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 KEISER, H.W. Pennsylvania Power & Light Co.
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 BUTLER, W.R. Project Directorate I-2

SUBJECT: Forwards revised App H Ttpe B leakage rate test results (SCCM).

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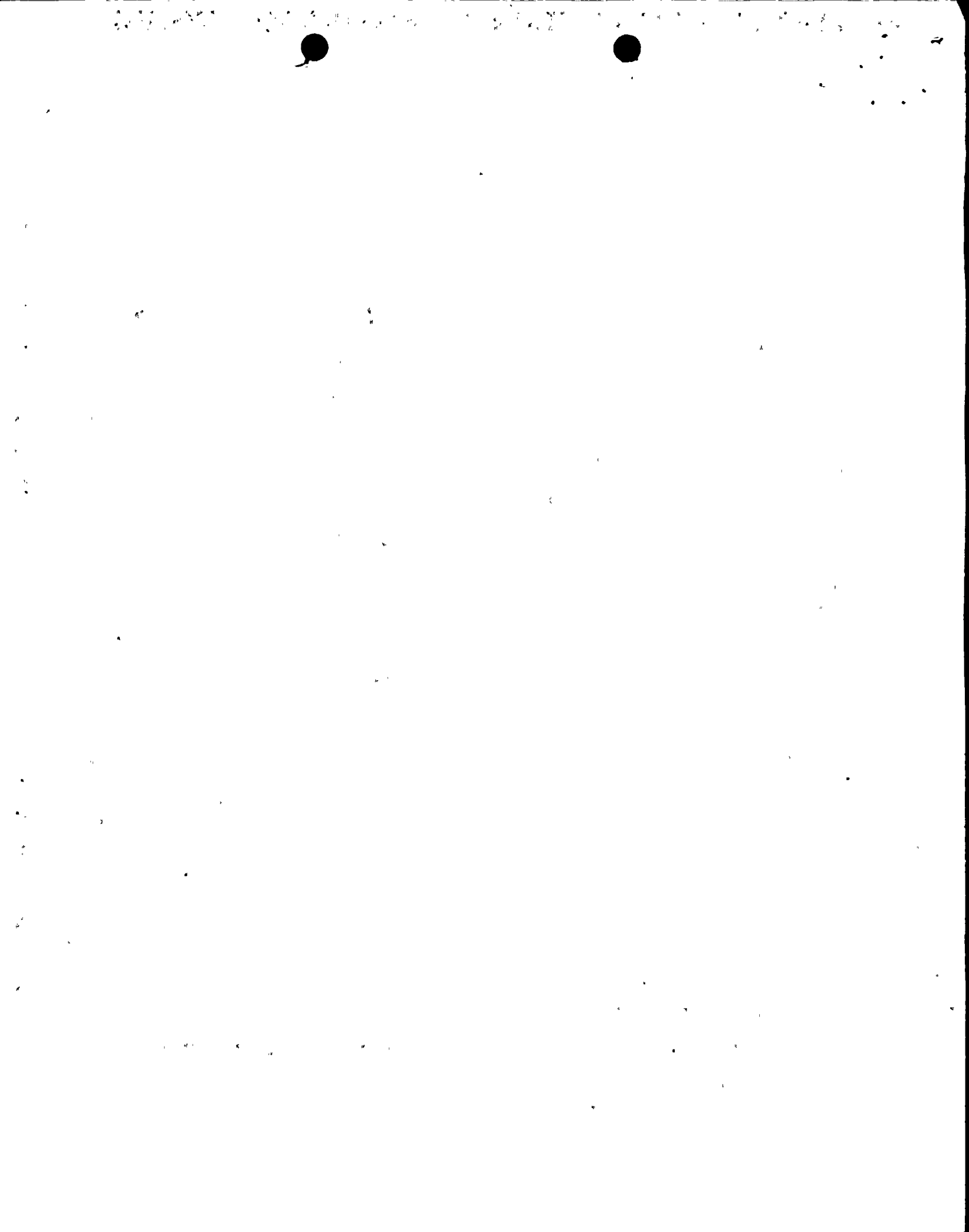
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Pennsylvania Power & Light Company

Two North Ninth Street • Allentown, PA 18101-1179 • 215/770-5151

Harold W. Keiser
Senior Vice President-Nuclear
215/770-4194

SEP 06 1990

Director of Nuclear Reactor Regulation
Attention: Dr. W. R. Butler
Project Directorate I-2
Division of Reactor Projects
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
REVISION TO UNIT 1 ILRT FINAL REPORT -
JUNE 1989
PLA-3432 FILE R41-2

Docket No. 50-387

Dear Dr. Butler:

Based on a question from the NRC staff, Appendix H, Type B and C Leakage Rate Test Results, of the Unit 1 ILRT Report was revised. The revised Appendix H is attached.

