect and its evaluation.

The defect is an error in irradiation dose units as identified in the attached letter from Georgia Tech dated March 15, 2002, which was received by Wyle on April 11, 2002 and submitted to the NRC with our referenced 4/12 letter. The error applies to all equipment irradiated with the cobalt-60 sources in the Georgia Tech hot cell from 7/24/1997 to 7/6/2001. Georgia Tech reported radiation doses in units of rads-air (absorbed dose in air), but the actual radiation dose units were Roentgens. Since one Roentgen is equal to 0.877 rad, the actual dose is less than the reported value.

Wyle performed an evaluation that determined the following:

1. Wyle projects that include irradiation with the cobalt-60 sources in the Georgia Tech hot cell from 7/24/1997 to 7/6/2001.
2. The actual dose absorbed by equipment in Item 1.
3. Whether the actual dose in said projects identified in Item 1 envelopes the customer-specified requirements.

We have identified eighteen (18) companies and twenty-eight (28) specific reports that have been affected by this incident. The results of the evaluation are listed in the attached tables, with a separate table for each company. Concurrent with this notification, Wyle is notifying the affected customers and informing them of the impact on qualification. We will revise the affected report(s) according to our standard operating practices, and provide the revised report(s) to each customer.

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If you have any questions, please feel free to contact me by phone (256) 837-4411, Ext. 271, fax (256) 830-2109, or email [esmith@hnt.wylelabs.com](mailto:esmith@hnt.wylelabs.com).

Sincerely,

Wyle Laboratories, Inc.



Edward W. Smith  
Director, Contracts & Purchasing

Attachment: Wyle Evaluation Summaries

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9905	6/11/99-6/14/99	1 MSIV actuator	7.209E+06	6.322E+06	7.000E+06	7.000E+06	90.32%	40321R99	Atwood & Morrill	normal radiation aging
00-03	2/12/00-2/12/00	1 MSIV actuator S/N SAA123	7.189E+05	6.305E+05	7.000E+05	7.000E+05	90.07%	43813R2000	Atwood & Morrill	normal radiation aging (4y)
00-08	4/7/00-4/10/00	1 MSIV actuator	1.066E+07	9.349E+06	1.000E+07	1.000E+07	93.49%	43813R2000	Atwood & Morrill	accident radiation (6h dose), see 00-11 for continuation
00-10	4/19/00-4/19/00	2 air valves	7.360E+05	6.455E+05	7.000E+05	7.000E+05	92.21%	43813R2000	Atwood & Morrill	normal radiation aging (4y)
00-11	5/18/00-5/25/00	1 MSIV actuator	9.441E+07	8.280E+07	9.120E+07	9.100E+07	90.99%	43813R2000	Atwood & Morrill	accident radiation (balance of 6 month dose), see 00-08 for 1st 6h dose
00-13	5/25/00-5/26/00	1 air valve pack	1.063E+07	9.323E+06	1.000E+07	1.000E+07	93.23%	43813R2000	Atwood & Morrill	accident radiation (6h dose)

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
97-18a	12/16/97-12/17/97	4, 9, 14, 19, 24	1.021E+07	8.954E+06	1.000E+07	1.560E+03	573985.26%	46506R98	Bechtel Hanford Inc.	research test
97-18b	12/30/97-12/30/97	1, 2, 6, 7, 11, 12, 16, 17, 21, 22, 26, 27, 31, 32, 36, 37, 41, 42, 46, 47, 51-60	1.635E+03	1.434E+03	1.560E+03	1.560E+03	91.92%	46506R98	Bechtel Hanford Inc.	normal radiation aging

