



Carolina Power & Light Company

SERIAL: NLS-84-455

OCT 22 1984

Director of Nuclear Reactor Regulation
Attention: Mr. D. B. Vassallo, Chief
Operating Reactors Branch No. 2
Division of Licensing
United States Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
REQUEST FOR ADDITIONAL INFORMATION
UNIT 1 LOCAL LEAK RATE TESTS

Dear Mr. Vassallo:

As a result of telephone conversations with your staff, Carolina Power & Light Company committed to provide additional information concerning our submittal of September 4, 1984 which requested a one-time only deferment of required Type B and C local leak rate tests (LLRTs) for certain valves and penetrations. Specifically, the following data was requested:

- 1) The previous LLRT results for the subject valves.
- 2) An indication of which valves can be tested during plant operation.
- 3) The approximate dose received during valve testing.

This information has been compiled and is provided in Attachment 1. The dose rates listed in Attachment 1 are for testing performed while shutdown, dose rates encountered while testing at power would be substantially higher. Additionally, although many of these tests may be performed at power (as indicated), most would require placing the system in a limiting condition for operation action statement or would initiate a half scram. We consider such actions to be a greater safety concern than deferral of the LLRT testing for three months.

Attachment 2 provides additional information regarding programmatic improvements at Brunswick involving the LLRT program. Should you have further questions concerning this matter, please contact Mr. John S. Dietrich at (919) 836-6154.

Yours very truly,

S. Zimmerman
Manager

Nuclear Licensing Section

8410290188 841022
PDR ADOCK 05000325
P PDR

MAT/pgp (766MAT)

cc: Mr. D. O. Myers (NRC-BNP)
Mr. J. P. O'Reilly (NRC-RII)
Mr. M. Grotenhuis (NRC)

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Attachment 1

to Serial: NLS-84-455

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E-1	Electrical Pene X100A	12-12-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0		
		01-15-79	0		
E-2	Electrical Pene X100B	12-12-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0		
		01-15-79	0		
E-3	Electrical Pene X100C	12-12-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0		
		01-15-79	0		
E-4	Electrical Pene X100D	12-12-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0		
		01-15-79	0		
E-5	Electrical Pene X100E	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-18-79	0		
E-6	Electrical Pene X100F	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-18-79	0		
E-7	Electrical Pene X100G	12-14-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0		
		01-18-79	0		

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E-8	Electrical Pene X100H	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-18-79	0		
E-9	Electrical Pene X101A	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0.25		
		01-16-79	0		
E-10	Electrical Pene X101C	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-07-80	0		
		01-16-79	0		
E-11	Electrical Pene X101D	12-18-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-11-80	0		
		01-15-79	0		
E-12	Electrical Pene X101F	12-18-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-11-80	0		
		01-15-79	0		
E-13	Electrical Pene X102A	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0		
		01-15-79	0		
E-14	Electrical Pene X102B	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-06-80	0		
		01-16-79	0		
E-15	Electrical Pene X102C	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-16-79	0		

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E-16	Electrical Pene X102E	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-17-79	0		
E-17	Electrical Pene X102F	12-14-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0		
		01-18-79	0		
E-18	Electrical Pene X102H	12-18-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0.21		
		01-18-79	0		
E-19	Electrical Pene X103A	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0.21		
		01-16-79	0		
E-20	Electrical Pene X103B	12-16-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0		
		01-18-79	0.77		
E-21	Electrical Pene X104A	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0		
		01-16-79	0		
E-22	Electrical Pene X104B	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-06-80	0		
		01-16-79	0		
E-23	Electrical Pene X104C	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-16-79	0		

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E-24	Electrical Pene X104E	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-17-79	0		
E-25	Electrical Pene X104F	12-16-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-18-79	0		
E-26	Electrical Pene X104G	12-18-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0		
		01-18-79	0		
E-27	Electrical Pene X105B	12-12-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0.04		
		01-15-79	1.438		
E-28	Electrical Pene X105C	12-12-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-05-80	0		
		01-16-79	0		
E-29	Electrical Pene X105D	12-14-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-08-80	0		
		01-16-79	0		
E-30	Electrical Pene X105E	12-13-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-07-80	0		
		01-16-79	0.67		
E-31	Electrical Pene X105G	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-16-79	1.54		