The question concerned test results that were listed as less than the measurement tolerance, e.g. 61 ± 160 sccm. The reason that this is acceptable is because the test machine can be set-up to impose a known leakage. Therefore, subtracting the imposed leakage from the total measured leakage can provide the result indicated e.g., 1061 sccm measured - 1000 sccm imposed = 61 ± 160 sccm leakage rate.

Therefore, all test results are now listed as the actual leakage rate and not rounded up to match the tolerance. This has no affect on the ILRT results as listed in the final report because the changes are insignificant in magnitude.

The ILRT was completed on May 31, 1989, and the Acceptance Criteria for both the "As Found" ILRT and "As Left" ILRT were satisfied.

The next Unit 1 ILRT is tentatively scheduled for the second quarter of 1992.

Very truly yours,

H. W. Keiser

Attachment

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cc: ~~NRC Document Control Desk (original)~~
NRC Region I
Mr. G. S. Barber, NRC Sr. Resident Inspector
Mr. M. C. Thadani, NRC Project Manager



UNIT 1 APPENDIX H
TYPE B LEAKAGE RATE TEST RESULTS (SCCM)

<u>PENETRATION</u>	<u>SINGLE FAILURE</u>		<u>MINIMUM PATH CRITERIA</u>			<u>DATE</u>	<u>CODE</u>	
	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>IMPROVEMENT</u>			
X-1		3+16		3+16		04-04-86	2	
		23+16		23+16		10-02-86	5	
		2+16		2+16		11-03-87	3	
	5+16	3+16	5+16	3+16	2	05-20-89	4	
X-2		526+160		526+160		03-29-86	2	
		507+160		507+160		12-22-86	5	
		625+160		625+160		11-02-87	3	
		536+160		536+160		11-16-87	3	
		674+160		674+160		06-08-88	5	
		710+160		710+160		01-10-89	5	
	690+160	690+160	690+160	690+160	0	05-21-89	4	
X-4		5+16		5+16		03-06-86	2	
		1+16		1+16		09-14-87	3	
	5+16	2+16	5+16	2+16	3	05-12-89	4	
X-5 DRYWELL HEAD		3+16		3+16		04-12-86	2	
		28+16		28+16		11-09-87	3	
	36+16	24+16	36+16	24+16	12	05-26-89	4	
X-6		1+16		1+16		04-08-86	2	
		11+16		11+16		10-28-86	5	
		0+16		0+16		11-14-86	5	
		1+16		1+16		12-04-86	5	
		1+16		1+16		12-21-86	5	
		1+16		1+16		01-07-87	5	
		5+16		5+16		02-02-87	5	
		1+16		1+16		11-03-87	3	
		1+16		1+16		11-14-87	3	
		1+16		1+16		05-17-89	4	
	3+16	1+16	3+16	1+16	2	05-17-89	4	
	X-35A (*1)		5+16		5+16		03-05-86	2
			6+16		6+16		09-23-87	3
3+16		3+16	3+16	3+16	0	05-02-89	4	
X-35C (*1)		5+16		5+16		03-05-86	2	
		5+16		5+16		09-23-87	3	
	6+16	6+16	6+16	6+16	0	05-25-89	4	
X-35D (*1)		8+16		8+16		03-05-86	2	
		5+16		5+16		09-23-87	3	
	200+160	6+16	200+160	6+16	194	05-25-89	4	
X-35E (*1)		8+16		8+16		03-05-86	2	
		10+16		10+16		09-23-87	3	
	4+16	4+16	4+16	4+16	0	05-02-89	4	

UNIT 1 APPENDIX H
TYPE B LEAKAGE RATE TEST RESULTS (SCCM)