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9805a	2/3/98-3/9/98	215, 216, Baskets 14, 15, 16, 17, 23, 24, 25, 28, 29	2.581E+07	2.264E+07	2.500E+07	2.500E+07	90.54%	45120-2	Brookhaven National Laboratory	normal radiation aging
9805b	2/3/98-3/9/98	203, 204, 205, 206, 19, 20, 21, 26, 27	3.253E+06	2.853E+06	3.140E+06	3.140E+06	90.86%	45120-2	Brookhaven National Laboratory	normal radiation aging
9805c	2/10/98-2/12/98	212, 213, 214, 217, 218	2.552E+07	2.238E+07	2.500E+07	2.500E+07	89.52%	45120-2	Brookhaven National Laboratory	normal radiation aging
9805d	2/16/98-2/21/98	203, 204, 207-212	7.859E+07	6.892E+07	7.500E+07	7.500E+07	91.90%	45120-2	Brookhaven National Laboratory	accident radiation
9805e	2/3/98-3/9/98	1, 4, 7, 9, 10, 12, 15, 20, 21, 24, 25,	7.656E+07	6.714E+07	7.500E+07	7.500E+07	89.52%	45120-2	Brookhaven National Laboratory	accident radiation
9805d,f	2/27/98-3/4/98	201, 202, 205, 206, 213, 214, 217, 218	1.554E+08	1.363E+08	1.500E+08	1.500E+08	90.86%	45120-2	Brookhaven National Laboratory	accident radiation
9805e,g	2/23/98-3/9/98	215, 215x, 216, 216x, 2, 3, 5, 6, 8, 11, 16, 17, 26, 27, 28, 29	1.540E+08	1.351E+08	1.500E+08	1.500E+08	90.04%	45120-2	Brookhaven National Laboratory	accident radiation
9819a	8/11/98-8/11/98	0303	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	0304	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	0305	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	0306	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	0312	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	0313	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	0314	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	0315	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	0316	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	0317	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	8 (I0303D/J0303D)	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	9 (I0303F/J0303F)	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	10 (I0303G/J0303G)	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	11 (I0303H/J0303H)	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819a	8/11/98-8/11/98	15 (I0311F/J0311F)	2.268E+06	1.989E+06	2.200E+06	2.200E+06	90.41%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	19 (I0312E/J0312E)	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	20 (I0312F/J0312F)	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	21 (I0312G/J0312G)	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819b	8/12/98-8/17/98	22 (I0312H/J0312H)	5.149E+07	4.516E+07	5.000E+07	5.000E+07	90.31%	45120-3	Brookhaven National Laboratory	normal radiation aging
9819c,e	8/26/98-9/9/98	0301	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0302	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0303	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0304	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0305	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0306	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0307	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0308	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0309	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0310	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0311	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0312	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0313	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0314	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819d,f	8/31/98-9/14/98	0315	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819d,f	8/31/98-9/14/98	0316	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation
9819c,e	8/26/98-9/9/98	0317	1.532E+08	1.344E+08	1.500E+08	1.500E+08	89.57%	45120-3	Brookhaven National Laboratory	accident radiation











GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9912o,p	2/1/00-2/28/00	12 (I0604H/J0604H)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o	2/1/00-2/7/00	15 (I0605F/J0605F)	7.899E+07	6.927E+07	7.500E+07	7.500E+07	92.37%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	16 (I0605G/J0605G)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	17 (I0605H/J0605H)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o	2/1/00-2/7/00	20 (I0608F/J0608F)	7.899E+07	6.927E+07	7.500E+07	7.500E+07	92.37%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	21 (I0608G/J0608G)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	22 (I0608H/J0608H)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o	2/1/00-2/7/00	25 (I0611F/J0611F)	7.899E+07	6.927E+07	7.500E+07	7.500E+07	92.37%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	26 (I0611G/J0611G)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	27 (I0611H/J0611H)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o	2/1/00-2/7/00	32 (I0621F/J0621F)	7.899E+07	6.927E+07	7.500E+07	7.500E+07	92.37%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	33 (I0621G/J0621G)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation
9912o,p	2/1/00-2/28/00	34 (I0621H/J0621H)	1.566E+08	1.373E+08	1.500E+08	1.500E+08	91.56%	45120-6	Brookhaven National Laboratory	accident radiation

