

April 30, 2005

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United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454 and STN 50-455

Subject: 2004 Occupational Radiation Exposure Report

In accordance with Technical Specification 5.6.1, "Occupational Radiation Exposure Report," Byron Station is submitting the facility 2004 Occupational Radiation Exposure Report. This report is a tabulation of station, utility, and other personnel (i.e., contractors) who received an annual deep dose equivalent of greater than 100 mrem. The associated collective deep dose equivalent is reported according to work and job functions.

If you have any questions regarding this information, please contact W. Grundmann, Regulatory Assurance Manager, at (815) 406-2800.

Respectfully,

(signed by)
Stephen E. Kuczynski
Site Vice President
Byron Nuclear Generating Station

SEK/LD/tlf/rah

Attachment

Occupational Radiation Exposure Report

Facility: BYR Year: 2004

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
<u>Reactor Operations and Surveillance</u>				
Maintenance	15	0	2	17
Operations	17	1	0	18
Health Physics	10	0	0	10
Supervisory	1	0	0	1
Engineering	3	0	0	3
Total	46	1	2	49

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
0.039	0.000	0.005	0.044
0.957	0.008	0.000	0.965
0.060	0.000	0.000	0.060
0.022	0.000	0.000	0.022
0.090	0.000	0.000	0.090
1.168	0.008	0.005	1.181

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
<u>Routine Maintenance</u>				
Maintenance	44	1	164	209
Operations	17	5	1	23
Health Physics	13	2	14	29
Supervisory	5	1	17	23
Engineering	4	0	2	6
Total	83	9	198	290

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
7.247	0.108	35.425	42.780
1.902	0.830	0.165	2.897
2.711	0.203	2.340	5.254
0.643	0.217	3.016	3.876
0.831	0.000	0.492	1.323
13.334	1.358	41.438	56.13

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
<u>Inservice Inspection</u>				
Maintenance	1	0	1	2
Health Physics	2	0	0	2
Total	3	0	1	4

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
0.001	0.000	0.012	0.013
0.011	0.000	0.000	0.011
0.012	0	0.012	0.024

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
<u>Special Maintenance</u>				
Maintenance	2	0	26	28
Operations	1	0	0	1
Health Physics	1	0	2	3
Supervisory	0	0	11	11
Total	4	0	39	43

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
0.002	0.000	4.857	4.859
0.002	0.000	0.000	0.002
0.001	0.000	0.117	0.118
0.000	0.000	3.357	3.357
0.005	0	8.331	8.336

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
Waste Processing				
Maintenance	4	0	3	7
Operations	4	0	0	4
Health Physics	10	0	1	11
Supervisory	1	0	0	1
Total	19	0	4	23

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
0.015	0.000	0.011	0.026
0.008	0.000	0.000	0.008
0.044	0.000	0.124	0.168
0.003	0.000	0.000	0.003
0.070	0.000	0.135	0.205

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
Refueling				
Maintenance	0	0	2	2
Operations	4	0	0	4
Health Physics	1	0	1	2
Total	5	0	3	8

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
0.000	0.000	0.012	0.012
0.210	0.000	0.000	0.210
0.001	0.000	0.014	0.015
0.211	0.000	0.026	0.237

	Number of Personnel (> 100 mrem)			
	Station Employees	Utility Employees	Contractors/ Others	Total Persons
Total by Job Function				
Maintenance	44	1	165	210
Operations	17	4	1	22
Health Physics	13	1	14	28
Supervisory	5	1	18	24
Engineering	4	0	2	6
Total	83	7	200	290

Quantity of Person-rem			
Station Employees	Utility Employees	Contractors/ Others	Total Persons
7.304	0.253	40.241	47.798
3.015	0.836	0.165	4.016
2.831	0.200	2.595	5.626
0.668	0.217	6.375	7.260
0.921	0.000	0.492	1.413
14.739	1.506	49.868	66.113

Number of Employees with >100 mrem: 290