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E-32	Electrical Pene X105H	12-14-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-08-80	0		
		01-17-79	0		
E-33	Electrical Pene X105J	12-18-82	0	YES	0.02 man-rem
		07-21-82	0		
		02-11-80	0		
		01-17-79	0		
E-34	Electrical Pene X105K	12-18-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-11-80	0		
		01-17-79	0		
E-35	Electrical Pene X232B	12-18-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-11-80	0		
		01-19-79	0		
E-36	Electrical Pene X232C	12-18-82	0	YES	0.02 man-rem
		07-22-82	0		
		02-11-80	0		
		01-19-79	0		
H2	Personnel Lock to Drywell Liner Seal	01-19-83	0	YES	0.02 man-rem
		10-13-81	0		
		04-10-79	0		
M2	CAC V5 Inboard O-Rings	12-31-82	0	YES	0.125 man-rem
		09-14-82	0		
		06-23-81	0		
		03-26-79	0		
M3	CAC V6 Inboard O-Rings	12-31-82	0	YES	0.1 man-rem
		09-14-82	0		
		06-23-81	0		
		03-26-79	0		

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
M4	CAC V7 Inboard O-Rings	02-21-83	0	YES	0.125 man-rem
		09-12-82	0		
		09-11-82	0.199		
		09-06-82	WNP(1)		
		08-31-82	0		
		05-09-81	0		
		03-26-79	0		
M5	CAC V9 Inboard O-Rings	12-23-82	0	YES	0.1 man-rem
		08-31-82	0		
		05-22-81	0		
		03-26-79	0		
M6	CAC V16 Inboard O-Rings	12-26-82	0	YES	0.125 man-rem
		09-07-82	0		
		04-20-81	0		
		02-02-79	0		
M7	CAC V17 Inboard O-Rings	03-14-83	0	YES	0.125 man-rem
		09-01-82	0		
		06-22-81	0		
		02-12-79	0		
B21-2	B21-F010B	01-12-83	0	NO (Feedwater System in service)	0.562 man-rem
		07-31-82	1.785		
		07-25-82	WNP(2)		
		06-27-80	0.04		
		04-06-79	7.97		
B21-3	B21-F032A, E41-F006	03-17-83	5.457(3)	NO (Feedwater System in service)	0.02 man-rem
		03-03-83	0		
		05-01-81	0.479		
		02-23-79	4.016		

*WNP = Would Not Pressurize

(1) Remove valve and repaired imperfections in sealing surface, 1-M-82-2588

(2) Cleaned valves 1-M-82-208, MI-16-525, and MI-16-583

(3) Repacked valve E41-F006 per 1-M-82-1553

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
B21-4	B21-F032B, E51-F013, G31-F039	03-03-83	0.749(1)	NO (Feedwater System in service)	0.02 man-rem
		01-14-83	WNP		
		06-26-81	14.76		
		04-08-79	2.889		
CAC-1	CAC V47	12-31-82	0	NO (Located inside torus)	0.1 man-rem
		09-21-82	0		
		09-05-82	0		
		05-06-81	0		
		06-07-80	0		
		03-13-79	4.0		
CAC-2	CAC V48	12-30-82	0.550	NO (Located inside drywell)	0.562 man-rem
		09-21-82	0.7225		
		09-14-82	0		
		04-30-81	0		
		03-01-79	0		
CAC-4	CAC V7, V8, V22	02-22-83	5.457(2)	YES (SBGT in LCO)	0.125 man-rem
		01-04-83	10.11		
		09-12-82	0		
		09-06-82	0		
		09-06-82	WNP		
		08-31-82	WNP		
		08-15-82	WNP		
		05-09-81	6.368		
		04-23-81	WNP(3)		
		03-01-79	1.51		
CAC-5	CAC V9, V10, V23	12-23-82	2.348	NO (Neutron dosage)	0.1 man-rem
		09-03-82	2.702		
		08-31-82	3.037		
		08-29-82	5.85		
		08-24-82	2.790		
		05-21-81	2.462		
		05-02-81	WNP(4)		
		04-07-79	1.323		

*WNP = Would Not Pressurize

(1) Repacked valve B21-F032B per 1-M-82-1705

(2) Rebuilt valves, 1-M-83-268 and 1-M-83-234

(3) Rebuilt valve, 1-M-81-1077 (V7)