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9810	3/30/98-3/31/98	2 LED's, 1 Fire Detection Panel, 1 Power Supply, 1 Temp Controller, & 1 pressure transmitter	1.253E+05	1.099E+05	1.200E+05	1.000E+05	109.89%	45965A98-ACU	Century Corporation (Formerly Kyungwon-Century Co., Ltd	normal + accident TID
9815	5/11/98-5/12/98	CR132, CR133	1.265E+05	1.109E+05	1.200E+05	1.000E+05	110.94%	45965A98-ACU	Century Corporation (Formerly Kyungwon-Century Co., Ltd	normal + accident TID

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97-12a	10/17/97-10/20/97	2 small motors, 2 large motors	1.120E+07	9.822E+06	1.100E+07	1.000E+07	98.22%	45966R98, Rev. B	Chun In, Limited	normal + accident TID
97-12b	10/24/97-10/26/97	2 fan blades, 2 cable samples	1.150E+07	1.009E+07	1.100E+07	1.000E+07	100.86%	45966R98, Rev. B	Chun In, Limited	normal + accident TID

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9807	3/9/98-3/11/98	Raychem cable splice assemblies	2.240E+07	1.964E+07	2.200E+07	2.000E+07	98.22%	46312-1	Consumers Energy	accident radiation
9811	4/8/98-4/9/98	4 coated plates	2.046E+07	1.794E+07	2.000E+07	2.000E+07	89.72%	46945-1	Consumers Energy	-

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00-20	9/11/00-9/11/00	1 actuator & spare parts	1.235E+06	1.083E+06	1.200E+06	1.200E+06	90.26%	43426R00	Curtiss-Wright Target Rock Div.	normal radiation aging
00-24	10/12/00-10/12/00	o-ring kits	1.257E+06	1.102E+06	1.200E+06	1.200E+06	91.87%	43426R00	Curtiss-Wright Target Rock Div.	normal radiation aging

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9901	1/28/99-3/5/99	two penetrations	6.693E+08	5.870E+08	6.500E+08	6.500E+08	90.31%	42245-02	D. G. O'Brien, Inc.	-
2001-14a	4/27/01-4/30/01	cable samples	1.447E+07	1.269E+07	1.370E+07	1.241E+07	102.26%	45439R2001-00	D. G. O'Brien, Inc.	normal + accident TID
2001-14b	4/30/01-5/01/01	fiber optic penetrator	1.243E+07	1.090E+07	1.210E+07	1.100E+07	99.10%	45439R2001-00	D. G. O'Brien, Inc.	normal + accident TID
2001-14c	4/30/01-5/01/01	C&I penetrator	1.418E+07	1.244E+07	1.370E+07	1.241E+07	100.21%	45439R2001-00	D. G. O'Brien, Inc.	normal + accident TID

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00-12a	5/4/00-5/5/00	200 Hp motor	1.027E+07	9.007E+06	1.000E+07	1.000E+07	90.07%	1001036	Electric Power Research Institute	normal radiation aging
00-12b	5/5/00-5/8/00	6 wood blocks, twisted wires, straight wires, large wire loops	2.125E+07	1.864E+07	2.000E+07	2.000E+07	93.18%	1001036	Electric Power Research Institute	normal radiation aging
00-12c	5/8/00-5/10/00	400 Hp motor, small loops, 2 wood blocks	2.086E+07	1.829E+07	2.000E+07	2.000E+07	91.47%	1001036	Electric Power Research Institute	normal radiation aging
00-22a	10/20/00-10/23/00	wood/coil blocks, twisted wire racks, cable lengths	4.146E+07	3.636E+07	4.000E+07	4.000E+07	90.90%	1001036	Electric Power Research Institute	accident radiation
00-22b	10/25/00-10/30/00	400 hp motor frame, 22 coils	4.152E+07	3.641E+07	4.000E+07	4.000E+07	91.03%	1001036	Electric Power Research Institute	accident radiation
2001-24	6/26/01-7/6/01	2 mandrels	2.058E+08	1.805E+08	2.000E+08	2.000E+08	90.24%	1001390	Electric Power Research Institute	-

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9812	4/16/98-4/17/98	5 PAR cartridges	1.021E+07	8.954E+06	1.000E+07	7.600E+06	117.82%	46189, Rev. C	Entergy Nuclear NE( formerly Con Ed-	