PENETRATION	SINGLE FAILURE		MINIMUM PATH CRITERIA			DATE	CODE
	AS FOUND	AS LEFT	AS FOUND	AS LEFT	IMPROVEMENT		
X-35F (*1)		8±16		8±16		03-05-86	2
		4±16		4±16		09-23-87	3
	12±16	12±16	12±16	12±16	0	05-02-89	4
X-100A, 100C, 103A, 104A, 104C, 301 (*2)		6±16		6±16		02-24-86	2
		5±16		5±16		09-16-87	3
	9±16	9±16	9±16	9±16	0	04-02-89	4
X-100B, 100D, 103B, 104B, 104D, 300, 330B (*3)		26±16		26±16		02-28-86	2
		31±16		31±16		09-16-87	3
	74±16	74±16	74±16	74±16	0	04-02-89	4
X-101A, 101C, 101E, 102A, 105A, 105C, 106A, 106C, 108 (*4)		97±16		97±16		03-03-86	2
		56±16		56±16		09-16-87	3
	63±16	63±16	63±16	63±16	0	04-02-89	4
X-101B, 101D, 101F, 102B, 105B, 105D, 106B, 106D, 107 (*5)		38±16		38±16		03-01-86	2
		24±16		24±16		09-16-87	3
	33±16	33±16	33±16	33±16	0	04-02-89	4
X-200A		2±16		2±16		04-07-86	2
		1±16		1±16		10-28-86	5
		2±16		2±16		11-14-86	5
		1±16		1±16		12-02-86	5
		1±16		1±16		12-21-86	5
		1±16		1±16		01-07-87	5
		3±16		3±16		02-02-87	5
		7±16		7±16		11-02-87	3
		1±16		1±16		02-06-89	5
	1±16	1±16	1±16	1±16	0	05-17-89	4
	X-200B		3±16		3±16		06-05-85
		1±16		1±16		04-12-86	2
		3±16		3±16		04-16-86	2
		1±16		1±16		10-28-86	5
		1±16		1±16		11-14-86	5
		1±16		1±16		12-02-86	5
		2±16		2±16		12-21-86	5

UNIT 1 APPENDIX H
TYPE B LEAKAGE RATE TEST RESULTS (SCCM)

<u>PENETRATION</u>	<u>SINGLE FAILURE</u>		<u>MINIMUM PATH CRITERIA</u>			<u>DATE</u>	<u>CODE</u>
	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>IMPROVEMENT</u>		
X-200B (Continued)		2+16		2+16		01-07-87	5
		17+16		17+16		04-10-87	5
		3+16		3+16		07-10-87	5
		2+16		2+16		11-11-87	3
		1+16		1+16		03-07-88	5
		2+16		2+16		01-08-89	5
		0+16		0+16		02-06-89	5
	1+16	1+16	1+16	1+16	0	05-21-89	4
X-2 DOOR SEALS		93+16		92+16		06-06-85	1
		391+160		126+16		11-05-85	5
		589+160		37+16		04-17-86	2
		403+160		18+16		04-21-86	2
		381+160		263+160		04-25-86	5
		653+160		519+160		06-13-86	5
		749+160		525+160		06-19-86	5
		711+160		557+160		09-22-86	5
		661+160		524+160		12-22-86	5
		891+160		477+160		12-28-86	5
		544+160		544+160		04-10-87	5
		611+160		452+160		07-11-87	5
		136+16		3+16		11-20-87	3
		98+16		0+16		11-23-87	5
		115+16		1+16		12-20-87	5
		75+16		1+16		03-09-88	5
		103+16		2+16		03-20-88	5
		119+16		0+16		03-22-88	5
		105+16		0+16		06-08-88	5
		65+16		0+16		12-09-88	5
	338+160		2+16		01-10-89	5	
31+16	249+160	2+16	1+16	1	05-28-89	4	
X-100E, 100F (*6)		11+16		11+16		03-04-86	2
		13+16		13+16		09-16-87	3
	3+16	3+16	3+16	3+16	0	04-07-89	4

UNIT 1 APPENDIX H
TYPE B LEAKAGE RATE TEST RESULTS (SCCM)

CODES:

- 1 First Refueling Outage 05/30/85 to 06/12/85 (after ILRT)
- 2 Second Refueling Outage 02/15/86 to 04/22/86
- 3 Third Refueling Outage 09/12/87 to 11/24/87
- 4 Fourth Refueling Outage 03/29/89 to 05/28/89 (before ILRT)
- 5 Unplanned Drywell Entry or Rework
- 6 Six Month Periodic Tests

NOTES:

- (*1) Penetration requires both type B and C testing. Leakage rate listed is total penetration path leakage.
- (*2) Leakage assigned to penetration X-100A is the sum of penetrations X-100A, X-100C, X-103A, X-104A, X-104C, and X-301. These penetrations were all tested simultaneously.
- (*3) Leakage assigned to penetration X-100B is the sum of penetrations X-100B, X-100D, X-103B, X-104B, X-104D, X-300, and X-330B. These penetrations were all tested simultaneously.
- (*4) Leakage assigned to penetration X-101A is the sum of penetrations X-101A, X-101C, X-101E, X-102A, X-105A, X-105C, X-106A, X-106C, and X-108. These penetrations were all tested simultaneously.
- (*5) Leakage assigned to penetration X-101B is the sum of penetrations X-101B, X-101D, X-101F, X-102B, X-105B, X-105D, X-106B, X-106D, and X-107. These penetrations were all tested simultaneously.
- (*6) Leakage assigned to penetration X-100E is the sum of penetrations X-100E and X-100F. These penetrations were tested simultaneously.

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

PENETRATION	SINGLE FAILURE		MINIMUM PATH CRITERIA			DATE	CODE
	AS FOUND	AS LEFT	AS FOUND	AS LEFT	IMPROVEMENT		
X-60A		21±16		19±16		03-10-86	2
		12±16		10±16		10-22-87	3
	7±16	7±16	0±16	0±16	0	05-21-89	4
X-88B		7±16		5±16		03-10-86	2
		16±16		5±16		10-22-87	3
		2±16		1±16		03-08-88	5
	WOULD NOT PRESSURIZE	4±16	876±160	1±16	875	05-21-89	4
X-60A		65±16		5±16		03-10-86	2
		13±16		11±16		10-22-87	3
	47±16	47±16	4±16	4±16	0	05-21-89	4
X-221A		6±16		5±16		03-10-86	2
		13±16		6±16		10-22-87	3
	766±160	37±16	700±160	36±16	644	05-21-89	4
X-238A		3±16		2±16		03-10-86	2
		2±16		2±16		10-22-87	3
	1±16	1±16	1±16	1±16	0	05-21-89	4
X-80C		770±160		240±160		04-11-86	2
		141±16		136±16		10-16-87	3
	WOULD NOT PRESSURIZE	3±16	3±16	1±16	2	05-20-89	4
X-80C		664±160		537±160		04-11-86	2
		4±16		4±16		10-16-87	3
	WOULD NOT PRESSURIZE	4±16	3050±1600	3±16	3047	05-20-89	4
X-80C		2±16		1±16		04-11-86	2
		10±16		7±16		10-16-87	3
	452±160	7±16	7±16	2±16	5	05-20-89	4
X-233		2±16		1±16		04-11-86	2
		14±16		6±16		10-16-87	3
	5±16	5±16	3±16	3±16	0	05-20-89	4
X-238B		15±16		14±16		04-11-86	2
		6±16		2±16		10-16-87	3
	1±16	1±16	1±16	1±16	0	05-20-89	4
X-7A (3)		57000±4800		28500±4800		02-21-86	2
		1899±1600		950±1600		02-24-86	2
		1173±160		587±160		11-03-87	3
	8000±1600	2180±1600	30±1600	30±1600	NA	05-12-89	4

