Public Service
Electric and Gas
Company

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APR 28 1998

LR-N980208

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Ladies and Gentlemen:

SUPPLEMENTAL INFORMATION IN RESPONSE TO BULLETIN 96-01
SALEM GENERATING STATION UNIT NO. 1
DOCKET NO. 50-272

Public Service Electric and Gas (PSE&G) committed in letter LR-N96093 dated April 8, 1996, that a supplemental response to Bulletin 96-01 would be submitted within 30 days of completing control rod testing during the current unit restart activities. This supplemental response would include a summary of the testing data and verification of control rod operability.

Attachment 1 contains the relevant control rod drag force testing for Salem Unit 1. Attachment 2 contains a summary of the control rod drop testing for Salem Unit 1 which includes the Beginning of Cycle (BOC) and End of Cycle (EOC) average assembly burn up distributions, the location of each assembly in the core, the control rod drop time, and number of recoils for each assembly.

As stated in the April 8, 1996 letter, based upon a historical review of reactor trip data for the past five years and rod drop testing for the last fuel cycle, all control rod were operable up to the current plant shutdowns for the Salem Units. Based on the rod drop testing data provided in Attachment 1 and 2, PSE&G has determined that the Salem Unit 1 control rods continue to maintain their operability.

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If you have any questions concerning the above information, please do not hesitate to contact us.

Sincerely,

E C Simpson

C Mr. Hubert J. Miller, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. P. Milano, Licensing Project Manager - Salem
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 14E21
Rockville, MD 20852

Mr. S. Morris (X24)
USNRC Senior Resident Inspector - Salem

Mr. K. Tosch, Manager, IV
Bureau of Nuclear Engineering
P.O. Box 415
Trenton, NJ 08625

ATTACHMENT 1
LR-N98208

9.2.3 ATTACHMENT (3)

CRDS DRAG TEST CHECKOFF SHEET

UNIT 1

CORE POSITION	P 10	P 8	P 6	N 3	N 5	N 7	N 9	N 11	N 13	M 12	M 8	M 4	L 3	L 7
D.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.2														
D.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TOOL/CRDS/RCC D.5 (LBS)	440	440	440	440	440	440	440	440	440	440	440	440	440	440
D.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.7a (MAX LBS)	450	460	445	445	445	445	445	450	450	450	455	445	450	455
D.7b (MIN LBS)	435	420	425	425	420	430	425	430	425	425	420	425	425	415
D.8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
INITIALS	[illegible]													
DATE	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97

SHEET 1 OF 4

9.2.3 ATTACHMENT (3)

CRDS DRAG TEST CHECKOFF SHEET

UNIT 1

CORE POSITION	L 13	K 14	K 10	K 8	K 6	K 2	J 3	J 11	J 13	H 14	H 12	H 10	H 8	H 6
D.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.2														
D.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TOOL/CRDS/RCC D.5 (LBS)	440	440	440	440	440	440	440	440	440	440	440	440	440	435
D.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.7a (MAX LBS)	450	450	450	450	445 ~~445~~	450	450	460	455	450	455	455	450	455
D.7b (MIN LBS)	430	425	430	425	430	430	425	410	420	425	425	430	425	420
D.8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
INITIALS														
DATE	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97

SHEET 2 OF 4

~~In the last~~ pot region

9.2.3 ATTACHMENT (3)

CRDS DRAG TEST CHECKOFF SHEET

UNIT 1

CORE POSITION	H 4	H 2	G 3	G 5	G 13	F 14	F 10	F 8	F 6	F 2	E 3	E 9	E 13	D 12
D.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.2														
D.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TOOL/CRDS/RCC D.5 (LBS)	440	440	440	440	445	440	440	440	440	440	435	435	440	440
D.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D.7a (MAX LBS)	460	455	450	450	450	450	445	460	455	450	450	450	450	450
D.7b (MIN LBS)	415	420	415	415	415	420	430	420	425	420	420	420	425	425
D.8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
INITIALS	[illegible]													
DATE	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97