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00-06	3/9/00-3/14/00	1 pipe insulation sample	1.033E+08	9.059E+07	1.000E+08	1.000E+08	90.59%	44037 C of C No. 1	Entergy Operations, Inc.	-

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2001-18	5/14/01-5/14/01	3 Valtek actuators	4.873E+06	4.274E+06	4.740E+06	4.740E+06	90.16%	44388R02	Flowserve	normal radiation aging

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00-15a	6/7/00-6/8/00	20 gaskets, 3 small terminal blocks, 1 gallon grease	1.131E+07	9.919E+06	1.100E+07	1.000E+07	99.19%	43137R01, Rev. A	Hyosung Corporation	normal + accident TID
00-15b	6/8/00-6/9/00	6 bearings, 3 terminal blocks	1.135E+07	9.954E+06	1.100E+07	1.000E+07	99.54%	43137R01, Rev. A	Hyosung Corporation	normal + accident TID
00-15c	6/9/00-6/12/00	two 50 Hp motors	1.185E+07	1.039E+07	1.100E+07	1.000E+07	103.92%	43137R01, Rev. A	Hyosung Corporation	normal + accident TID
00-15d	6/12/00-6/14/00	two 7.5 Hp motors	1.138E+07	9.980E+06	1.100E+07	1.000E+07	99.80%	43137R01, Rev. A	Hyosung Corporation	normal + accident TID

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9824	10/12/98-10/13/98	41799M92VAL001	8.172E+06	7.167E+06	7.980E+06	7.400E+06	96.85%	41799R98, Rev. A	Niagara Mohawk Power Corporation	normal + accident TID

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9816	5/26/98-6/8/98	1 cable tray	2.042E+08	1.791E+08	2.000E+08	2.000E+08	89.54%	46979-1	Promatec Technologies Inc.	-

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
00-17a	7/14/00-7/25/00	mandrels 2,4,8,13,15	1.696E+08	1.487E+08	1.650E+08	1.500E+08	99.16%	43854 report not issued as of 4-22-2002	Raychem/Tyco Electronics Corp	accident radiation
00-17b	7/27/00-8/11/00	mandrels 1, 3, 6, 12, 14	2.239E+08	1.964E+08	2.150E+08	2.000E+08	98.18%	43854 report not issued as of 4-22-2002	Raychem/Tyco Electronics Corp	normal 40 y + accident TID
00-17b,c	7/27/00-8/18/00	mandrel 5	2.490E+08	2.184E+08	2.400E+08	2.250E+08	97.05%	43854 report not issued as of 4-22-2002	Raychem/Tyco Electronics Corp	normal 60 y + accident TID
00-17d	8/29/00-9/11/00	trays 3, 6	1.697E+08	1.488E+08	1.650E+08	1.500E+08	99.22%	43854 report not issued as of 4-22-2002	Raychem/Tyco Electronics Corp	accident radiation
00-17e,f	9/21/00-10/9/00	trays 1, 2, 4, 5, 7	2.225E+08	1.951E+08	2.150E+08	2.000E+08	97.57%	43854 report not issued as of 4-22-2002	Raychem/Tyco Electronics Corp	normal 40 y + accident TID
00-17g	10/13/00-10/16/00	tray 8	4.071E+07	3.570E+07	3.960E+07	3.960E+07	90.16%	43854 report not issued as of 4-22-2002	Raychem/Tyco Electronics Corp	-

