

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

February 28, 2000

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

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Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT NOS. 1 AND 2
ANNUAL WHOLE BODY EXPOSURE REPORT

Pursuant to Technical Specifications 6.9.1.5.a, enclosed is the Annual Whole Body Exposure Report for North Anna Power Station Unit Nos. 1 and 2 for the reporting period of January 1, 1999 to December 31, 1999.

If you have any questions or require additional information, please contact us.

Very truly yours,



W. R. Matthews
Site Vice President

Enclosure

Commitments made in this letter:

1. None

IE574

cc: U. S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, Georgia 30303

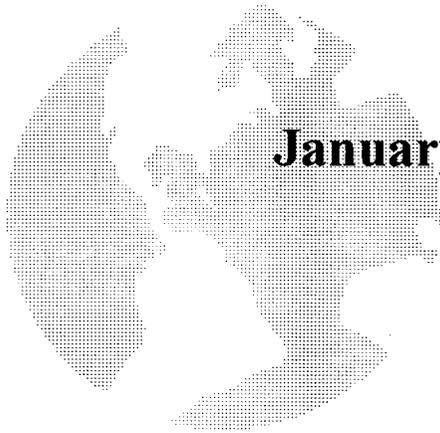
REIRS, Project Manager
Office of Nuclear Regulatory Research
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. M. J. Morgan
NRC Senior Resident Inspector
North Anna Power Station

North Anna Power Station
Post Office Box 402
Mineral, VA 23117

VIRGINIA POWER

ANNUAL EXPOSURE REPORT



January 1, 1999 - December 31, 1999

RECORDED ANNUAL WHOLE BODY EXPOSURE REPORT

NORTH ANNA POWER STATION

JANUARY 1, 1999 - DECEMBER 31, 1999

PREPARED BY: 
Teresa G. Johnson
Supervisor
Exposure Control & Instrumentation

REVIEWED BY: 
Erich W. Dreyer
Supervisor Health Physics
(Technical Services)

REVIEWED BY: 
A.H. Stafford
Superintendent
Radiological Protection

APPROVED BY: 
William R. Matthews
Site Vice President
North Anna Power Station

F O R W A R D

This report is submitted as required by Technical Specifications 6.9.1.5.a for North Anna Power Station Units 1 and 2.

PERSONNEL RADIATION EXPOSURE MANAGEMENT SYSTEM
Man-rem Exposure - Work/Job Function Report
 (Based on Self-reading Dosimetry)
NORTH ANNA POWER STATION
 License Numbers NPF-4, NPF-7
 Calendar Year 1999

Work Function	Number of Workers			Total Man-rem			Totals
	Station Employees	Utility Employees	Contract Workers	Station Employees	Utility Employees	Contract Workers	
REACTOR OPERATIONS&S							
Total	164	18	12	2.756	.099	.012	2.867
MAINTENANCE PERSONNEL	35	0	5	.245	.000	.000	.245
OPERATING PERSONNEL	86	9	2	2.212	.038	.001	2.251
HEALTH PHYSICS PERSONNEL	14	0	5	.198	.000	.011	.209
SUPERVISORY PERSONNEL	25	9	0	.074	.061	.000	.135
ENGINEERING PERSONNEL	4	0	0	.027	.000	.000	.027
OTHERS	0	0	0	.000	.000	.000	.000

Work Function	Number of Workers			Total Man-rem			Totals
	Station Employees	Utility Employees	Contract Workers	Station Employees	Utility Employees	Contract Workers	
INSERVICE INSPECTION							
Total	54	18	44	1.758	.123	4.786	6.667
MAINTENANCE PERSONNEL	6	0	10	.000	.000	1.157	1.157
OPERATING PERSONNEL	18	13	2	.979	.008	.233	1.220
HEALTH PHYSICS PERSONNEL	16	0	6	.013	.000	.080	.093
SUPERVISORY PERSONNEL	2	0	0	.000	.001	.000	.001
ENGINEERING PERSONNEL	12	5	26	.766	.114	3.316	4.196
OTHERS	0	0	0	.000	.000	.000	.000

