



APR 4 2001

SERIAL: BSEP 01-0027

T.S. 5.6.1

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62  
OCCUPATIONAL RADIATION EXPOSURE REPORT

Gentlemen:

In accordance with Technical Specification 5.6.1 for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2, Carolina Power & Light Company submits the Occupational Radiation Exposure Report for January 1, 2000, through December 31, 2000. The total person-rem data provided in the report reflects the exposure for personnel receiving greater than 100 mrem per year. Note that the station total thermoluminescent dosimeter (TLD) dose for 2000 was 321.776 person-rem or 160.888 person-rem per unit.

This submittal contains no commitments. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing, at (910) 457-2073.

Sincerely,

David C. DiCello  
Manager – Regulatory Affairs  
Brunswick Steam Electric Plant

GMT

Enclosure: Occupational Radiation Exposure Report

IEB/

cc (with enclosure):

U. S. Nuclear Regulatory Commission, Region II  
ATTN: Mr. Luis A. Reyes, Regional Administrator  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission  
ATTN: Mr. Theodore A. Easlick, NRC Senior Resident Inspector  
8470 River Road  
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission  
ATTN: Mr. Donnie J. Ashley (Mail Stop OWFN 8G9)  
11555 Rockville Pike  
Rockville, MD 20852-2738

The Honorable Jo A. Sanford  
Chair - North Carolina Utilities Commission  
P.O. Box 29510  
Raleigh, NC 27626-0510

# ENCLOSURE

## BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2 NRC DOCKET NOS. 50-325 AND 50-324 OPERATING LICENSE NOS. DPR-71 AND DPR-62 OCCUPATIONAL RADIATION EXPOSURE REPORT

NUMBER OF PERSONNEL AND PERSON-REM BY WORK AND JOB FUNCTION  
JANUARY 1, 2000, THROUGH DECEMBER 31, 2000

WORK AND JOB FUNCTION	NUMBER OF PERSONNEL > 100 MREM			TOTAL PERSON-REM		
	STATION	UTILITY	CONTRACT	STATION	UTILITY	CONTRACT
REACTOR OPERATIONS AND SURVEILLANCE						
MAINTENANCE PERSONNEL	50	0	27	9.040	0.000	11.103
OPERATING PERSONNEL	64	0	0	15.494	0.000	0.000
HEALTH PHYSICS PERSONNEL	57	0	17	20.327	0.000	6.225
SUPERVISORY PERSONNEL	6	0	0	0.832	0.000	0.000
ENGINEERING PERSONNEL	11	0	5	1.887	0.000	1.345
ROUTINE MAINTENANCE						
MAINTENANCE PERSONNEL	104	1	193	30.756	0.725	73.307
OPERATING PERSONNEL	4	0	8	1.553	0.000	1.014
HEALTH PHYSICS PERSONNEL	8	0	4	1.875	0.000	0.896
SUPERVISORY PERSONNEL	3	0	1	0.951	0.000	1.450
ENGINEERING PERSONNEL	26	1	46	5.087	0.109	19.598
INSERVICE INSPECTION						
MAINTENANCE PERSONNEL	0	0	3	0.000	0.000	0.490
OPERATING PERSONNEL	5	0	0	1.322	0.000	0.000
HEALTH PHYSICS PERSONNEL	0	0	0	0.000	0.000	0.000
SUPERVISORY PERSONNEL	0	0	0	0.000	0.000	0.000
ENGINEERING PERSONNEL	5	0	18	1.183	0.000	5.820
SPECIAL MAINTENANCE						
MAINTENANCE PERSONNEL	8	0	3	1.319	0.000	0.582
OPERATING PERSONNEL	1	0	0	0.201	0.000	0.000
HEALTH PHYSICS PERSONNEL	0	0	0	0.000	0.000	0.000
SUPERVISORY PERSONNEL	1	0	0	0.265	0.000	0.000
ENGINEERING PERSONNEL	0	0	2	0.000	0.000	0.381
WASTE PROCESSING						
MAINTENANCE PERSONNEL	0	0	0	0.000	0.000	0.000
OPERATING PERSONNEL	0	0	0	0.000	0.000	0.000
HEALTH PHYSICS PERSONNEL	0	0	0	0.000	0.000	0.000
SUPERVISORY PERSONNEL	0	0	0	0.000	0.000	0.000
ENGINEERING PERSONNEL	0	0	0	0.000	0.000	0.000
REFUELING						
MAINTENANCE PERSONNEL	17	0	59	3.937	0.000	13.240
OPERATING PERSONNEL	2	0	0	0.214	0.000	0.000
HEALTH PHYSICS PERSONNEL	2	0	0	0.295	0.000	0.000
SUPERVISORY PERSONNEL	2	0	0	0.267	0.000	0.000
ENGINEERING PERSONNEL	3	0	20	0.393	0.000	3.357
TOTAL						
MAINTENANCE PERSONNEL	179	1	285	45.052	0.725	98.722
OPERATING PERSONNEL	76	0	8	18.784	0.000	1.014
HEALTH PHYSICS PERSONNEL	67	0	21	22.497	0.000	7.121
SUPERVISORY PERSONNEL	12	0	1	2.315	0.000	1.450
ENGINEERING PERSONNEL	45	1	91	8.550	0.109	30.501
GRAND TOTAL *	379	2	406	110.416	0.947	157.684

\* Corrected for TLD results

### Special Maintenance Activities:

	<u>Person-Rem</u>		<u>Person-Rem</u>
On-line Outage Preparation	3.680	Radwaste High Radiation Area Maintenance	6.285
Refueling Outage	182.539	Condensate Phase Separator Polyelectrolyte Mod.	6.023
On-line Operations Activities	12.470	On-line Refuel Floor/Spent Fuel Pool	7.039
On-line Health Physics Activities	11.482	Fuel Shipping Cask Wash-Down Drain Mod.	4.527
On-line Corrective/Preventive Maintenance	10.652	Supplemental Spent Fuel Pool Cooling	3.674
Turbine Maintenance at Power	6.659		

255.03 Total