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
CAC-6	CAC X20A, V16	12-26-82	0.738	YES	0.125 man-rem
		09-07-82	0		
		09-06-82	WNP(1)		
		09-02-82	WNP(2)		
		05-28-81	2.376		
		04-20-81	WNP(3)		
		04-02-79	2.06		
CAC-7	CAC X20B, V17	12-26-82	0	YES	0.125 man-rem
		09-01-82	0		
		06-22-81	1.72		
		04-20-81	WNP(4)		
		04-05-79	24.21		
CAC-9	CAC-PV-1200B	12-16-82	0	YES (31-day LCO)	0.02 man-rem
		07-26-82	0		
		04-10-80	0		
		01-31-79	0		
CAC-10	CAC-PV-1261	12-16-82	0	YES (31-day LCO)	0.02 man-rem
		07-26-82	0		
		04-10-80	0		
		01-31-79	0		
CAC-11	CAC-PV-1227A	12-14-82	0	NO (Located inside drywell)	0.562 man-rem
		08-31-82	0		
		10-14-80	0.60		
		02-15-79	0		
CAC-12	CAC-PV-1227B	12-14-82	0	NO (Located inside drywell)	0.562 man-rem
		08-13-82	0		
		10-14-80	0.60		
		02-16-79	0		

*WNP = Would Not Pressurize

(1) Replaced seal on vacuum breaker, 1-M-82-2589

(2) Operations cycled valve

(3) Replaced valve seal (V16), 1-M-81-1057

(4) Replaced seal (V17), 1-M-81-1058, and set stroke and limit switches, 1-E-81-1246

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
CAC-14	CAC-PV-1227E	12-15-82	0	YES (31-day LCO)	0.02 man-rem
		10-09-82	0		
		07-25-82	0.068		
		06-02-80	0.246		
		02-15-79	0		
CAC-15	CAC-PV-1260	12-15-82	0	YES (31-day LCO)	0.02 man-rem
		07-25-82	0.0912		
		06-02-80	0.246		
		02-16-79	0		
CAC-16	CAC-PV-1231B	12-14-82	0	NO (Located inside torus)	0.01 man-rem
		08-13-82	0.6021		
		10-14-80	0.148		
		01-26-79	0		
CAC-17	CAC-PV-3440	12-15-82	0	YES (31-day LCO)	0.02 man-rem
		07-18-82	0		
		12-15-79	0		
CAC-18	CAC-PV-1225B	12-15-82	0	YES 1-day LCO)	0.02 man-rem
		07-18-82	0.353		
		02-15-79	0		
CAC-19	CAC-PV-1211F	12-14-82	0	YES (31-day LCO)	0.02 man-rem
		07-26-82	0		
		06-02-80	0.372		
		01-29-79	0		
CAC-20	CAC-PV-1262	12-14-82	0	YES (31-day LCO)	0.02 man-rem
		07-26-82	0		
		06-02-80	0.478		
		02-14-79	0		
CAC-21	CAC-PV-1209A	12-13-82	0	NO (Located inside drywell)	0.0562 man-rem
		08-14-82	0		
		10-28-80	0.385		
		01-30-79	0		

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
CAC-22	CAC-PV-1209B	12-13-82 08-14-82 10-28-80 01-29-79	0 0 0.385 0	NO (Located inside drywell)	0.0562 man-rem
CAC-23	CAC-PV-1205E	12-13-82 08-14-82 11-04-80 01-29-79	0 0 0.385 0	NO (Located inside drywell)	0.0562 man-rem
CAC-24	CAC-PV-1215E	12-14-82 08-13-82 11-04-80 01-29-79	0 0 0.385 0	NO (Located inside torus)	0.01 man-rem
CAC-25	CAC-PV-1211E	12-14-82 07-18-82 02-14-79	0 0 0	YES (31-day LCO)	0.02 man-rem
CAC-26	CAC-PV-3439	12-14-82 07-18-82 02-14-79	0 0 0	YES (31-day LCO)	0.02 man-rem
CAC-39	CAC-PV-1218C	12-16-82 07-19-82	0 0	YES (31-day LCO)	0.125 man-rem
CAC-40	CAC-PV-1219B	12-20-82 07-19-82	0 0	YES (half-scrum)	0.02 man-rem
CAC-41	CAC-PV-1225C	12-18-82 07-19-82	0 0	YES (half-scrum)	0.02 man-rem
CAC-42	CAC-PV-1209D	12-18-82 07-19-82	0 0	YES (half-scrum)	0.02 man-rem
CAC-45	CAC-PV-1219C	12-17-82 07-19-82	0 0	YES (31-day LCO)	0.02 man-rem