Work Function	Number of Workers			Total Man-rem			Totals
	Station Employees	Utility Employees	Contract Workers	Station Employees	Utility Employees	Contract Workers	
ROUTINE MAINTENANCE							
Total	628	387	646	39.604	1.263	29.438	70.305
MAINTENANCE PERSONNEL	259	17	433	23.773	.089	22.783	46.645
OPERATING PERSONNEL	190	224	67	6.106	.446	1.004	7.556
HEALTH PHYSICS PERSONNEL	69	16	104	7.492	.246	5.251	12.989
SUPERVISORY PERSONNEL	40	51	9	1.493	.285	.024	1.802
ENGINEERING PERSONNEL	70	79	32	.740	.197	.376	1.313
OTHERS	0	0	1	.000	.000	.000	.000

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WASTE DISPOSAL							
Total	122	2	5	.766	.003	.001	.770
MAINTENANCE PERSONNEL	42	1	1	.139	.000	.001	.140
OPERATING PERSONNEL	49	1	0	.215	.002	.000	.217
HEALTH PHYSICS PERSONNEL	27	0	4	.364	.000	.000	.364
SUPERVISORY PERSONNEL	4	0	0	.048	.001	.000	.049
ENGINEERING PERSONNEL	0	0	0	.000	.000	.000	.000
OTHERS	0	0	0	.000	.000	.000	.000

Work Function	Number of Workers			Total Man-rem			Totals
	Station Employees	Utility Employees	Contract Workers	Station Employees	Utility Employees	Contract Workers	
REFUELING							
Total	113	28	59	10.403	.329	2.629	13.361
MAINTENANCE PERSONNEL	54	1	39	8.261	.020	1.965	10.246
OPERATING PERSONNEL	34	22	2	1.371	.198	.000	1.569
HEALTH PHYSICS PERSONNEL	15	0	16	.492	.000	.647	1.139
SUPERVISORY PERSONNEL	8	4	0	.163	.105	.000	.268
ENGINEERING PERSONNEL	2	1	2	.116	.006	.017	.139
OTHERS	0	0	0	.000	.000	.000	.000

Work Function	Number of Workers			Total Man-rem			Totals
	Station Employees	Utility Employees	Contract Workers	Station Employees	Utility Employees	Contract Workers	
SPECIAL MAINTENANCE							
Total	143	50	132	.604	.074	.154	.832
MAINTENANCE PERSONNEL	68	4	122	.150	.003	.138	.291
OPERATING PERSONNEL	17	33	8	.283	.029	.014	.326
HEALTH PHYSICS PERSONNEL	50	3	1	.171	.000	.000	.171
SUPERVISORY PERSONNEL	5	5	0	.000	.042	.000	.042
ENGINEERING PERSONNEL	3	5	1	.000	.000	.002	.002
OTHERS	0	0	0	.000	.000	.000	.000

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	Station Employees	Utility Employees	Contract Workers	Station Employees	Utility Employees	Contract Workers	
DESIGN CHANGES							
Total	0	0	2	.000	.000	.110	.110
MAINTENANCE PERSONNEL	0	0	2	.000	.000	.110	.110
OPERATING PERSONNEL	0	0	0	.000	.000	.000	.000
HEALTH PHYSICS PERSONNEL	0	0	0	.000	.000	.000	.000
SUPERVISORY PERSONNEL	0	0	0	.000	.000	.000	.000
ENGINEERING PERSONNEL	0	0	0	.000	.000	.000	.000
OTHERS	0	0	0	.000	.000	.000	.000

ALL WORK FUNCTIONS

Total	1224	503	900	55.891	1.891	37.130	94.912
MAINTENANCE PERSONNEL	464	23	612	32.568	.112	26.154	58.834
OPERATING PERSONNEL	394	302	81	11.166	.721	1.252	13.139
HEALTH PHYSICS PERSONNEL	191	19	136	8.730	.246	5.989	14.965
SUPERVISORY PERSONNEL	84	69	9	1.778	.495	.024	2.297
ENGINEERING PERSONNEL	91	90	61	1.649	.317	3.711	5.677
OTHERS	0	0	1	.000	.000	.000	.000

	Number of Workers			Totals
	Station Employees	Utility Employees	Contract Workers	
Total Individuals	632	403	703	1,738