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

<u>PENETRATION</u>	<u>SINGLE FAILURE</u>		<u>MINIMUM PATH CRITERIA</u>			<u>DATE</u>	<u>CODE</u>
	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>IMPROVEMENT</u>		
X-7B (3) 		OFFSCALE		OFFSCALE		02-21-86	2
		3398±1600		1699±1600		02-24-86	2
		2140±1600		1070±1600		11-03-87	3
	11670±1600	6165±1600	130±1600	130±1600	NA	05-12-89	4
X-7C (3) 		44000±4800		22000±48000		02-21-86	2
		679±160		340±160		02-24-86	2
		3930±1600		1965±1600		11-03-87	3
	39300±4800	4055±1600	4055±1600	18±160	NA	05-12-89	4
X-7D (3) 		6543±1600		3272±1600		02-24-86	2
		3450±1600		1725±1600		11-18-87	3
	6270±1600	6270±1600	1572±160	1572±160	NA	05-12-89	4
X-8 (3) 		126±16		72±16		06-06-85	1
		530±160		233±160		03-06-86	2
		158±16		132±16		11-02-87	3
	92000±12000	329±160	5±16	3±16	NA	05-15-89	4
X-9A		OFFSCALE		OFFSCALE		03-11-86	2
		6136±1600		586±160		03-22-86	2
		11046±1600		586±160		04-18-86	2
		3568±1600		463±160		11-06-87	3
	1037±160	537±160	63±16	63±16	0	05-12-89	4
X-9B		OFFSCALE		OFFSCALE		03-09-86	2
		OFFSCALE		OFFSCALE		03-22-86	2
		559±160		559±160		03-29-86	2
		13500±1600		1160±160		11-05-87	3
	35100±12000	2318±1600	190±16	190±16	0	05-18-89	4
X-10		656±160		328±160		03-25-86	2
		912±160		456±160		12-28-86	5
		2498±1600		1249±160		11-03-87	3
		3680±1600		1840±1600		11-14-87	3
	15150±1600	672±160	672±160	336±160	336	04-19-89	4
X-11 		91550±3600		45750±3600		11-03-85	5
		859±160		430±160		11-05-85	5
		OFFSCALE		OFFSCALE		03-06-86	2
		13200±4800		6600±4800		03-29-86	2
		122±16		61±16		04-13-86	2
		157120±4800		78560±4800		04-04-87	5
		2055±1600		1028±1600		04-09-87	5
		8450±1600		4225±1600		07-10-87	5
		89±160		45±160		10-31-87	3
		88±16		44±16		11-12-87	3
	35200±4800	2350±1600	2350±1600	1175±1600	1175	04-21-89	4

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

<u>PENETRATION</u>	<u>SINGLE FAILURE</u>		<u>MINIMUM PATH CRITERIA</u>			<u>DATE</u>	<u>CODE</u>
	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>IMPROVEMENT</u>		
X-12		93±160		24±160		03-06-86	2
		188±160		90±160		10-13-87	3
	357±160	187±160	61±160	61±160	0	04-20-89	4
X-13A		5835±1600		157±16		02-22-86	2
		12700±1600		571±160		10-21-87	3
	22150±4800	5228±1600	1692±160	1692±160	0	05-02-89	4
X-13B		8300±1600		2224±1600		03-12-86	2
		9542±1600		2224±1600		03-25-86	2
		7290±1600		2224±1600		06-12-86	5
		6470±1600		4700±1600		10-06-87	3
	8090±1600	1729±160	2750±1600	637±160	2113	05-02-89	4
X-14 (2)		23±2		10±1		03-30-86	2
		40±3		23±2		09-19-86	5
		9783±10		40±3		04-05-87	5
		20±3		18±3		04-09-87	5
		161±3		75±3		11-01-87	3
	233±2	233±2	193±2	193±2	NA	05-13-89	4
X-16A		597±160		10±16		02-22-86	2
		215±160		201±160		10-25-87	3
	39±16	39±16	8±16	8±16	0	05-04-89	4
X-16B		1373±160		381±160		03-14-86	2
		1002±160		161±16		09-30-87	3
		1002±160		171±16		10-06-87	3
	1040±160	871±160	871±160	9±16	862	04-14-89	4
X-17		25±16		13±16		02-24-86	2
		57±16		29±16		10-18-87	3
	28±16	28±16	14±16	14±16	0	05-01-89	4
X-19		74±16		73±16		02-28-86	2
		444±160		94±16		10-22-87	3
	137±16	137±16	45±16	45±16	0	05-18-89	4
X-21		33±16		7±16		02-27-86	2
		6±16		5±16		09-26-87	3
	5±16	5±16	1±16	1±16	0	04-21-89	4
X-23		21±16		17±16		03-24-86	2
		23±16		11±16		10-07-87	3
	12±16	8±16	3±16	3±16	0	05-03-89	4
X-24		46±16		23±16		03-24-86	2
		163±160		150±16		10-08-87	3
	183±16	183±16	20±16	20±16	0	04-28-89	4