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E11-1	E11-F008, F009	03-23-83	0	NO (RHR suction)	0.1 man-rem
		03-10-83	0(1)		
		08-23-82	0		
		06-02-81	0		
		03-10-79	0.747		
E11-2	E11-F011A	03-28-83	0	YES (RHR in seven-day LCO [A loop])	0.125 man-rem
		07-27-82	0		
		05-27-80	8.18		
		01-19-79	0		
E11-3	E11-F011B	12-30-82	5.552	YES (RHR B loop in seven-day LCO)	0.125 man-rem
		05-19-81	13.302		
		05-14-81	WNP		
		05-04-81	WNP(2)		
		03-11-79	8.966		
E11-4	E11-F015A, F017A	03-08-83	2.16(3)	NO (Reactor vessel at pressure)	0.1 man-rem
		02-01-83	0.748		
		08-23-82	3.775		
		07-27-82	1.882		
		06-03-80	0.907		
		03-27-79	0		
E11-5	E11-F015B, F017B	01-24-83	0	NO (Reactor vessel at pressure)	0.1 man-rem
		08-23-82	4.967		
		05-12-81	11.903		
		05-04-81	14.5(4)		
		02-26-79	0		

*WNP = Would Not Pressurize

(1) Rebuilt valve, 1M-83-728 (E11-F009)

(2) Set stroke (LVF053B), 1-E-81-1279

(3) Repack Valve, 1M-82-2053 (F017A)

(4) Set stroke (E11-F017B), 1-E-81-1212

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCPH)		
E11-6	E11-F016A, F021A	03-26-83	0(1)	YES (kHR A loop in seven-day LCO)	0.02 man-rem
		02-01-83	0.253		
		07-27-82	0.8242		
		06-02-80	3.65		
		03-27-79	0		
E11-8	E11-F020A	03-29-83	13.598(2)	YES (RHR A loop in seven-day LCO)	0.125 man-rem
		02-03-83	WNP		
		07-29-82	12.826		
		07-28-82	WNP		
		05-30-80	18.21		
		01-18-79	0		
E11-11	E11-F024A, F027A, F028A	02-02-83	0	YES (RHR A loop in seven-day LCO)	0.125 man-rem
		07-27-82	0		
		05-28-80	0.374		
		03-27-79	0.8		
E11-12	E11-F024B, F027B, F028B	01-28-83	0(3)	YES (RHR B loop in seven-day LCO)	0.125 man-rem
		01-25-83	0		
		05-04-81	0		
		03-07-79	0.75		
E11-13	E11-F025A	02-04-83	0	YES	0.02 man-rem
		07-27-82	0		
		06-30-80	0		
		03-28-79	0		
E11-14	E11-F025B	01-17-83	0	YES	0.02 man-rem
		07-19-82	0		
		03-10-79	0.747		
E11-15	E11-F037D	12-22-82	0.1	YES (half-scrum)	0.02 man-rem
		07-18-82	0		

*WNP = Would Not Pressurize

(1) Replaced Stem, 1M-83-331 (F016A)

(2) Replaced Stem, 1M-83-344

(3) Replaced Bonnet Gasket, 1M-82-2818 (F028B)

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E11-16	E11-F037B	12-16-82 07-18-82	0 0	YES (half-scrum)	0.02 man-rem
E11-17	E11-F043D	12-22-82 07-18-82	0.1 0	YES (half-scrum)	0.02 man-rem
E11-19	E11-F037C	12-16-82 07-18-82	0 0	YES (half-scrum)	0.02 man-rem
E11-20	E11-F043C	12-16-82 07-18-82	0 0	YES (half-scrum)	0.02 man-rem
E11-22	E11-F037A	12-16-82 07-18-82	0 1.150	YES (half-scrum)	0.02 man-rem
E11-23	E11-F097	01-11-83 12-30-82 08-03-82	0(1) 34.43 0.3781	YES	0.02 man-rem
E11-24	E11-F007A	02-01-83 08-10-82	0 0.061	YES (RHR A loop in seven-day LCO)	0.125 man-rem
E11-25	E11-F007B	01-28-83 01-21-83 08-11-82	0(2) 23.02 0	YES (RHR B loop in seven-day LCO)	0.125 man-rem
E11-26	E11-F103A	02-02-83 08-16-82	0 0	NO (Both loops tie in)	0.07 man-rem
E11-27	E11-F103B	01-18-83 08-13-82	0 0	NO (Both loops tie in)	0.07 man-rem
E11-28	E11-F055A	02-04-83 08-16-82 08-13-82	0 0.2735 0.714	NO (Tie into HPCI and B loop RHR)	0.07 man-rem

