Progress Energy

TS 5.6.1

APR 2 0 2005

SERIAL: BSEP 05-0018

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

Subject: 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 for 2004

Ladies and Gentlemen:

In accordance with Technical Specification 5.6.1 for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2, Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc., submits the enclosed Occupational Radiation Exposure Report for January 1, 2004, through December 31, 2004. The total person-rem data provided in the report reflects the exposure for personnel receiving greater than 100 millirem per year.

No regulatory commitments are contained in this submittal. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor – Licensing/Regulatory Programs, at (910) 457-2073.

Sincerely,

ETO'N

Edward T. O'Neil
Manager – Support Services
Brunswick Steam Electric Plant

CRE/cre

Enclosure: Occupational Radiation Exposure Report for 2004

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Chair - North Carolina Utilities Commission
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Occupational Radiation Exposure Report for 2004						
	Number of Personnel > 100 mRem			Total Person-Rem		
Work and Job Function	Station	Utility	Contract	Station	Utility	Contract
Reactor Operations and Surveillance						
Maintenance Personnel	22	1	5	0.555	0.010	0.028
Operating Personnel	51	0	1	8.476	0.000	0.176
Health Physics Personnel	43	4	9	7.877	0.015	0.221
Supervisory Personnel	6	0	1	0.459	0.000	0.122
Engineering Personnel	7	0	1	0.276	0.000	0.180
Routine Maintenance						
Maintenance Personnel	112	9	129	20.415	1.075	12.655
Operating Personnel	18	0	0	0.572	0.000	0.000
Health Physics Personnel	37	0	13	3.034	0.000	1.052
Supervisory Personnel	6	1	1	0.673	0.002	0.003
Engineering Personnel	28	0	10	2.072	0.000	2.537
Inservice Inspection						
Maintenance Personnel	6	1	5	0.083	0.007	0.030
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	1	0	0.000	0.118	0.000
Engineering Personnel	8	0	0	0.689	0.000	0.000
Special Maintenance[1]						
Maintenance Personnel	44	0	54	2.108	0.016	8.778
Operating Personnel	1	0	0	0.017	0.000	0.000
Health Physics Personnel	13	3	9	0.426	0.086	0.270
Supervisory Personnel	1	1	1	0.084	0.002	0.791
Engineering Personnel	6	0	7	0.124	0.000	0.303

[1] Special Maintenance includes: turbine maintenance performed at power, spent fuel shipping activities, and various other maintenance activities not normally considered routine in nature.

Occupational Radiation Exposure Report for 2004						
	Number of Personnel > 100 mRem			Total Person-Rem		
Work and Job Function	Station	Utility	Contract	Station	Utility	Contract
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	1	0.000	0.000	0.070
Refueling						
Maintenance Personnel	112	23	183	15.803	3.068	38.622
Operating Personnel	47	0	0	4.559	0.000	0.000
Health Physics Personnel	37	8	37	3.096	1.290	6.141
Supervisory Personnel	8	1	0	0.479	0.282	0.000
Engineering Personnel	30	0	19	4.686	0.000	4.061
Total						
Maintenance Personnel	296	34	376	38.964	4.176	60.113
Operating Personnel	117	0	1	13.624	0.000	0.176
Health Physics Personnel	130	15	68	14.433	1.391	7.684
Supervisory Personnel	21	4	3	1.695	0.404	0.916
Engineering Personnel	79	0	38	7.847	0.000	7.151
Grand Total	643	53	486	76.563	5.971	76.040
Grand Total (Corrected for TLD Results)[2]				91.718	7.153	91.092

[2] Correction factor = 1.197947. The station total thermoluminescent dosimeter (TLD) dose, which includes personnel receiving ≤ 100 mRem, for 2004 was 244.562 person-rem or 122.281 person-rem per unit.