SHEET 3 OF 4

~~Fax the data~~ ~~for region~~ [illegible]

9.2.3 ATTACHMENT (3)

CRDS DRAG TEST CHECKOFF SHEET

UNIT 1

CORE POSITION	D 8	D 4	C 3	C 5	C 7	C 9	C 11	C 13	B 10	B 8	B 6			
D.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D.2														
D.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
TOOL/CRDS/RCC D.5 (LBS)	425	440	440	440	440	440	440	440	440	440	440			
D.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D.7a (MAX LBS)	DASH pa 470	460	450	450	465	460	455	450	450	455	450			
D.7b (MIN LBS)	410	420	430	425	430	420	425	425	425	425	430			
D.8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
INITIALS	[illegible]													
DATE	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97	12-5-97			

SHEET 4 OF 4

In the dash pot region

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ATTACHMENT 2
LR-N98208

SALEM UNIT 1 CYCLE 13 **4/15/98**

INITIAL HOT ROD DROP TIME DATA

W.O. 950106135, 950727015

RCCA Position ID	Core Location	BOC Burnup (MWD/MTU)	Projected EOC Burnup (MWD/MTU)	Drop Time (Sec.)	No. of Recoils
1SA1	D4	15370	38265	1.33	6
1SA2	D12	15370	38265	1.33	6
1SA3	M12	15370	38265	1.34	6
1SA4	M4	15370	38265	1.35	5
2SA1	G5	24428	43166	1.35	4
2SA2	E9	24428	43166	1.34	5
2SA3	J11	24428	43166	1.33	4
2SA4	L7	24428	43166	1.36	4
1SB1	G3	15374	37070	1.34	6
1SB2	C9	15374	37070	1.34	7
1SB3	J13	15374	37070	1.34	6
1SB4	N7	15374	37070	1.33	7
2SB1	C7	15328	37019	1.36	6
2SB2	G13	15328	37019	1.36	5
2SB3	N9	15328	37019	1.34	8
2SB4	J3	15328	37019	1.33	6
1SC1	H2	15910	35278	1.35	8
1SC2	B8	15910	35278	1.37	8
1SC3	H14	15910	35278	1.35	7
1SC4	P8	15910	35278	1.37	6
1SD1	F6	11354	34965	1.36	7
1SD2	F10	11354	34965	1.35	8
1SD3	K10	11354	34965	1.36	8
1SD4	K6	11354	34965	1.34	8
1A1	E3	19553	41240	1.32	6
1A2	C11	19553	41240	1.34	7
1A3	L13	19553	41240	1.33	6
1A4	N5	19553	41240	1.34	7
2A1	C5	19541	41184	1.37	7
2A2	E13	19541	41184	1.38	5
2A3	N11	19541	41184	1.37	8
2A4	L3	19541	41184	1.35	5
1B1	D8	15154	34213	1.34	5
1B2	M8	15154	34213	1.33	6
2B1	H4	15154	34213	1.32	5
2B2	H12	15154	34213	1.32	6
1C1	C3	0	17668	1.36	7
1C2	C13	0	17668	1.35	7
1C3	N13	0	17668	1.35	8
1C4	N3	0	17668	1.36	8
2C1	H6	14751	36981	1.33	8
2C2	F8	14751	36981	1.34	6
2C3	H10	14751	36981	1.33	7
2C4	K8	14751	36981	1.36	8
1D1	F2	13240	33237	1.39	6
1D2	B10	13240	33237	1.38	6
1D3	K13	13240	33237	1.38	5
1D4	P6	13240	33237	1.38	6
2D1	B6	13208	32979	1.38	6
2D2	F14	13208	32979	1.39	5
2D3	P10	13208	32979	1.37	7
2D4	K2	13208	32979	1.39	5
2D5	H8	15167	38699	1.35	5

Prepared by

Chcecked by

NOTE: Drop Time is from Rx Trip Breaker Shunt Coil energized to Dashpot enty.