(1) Replaced Gasket, 1M-83-0061

(2) Repacked and Replaced Gasket, 1M-83-0276

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E11-29	E11-F055B	01-05-83 08-14-82	0.398 0.6530	NO (Tie into HPCI and A loop RHR)	0.07 man-rem
E11-30	E11-V20	02-04-83 08-25-82 08-20-82	0 0.0608 0	NO (Common loop tie-in)	0.07 man-rem
E11-31	E11-V21	01-05-83 08-19-82	0 0.1654	NO (Common loop tie-in)	0.07 man-rem
E11-32	E11-F029	02-22-83 08-20-82	0 0.555	NO (RHR suction)	0.125 man-rem
E21-1	E21-F001A	02-21-83 04-22-81 02-05-79	3.608 0 0.81	YES (Core spray A loop in seven-day LCO)	0.125 man-rem
E21-2	E21-F001B	12-29-82 07-26-82 06-04-80 02-07-79 02-05-79	0.106 0 0.316 0 0.81	YES (Core spray B loop in seven-day LCO)	0.125 man-rem
E21-3	E21-F004A, F005A	02-18-83 02-26-82 04-23-81 01-30-79	0 0 0 0	NO (Reactor vessel under pressure)	0.125 man-rem
E21-4	E21-F004B, F005B	12-23-82 08-24-82 06-04-80 04-29-81 01-30-79	0.168 2.962 0 0 0	NO (Reactor vessel under pressure)	0.125 man-rem
E21-5	E21-F015A	02-21-83 07-28-82 06-02-80 02-01-79	0 0.8219 2.823 0	YES (Core spray A loop in seven-day LCO)	0.125 man-rem

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E21-6	E21-F015B	12-29-82	0	YES (Core spray B loop in seven-day LCO)	0.125 man-rem
		07-25-82	0		
		06-23-80	1.78		
		05-27-80	WNP(1)		
		02-01-79	0		
E21-7	E21-F031A	02-21-83	0	YES (Core spray A loop in seven-day LCO)	0.125 man-rem
		04-21-81	0		
		07-26-79	0		
E21-8	E21-F031B	01-19-83	0	YES (Core spray B loop in seven-day LCO)	0.125 man-rem
		02-24-82	0.2822		
		06-03-80	0.039		
		01-26-79	0		
E41-1	E41-F002, F003	03-22-83	0	NO (Reactor vessel under pressure)	0.125 man-rem
		08-04-82	0.8223		
		07-25-82	WNP		
		07-22-82	WNP(2)		
		01-19-82	WNP(3)		
		06-03-80	2.653		
		01-17-79	0		
E41-2	E41-F012	12-19-82	0	YES (HPCI in 14-day LCO)	0.125 man-rem
		07-28-82	4.174		
		06-01-80	0.03		
		01-17-79	0		
E41-3	E41-F042	12-19-82	0	YES (HPCI in 14-day LCO)	0.125 man-rem
		07-22-82	1.139		
		06-30-80	5.9307		
		06-02-80	WNP(4)		
		01-13-79	0		

*WNP = Would Not Pressurize

(1) Reset torque switch

(2) Repacked and disassembled, 1-M-82-2081

(3) Lapped seat, new pressure seal gasket, 1-E-83-321, 1135, 696, M-82-3148, 1-M-82-3197

(4) Relapped seat (E41-F049)