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

PENETRATION	SINGLE FAILURE		MINIMUM PATH CRITERIA			DATE	CODE	
	AS FOUND	AS LEFT	AS FOUND	AS LEFT	IMPROVEMENT			
X-25, 201A		360±160		180±160		12-04-85	6	
		747±160		374±160		04-18-86	2	
		604±160		302±160		10-07-86	6	
		542±160		271±160		04-14-87	6	
		275±160		138±160		11-03-87	3	
		311±160		156±160		11-13-87	3	
		394±160		197±160		04-13-88	6	
		413±160		207±160		10-04-88	6	
		388±160	388±160	194±160	194±160	0	04-20-89	4
	X-26		126±16		63±16		06-07-85	1
		83±16		42±16		12-03-85	6	
		81±16		41±16		04-18-86	2	
		190±160		95±16		10-19-86	6	
		12190±1600		6095±1600		04-17-87	6	
		243±160		122±16		04-18-87	5	
		93±16		47±16		11-12-87	3	
		261±160		131±16		04-18-88	6	
		262±160		131±16		10-03-88	6	
		387±160	387±160	194±160	194±160	0	04-16-89	4
X-31B		324±160		125±16		03-24-86	2	
		144±16		133±16		10-25-87	3	
	7900±1600	8±16	7720±1600	3±16	7717	05-14-89	4	
X-39A (1)		3285±1600		0		02-19-86	2	
		293±160		0		10-07-87	3	
	2720±1600	627±160	0	0	0	05-02-89	4	
X-39B (1)		175±16		0		03-21-86	2	
		66±16		0		09-29-87	3	
	1173±160	232±160	0	0	0	04-26-89	4	
X-41		108±16		28±16		02-27-86	2	
		68±16		6±16		09-26-87	3	
	12±16	12±16	3±16	3±16	0	04-21-89	4	
X-42 (2)		3±3		0±1		02-21-86	2	
		0±3		0±3		10-13-87	3	
	1070±2	1070±2	0±2	0±2	NA	04-21-89	4	
X-53		131±160		17±16		03-20-86	2	
		7±160		5±160		10-12-87	3	
	4±16	4±16	1±16	1±16	0	05-01-89	4	
X-54		266±160		13±16		03-20-86	2	
		1261±160		138±160		10-12-87	3	
	885±160	885±160	2±16	2±16	0	05-01-89	4	

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

<u>PENETRATION</u>	<u>SINGLE FAILURE</u>		<u>MINIMUM PATH CRITERIA</u>			<u>DATE</u>	<u>CODE</u>
	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>IMPROVEMENT</u>		
X-55		624±160 175±16		20±16 142±16		03-20-86 10-12-87	2 3
	20±16	14±16	14±16	13±16	1	05-14-89	4
X-56		166±160 931±160		65±16 26±16		03-20-86 10-12-87	2 3
	1135±160	1135±160	9±16	9±16	0	05-14-89	4
X-60A		574±160 528±160		190±16 113±16		03-24-86 10-25-87	2 3
	1880±1600	560±160	1147±160	135±16	1012	05-22-89	4
X-60B		19±16 21±16		17±16 19±16		03-23-86 10-07-87	2 3
	3±16	5±16	1±16	3±16	0	04-28-89	4
X-61A		5±16 10±16		3±16 5±16		03-05-86 10-05-87	2 3
	17±16	17±16	5±16	5±16	0	04-21-89	4
X-61A		9±16 9±16		9±16 8±16		03-05-86 09-23-87	2 3
	7±16	7±16	4±16	4±16	0	04-20-89	4
X-72A		939±160 687±160		661±160 498±160		03-22-86 10-28-87	2 3
	1558±160	1558±160	335±160	335±160	0	05-18-89	4
X-72B		767±160 278±160		254±160 213±160		03-22-86 10-28-87	2 3
	931±160	931±160	356±160	356±160	0	05-18-89	4
X-85A		2440±1600 825±160		39±16 39±16		03-17-86 03-26-86	2 2
	1121±160	1121±160	8±16	6±16 8±16	0	10-17-87 05-25-89	3 4
X-85B		737±160 473±160		8±16 13±16		03-26-86 10-17-87	2 3
	1120±160	1120±160	3±16	3±16	0	05-25-89	4
X-86A		61±16 353±160		6±16 310±160		03-20-86 10-17-87	2 3
	13±16	13±16	7±16	3±16	4	05-08-89	4
X-86B		41±16 274±160		5±16 137±16		03-20-86 10-17-87	2 3
	2045±1600	1594±1600	3±16	3±16	0	05-08-89	4