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
97-17	11/21/97-11/26/97	SXM-1	5.233E+07	4.589E+07	5.000E+07	5.000E+07	91.78%	45925-1	Schulz Electric Company	normal radiation aging
97-17	11/21/97-11/26/97	SXM-2	5.223E+07	4.580E+07	5.000E+07	5.000E+07	91.60%	45925-1	Schulz Electric Company	normal radiation aging
97-17	11/21/97-11/26/97	SXM-3	5.230E+07	4.587E+07	5.000E+07	5.000E+07	91.73%	45925-1	Schulz Electric Company	normal radiation aging
97-17	11/21/97-12/18/97	SXM-4	5.135E+07	4.503E+07	5.000E+07	5.000E+07	90.07%	45925-1	Schulz Electric Company	normal radiation aging
97-17	11/21/97-12/18/97	SXM-5	6.025E+07	5.284E+07	5.000E+07	5.000E+07	105.68%	45925-1	Schulz Electric Company	normal radiation aging
97-17	11/21/97-12/12/97	SXM-7	5.105E+07	4.477E+07	5.000E+07	5.000E+07	89.54%	45925-1	Schulz Electric Company	normal radiation aging
97-17	12/15/97-12/17/97	Motor Frame 8 (SXM-8, SXM-9, SXM-10, & SXM-11)	2.042E+07	1.791E+07	2.000E+07	2.000E+07	89.54%	45925-1	Schulz Electric Company	normal radiation aging
9817	7/1/98-7/23/98	SXM-7, SXM-2	1.729E+08	1.516E+08	1.694E+08	1.540E+08	98.46%	45925-1	Schulz Electric Company	accident radiation
9817	7/1/98-7/23/98	Motor Frame 8 (SXM-8, SXM-9, SXM-10, & SXM-11)	4.492E+07	3.939E+07	4.400E+07	4.000E+07	98.49%	45925-1	Schulz Electric Company	accident radiation

GT Reference	Irradiation Period	Specimen ID	Actual Total Dose, R	Actual Total Dose, rad	Wyle Required Test Dose, rad	Customer Required Dose, rad	Actual Total Dose / Customer Required Dose, %	Wyle Report No.	Customer	Comments
9813a	4/21/98-4/24/98	1	2.975E+07	2.609E+07	3.000E+07	3.000E+07	86.97%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-b	4/21/98-4/30/98	2	6.956E+07	6.100E+07	6.800E+07	6.800E+07	89.71%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a	4/21/98-4/24/98	3	3.097E+07	2.716E+07	3.000E+07	3.000E+07	90.54%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-e	4/21/98-5/8/98	4	2.043E+08	1.792E+08	2.000E+08	2.000E+08	89.59%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-b	4/21/98-4/30/98	5	6.944E+07	6.090E+07	6.800E+07	6.800E+07	89.56%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a	4/21/98-4/24/98	6	3.029E+07	2.657E+07	3.000E+07	3.000E+07	88.56%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-b	4/21/98-4/30/98	7	7.078E+07	6.207E+07	6.800E+07	6.800E+07	91.29%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-b	4/21/98-4/30/98	8	6.985E+07	6.126E+07	6.800E+07	6.800E+07	90.09%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a	4/21/98-4/24/98	9	3.055E+07	2.679E+07	3.000E+07	3.000E+07	89.31%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a	4/21/98-4/24/98	10	3.004E+07	2.634E+07	3.000E+07	3.000E+07	87.81%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-b	4/21/98-4/30/98	11	7.009E+07	6.147E+07	6.800E+07	6.800E+07	90.40%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9813a-e	4/21/98-5/8/98	12	2.045E+08	1.793E+08	2.000E+08	2.000E+08	89.67%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9822	8/17/98-8/24/98	2	1.367E+08	1.199E+08	1.300E+08	1.300E+08	92.22%	46656-1, Rev. A	Weed Instrument Company, Inc.	CP proj numbers start here
9822	8/17/98-8/24/98	11	1.361E+08	1.194E+08	1.300E+08	1.300E+08	91.82%	46656-1, Rev. A	Weed Instrument Company, Inc.	-
9908a	6/23/99-6/30/99	4, 5, 6 , 10, 15, 21	1.136E+08	9.963E+07	1.100E+08	1.100E+08	90.57%	42692-1, Rev. A	Weed Instrument Company, Inc.	-
9908a,b,c	6/23/99-7/6/99	2, 8, 12, 13, 14, 18, 22, 23	2.0764E+08	1.8210E+08	2.000E+08	2.000E+08	91.05%	42692-1, Rev. A	Weed Instrument Company, Inc.	-