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
E41-4	E41-F022, F040	02-10-83	0	YES (HPCI in 14-day LCO)	0.125 man-rem
		07-22-82	0		
		06-10-80	0		
		03-16-79	0.60		
E41-6	E41-F075, F079	12-19-82	0	YES (HPCI in 14-day LCO)	0.125 man-rem
		07-22-82	1.090		
		06-06-80	1.9974		
		01-19-79	0		
E41-7	E41-PV-1218D, 1220D	12-28-82	0	YES (HPCI in 14-day LCO)	0.125 man-rem
		07-20-82	0		
		07-19-82	WNP(1)		
E41-8	E41-PV-1219D, 1221D	02-18-83	0	YES (HPCI in 14-day LCO)	0.125 man-rem
		07-18-82	0		
E51-2	E51-F019	12-17-82	0	YES (RCIC in 31-day LCO)	0.125 man-rem
		07-22-82	0		
		03-08-79	0		
E51-3	E51-F031	12-16-82	0	YES (RCIC in 31-day LCO)	0.125 man-rem
		07-22-82	0		
		06-05-80	0		
		01-18-79	0		
E51-4	E51-F002, F028	02-04-83	0	YES (RCIC in 31-day LCO)	0.125 man-rem
		07-18-82	0		
		07-18-82	9.552(2)		
		06-06-80	0		
		01-17-79	0		

*WNP = Would Not Pressurize

(1) Tightened bonnet

(2) Cleaned valve and replaced gasket (F028), 1-M-82-2005

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
G16-1	G16-F003, F004	01-28-83	0	YES	0.125 man-rem
		09-26-82	9.1361		
		09-06-82	WNP		
		09-04-82	WNP		
		08-31-82	WNP		
		08-29-82	WNP		
		05-28-80	0.307		
		02-07-79	0		
G16-2	G16-F019, F020	01-27-83	0.7531	YES	0.125 man-rem
		08-01-82	2.532		
		07-15-82	WNP(1)		
		05-28-80	0.0218		
		04-03-79	2.797		
G31-2	G31-F042	03-11-83	0	NO (System under pressure (1000 lbs))	0.02 man-rem
		08-12-82	0		
SA-1	SA-V448	03-23-83	0	NO (Located inside drywell)	0.093 man-rem
		04-29-81	0		
SA-2	SA-V449	03-23-83	0	YES	0.02 man-rem
		04-30-81	0.076		
TIP-1	TIP-V1	12-17-82	0	NO (Located inside drywell)	0.225 man-rem
		07-19-82	0		
		01-22-79	0		
TIP-2	TIP-V2	12-17-82	0	NO (Located inside drywell)	0.225 man-rem
		07-19-82	0		
		01-22-79	0		
TIP-3	TIP-V3	12-17-82	0	NO (Located inside drywell)	0.225 man-rem
		07-19-82	0		
		01-22-79	0		

*WNP = Would Not Pressurize

(1) Cleaned valve and set stroke (F019), 1-M-82-2083

TEST NO.	TEST VALVES	TEST RESULTS		TEST AT POWER(?)	APPROXIMATE DOSE EXPENDITURE
		DATE	(SCFH)		
TIP-4	TIP-V4	12-17-82	0	NO (Located inside drywell)	0.225 man-rem
		07-19-82	0		
		01-22-79	0		
TIP-5	TIP N2 Check Valve	12-17-82	0	NO (Located inside drywell)	0.225 man-rem
		07-18-82	0		
		01-22-79	0		
TIP-6	TIP N2 Solenoid Valve	12-17-82	0	YES	0.02 man-rem
		07-18-82	0		
		03-26-79	0		

Attachment 2

to Serial: NLS-84-455

Summary of LLRT Program Improvements

- Expanded total ISI staff from two to ten people with three solely dedicated to LLRT/ILRT.
- Significantly revised program in 1982 following an extensive review of containment penetrations to include a larger number of tests.
- Require performance of pre-maintenance LLRTs to determine "as found" containment leakage to more closely monitor valve degradation and overall containment integrity.
- Revised maintenance procedures to ensure the requirements for pre- and post-maintenance LLRTs are determined correctly.
- Leakage trends since 1982 (these values are approximate):

	Unit 1	Unit 2
1982	120 scfh	145 scfh
1983	90 scfh	120 scfh
1984	90 scfh*	90 scfh

* Not a complete cycle for data; Unit 1 has basically been at power throughout 1984.

- For clarification: BSEP performs its ILRT at 49 psig and the pass/fail limit is 0.5% wt/day (L_a). The $.375 L_a$ is used as the criteria for determining whether the ILRTs remain at the 40-month interval or the shorter 18-month interval.