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

PENETRATION	SINGLE FAILURE		MINIMUM PATH CRITERIA			DATE	CODE
	AS FOUND	AS LEFT	AS FOUND	AS LEFT	IMPROVEMENT		
X-87		45+16		32+16		02-28-86	2
		45+16		11+16		09-21-86	5
		475+160		138+160		09-26-87	3
	209+160	209+160	198+160	198+160	0	04-21-89	4
X-93		462+160		66+16		02-28-86	2
		294+160		113+16		09-26-87	3
	165+16	165+16	144+16	144+16	0	04-21-89	4
X-202		91+16		46+16		06-14-85	1
		393+160		197+160		12-03-85	6
		1053+160		527+160		04-18-86	2
		436+160		218+160		10-08-86	6
		875+160		438+160		04-15-87	6
		89+160		45+160		11-03-87	3
		40+160		20+160		04-12-88	6
		162+160		81+160		10-03-88	6
	31+16	29+16	16+16	15+16	1	05-18-89	4
X-203A (1) (2)		4+3		0		02-19-86	2
		20+3		0		10-09-87	3
	15+3	15+3	0	0	0	05-11-89	4
X-203B (1) (2)		8+1		0		03-05-86	2
		4+2		0		09-19-87	3
	340+3	340+3	0	0	0	05-02-89	4
X-203C (1) (2)		343+2		0		03-04-86	2
		7+2		0		10-12-87	3
	250+3	250+3	0	0	0	05-10-89	4
X-203D (1) (2)		17+1		0		03-05-86	2
		146+2		0		09-19-87	3
	160+3	160+3	0	0	0	05-02-89	4
X-204A, 205A (1)		1386+160		0		02-23-86	2
		795+160		0		10-25-87	3
	129400+12000	1321+160	0	0	0	05-11-89	4
X-204B, 205B (1)		1763+160		0		03-17-86	2
		7200+1600		0		04-06-87	5
		15800+4800		0		04-10-87	5
		1252+160		0		10-06-87	3
	1045+160	1045+160	0	0	0	05-08-89	4

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

PENETRATION	SINGLE FAILURE		MINIMUM PATH CRITERIA			DATE	CODE
	AS FOUND	AS LEFT	AS FOUND	AS LEFT	IMPROVEMENT		
X-206A, 207A, 208A (1) (2)		30±2 13±1 5±3 15±3 10±3		0 0 0 0 0		02-25-86 02-28-86 12-20-86 10-27-87 05-08-89	2 2 5 3 4
	45±2		0		0		
X-206B, 207B, 208B (1) (2)		0±2 OFFSCALE 600±3 1714±7 105±3		0 0 0 0 0		03-11-86 03-20-86 03-21-86 10-05-87 04-14-89	2 2 2 3 4
	1800±3		0		0		
X-209 (1) (2)		8±2 0±3 90±3		0 0 0		04-12-86 11-03-87 05-23-89	2 3 4
	90±3		0		0		
X-210 (2)		13±2 5±3 0±3		13±2 5±3 0±3		04-02-86 10-21-87 05-23-89	2 3 4
	0±3		0±3		0±3	NA	
X-211 (2)		8±1 5±3 45±3		8±1 5±3 23±3		04-12-86 11-03-87 05-23-89	2 3 4
	45±3		23±3		23±3	NA	
X-214 (1) (2)		3±3 70±3 30±3		0 0 0		04-09-86 10-24-87 05-02-89	2 3 4
	30±3		0		0		
X-215 (2)		OFFSCALE 14±3 15±3 0±3		OFFSCALE 14±3 15±3 0±3		04-07-86 04-08-86 11-02-87 04-26-89	2 2 3 4
	WOULD NOT PRESSURIZE		WOULD NOT PRESSURIZE		0±3	NA	
X-216 (2)		0±3 0±3 0±3		0±3 0±3 0±3		04-06-86 10-27-87 05-26-89	2 3 4
	45±3		23±3		0±3	NA	
X-217 (2)		4±2 0±3 0±3		4±2 0±3 0±3		04-06-86 10-19-87 05-26-89	2 3 4
	0±3		0±3		0±3	NA	
X-218		422±160 179±160 3±16		2±16 21±16 1±16		02-27-86 10-22-87 05-13-89	2 3 4
	3±16		1±16		1±16	0	

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

<u>PENETRATION</u>	<u>SINGLE FAILURE</u>		<u>MINIMUM PATH CRITERIA</u>			<u>DATE</u>	<u>CODE</u>
	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>AS FOUND</u>	<u>AS LEFT</u>	<u>IMPROVEMENT</u>		
X-226A		30±2		0		02-18-86	2
(1) (2)		5±2		0		04-03-86	2
		43±2		0		10-13-87	3
		8±2		0		10-22-87	3
	0±3	0±3	0	0	0	05-11-89	4
X-226B		5±3		0		03-06-86	2
(1) (2)		0±3		0		09-24-87	3
		105±3		0		10-15-87	3
	1050±3	835±3	0	0	0	04-08-89	4
X-243		0±2		0±2		03-09-86	2
(2)		30±3		30±3		09-29-87	3
	15±3	30±3	8±3	15±3	NA	05-02-89	4
X-244		125±16		63±16		04-02-86	2
		39±16		20±16		10-16-87	3
	37±16	87±16	19±16	44±16	0	05-24-89	4
X-245		37±16		19±16		04-03-86	2
		30±16		15±16		10-19-87	3
		45±16		23±16		11-03-87	3
	196±160	19±16	98±160	10±16	88	05-24-89	4
X-246A		2556±1600		0		02-24-86	2
(1)		281±160		0		10-26-87	3
	22652±12000	258±160	0	0	0	05-11-89	4
X-246B		14352±1600		0		03-12-86	2
(1)		1280±160		0		03-20-86	2
		884±160		0		10-07-87	3
	503±160	1278±160	0	0	0	05-01-89	4
X-88A		1±16		0±16		04-01-86	2
		6±16		5±16		09-19-87	3
	6±16	6±16	3±16	3±16	0	04-23-89	4
X-220B		17±16		16±16		04-01-86	2
		16±16		5±16		09-19-87	3
	39±16	39±16	16±16	16±16	0	04-23-89	4

UNIT 1 APPENDIX H
TYPE C LEAKAGE RATE TEST RESULTS (SCCM)

CODES:

- 1 First Refueling Outage 05/30/85 to 06/12/85 (after ILRT)
- 2 Second Refueling Outage 02/15/86 to 04/22/86
- 3 Third Refueling Outage 09/12/87 to 11/24/87
- 4 Fourth Refueling Outage 03/29/89 to 05/28/89 (before ILRT)
- 5 Unplanned Drywell Entry or Rework
- 6 Six Month Periodic Tests

NOTES:

- (1) Closed system penetrations X-39A, X-39B, X-203A, X-203B, X-203C, X-203D, X-204A, X-204B, X-205A, X-205B, X-206A, X-206B, X-207A, X-207B, X-208A, X-208B, X-209, X-214, X-226A, X-226B, X-246A, X-246B. Minimum Path Criteria = 0.
- (2) Penetration tested hydraulically. Minimum Path Criteria Improvements are not calculated unless penetration is in closed system (See Note (1)).
- (3) Leakage Improvement on MSIV and MSL Drain penetrations is not calculated due to interpretation that 'As-Found' leakage does not count toward 'As-Found' ILRT.

	<u>SINGLE FAILURE CRITERIA (SCCM)</u>	<u>MINIMUM PATH CRITERIA (SCCM)</u>
TOTAL PNEUMATIC 'AS LEFT' LEAKAGE	30,669	6,947
TOTAL HYDRAULIC 'AS LEFT' LEAKAGE	3,213	231
TOTAL 'AS LEFT' MSIV LEAKAGE	18,670	1,750
TOTAL 'AS LEFT' MAIN STEAM DRAIN LEAKAGE	329	3