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April 24, 2003

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: Oconee Nuclear Site
Docket Nos. 50-269, 50-270 and 50-287
Revision to the 2001 Annual Effluent Release Report

Gentlemen:

Attached are revised pages for the 2001 Oconee Annual Effluent Release Report. The revision is due to incorrect data entry of tritium concentration values for the Unit Vent, 3RIA53, and 4RIA45 monthly effluent calculations. The data entry corrections resulted in an additional 12.1 curies of airborne tritium for 2001. The calculated maximum airborne organ dose increased to 3.83E-02 mrem from 3.52E-02 mrem representing less than 0.1 percent of the 45 mrem annual Selected Licensee Commitments maximum airborne organ dose limit.

Should there be questions concerning this report please contact Judy E. Smith at (864) 885-4309.

Very truly yours,

W W Foster for R A Jones

R. A. Jones
Site Vice President
Oconee Nuclear Site

Attachments

IE48

xc: Mr. L. A. Reyes
Regional Administrator, Region II

Mr. L. N. Olshan
Project Manager, ONRR

Mr. Mel Shannon
Senior Resident Inspector, ONS

Mr. Henry Porter
Division of Radioactive Waste Management

American Nuclear Insurers
ANI Library
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West Hartford, CT 06107-2445

Mr. William Nestel
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700 Galleria Place, Suite 100
Atlanta, GA 30339-5957

TABLE 1A

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Oconee Nuclear Station Units 1, 2, & 3

REPORT FOR 2001	Unit	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
A. Fission and Activation Gases						
1. Total Release	Ci	5.40E+00	4.02E+00	1.79E-01	2.49E+00	1.21E+01
2. Avg. Release Rate	µCi/sec	6.95E-01	5.11E-01	2.25E-02	3.13E-01	3.83E-01
B. Iodine-131						
1. Total Release	Ci	1.15E-05	6.08E-04	0.00E+00	2.10E-05	6.40E-04
2. Avg. Release Rate	µCi/sec	1.48E-06	7.73E-05	0.00E+00	2.65E-06	2.03E-05
C. Particulates Half Life >= 8 days						
1. Total Release	Ci	0.00E+00	2.38E-06	4.83E-06	5.53E-07	7.76E-06
2. Avg. Release Rate	µCi/sec	0.00E+00	3.03E-07	6.07E-07	6.96E-08	2.46E-07
D. Tritium						
1. Total Release	Ci	3.00E+01	1.76E+01	2.34E+01	1.42E+01	8.53E+01
2. Avg. Release Rate	µCi/sec	3.86E+00	2.24E+00	2.95E+00	1.78E+00	2.70E+00

TABLE 1B

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS EFFLUENTS - ELEVATED RELEASES - CONTINUOUS MODE

Oconee Nuclear Station Units 1, 2, & 3

REPORT FOR 2001	Unit	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
1. Fission and Activation Gases						
XE-133	Ci	8.72E-02	0.00E+00	0.00E+00	0.00E+00	8.72E-02
XE-135	Ci	0.00E+00	0.00E+00	6.84E-02	0.00E+00	6.84E-02
Totals for Period...	Ci	8.72E-02	0.00E+00	6.84E-02	0.00E+00	1.56E-01
2. Iodines						
I-131	Ci	1.14E-05	5.98E-04	0.00E+00	1.87E-05	6.28E-04
I-133	Ci	1.15E-05	7.77E-05	2.42E-05	1.06E-05	1.24E-04
Totals for Period...	Ci	2.29E-05	6.76E-04	2.42E-05	2.93E-05	7.52E-04
3. Particulates Half Life >= 8 days						
CS-137	Ci	0.00E+00	2.25E-06	2.65E-06	0.00E+00	4.91E-06
Totals for Period...	Ci	0.00E+00	2.25E-06	2.65E-06	0.00E+00	4.91E-06
4. Tritium						
H-3	Ci	2.63E+01	1.63E+01	2.21E+01	1.35E+01	7.81E+01
Totals for Period...	Ci	2.63E+01	1.63E+01	2.21E+01	1.35E+01	7.81E+01

TABLE 1C

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS EFFLUENTS - GROUND RELEASES - CONTINUOUS MODE

Oconee Nuclear Station Units 1, 2, & 3

REPORT FOR 2001	Unit	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
1. Fission and Activation Gases						
XE-133	Ci	0.00E+00	6.43E-01	0.00E+00	0.00E+00	6.43E-01
Totals for Period...	Ci	0.00E+00	6.43E-01	0.00E+00	0.00E+00	6.43E-01
2. Iodines						
I-131	Ci	0.00E+00	6.02E-06	0.00E+00	8.91E-07	6.91E-06
I-133	Ci	0.00E+00	0.00E+00	0.00E+00	7.90E-07	7.90E-07
Totals for Period...	Ci	0.00E+00	6.02E-06	0.00E+00	1.68E-06	7.70E-06
3. Particulates Half Life >= 8 days						
CO-58	Ci	0.00E+00	0.00E+00	8.80E-07	0.00E+00	8.80E-07
CS-137	Ci	0.00E+00	1.11E-07	1.29E-06	0.00E+00	1.40E-06
Totals for Period...	Ci	0.00E+00	1.11E-07	2.17E-06	0.00E+00	2.28E-06
4. Tritium						
H-3	Ci	3.70E+00	1.27E+00	1.36E+00	5.58E-01	6.89E+00
Totals for Period...	Ci	3.70E+00	1.27E+00	1.36E+00	5.58E-01	6.89E+00

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS ANNUAL DOSE SUMMARY REPORT

Oconee Nuclear Station Units 1, 2, & 3

1st Quarter 2001

=== IODINE, H3, and PARTICULATE DOSE LIMIT ANALYSIS======= Quarter 1 2001 ====

Period-Limit	Critical Age	Critical Organ	Dose (mrem)	Limit (mrem)	Max % of Limit
Q1 - Maximum Organ Dose	CHILD	THYROID	9.85E-03	2.25E+01	4.38E-02

Maximum Organ Dose Receptor Location: 1.0 Mile SW
Critical Pathway: Vegetation

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
H-3	9.77E+01

=== NOBLE GAS DOSE LIMIT ANALYSIS========== Quarter 1 2001 ====

Period-Limit	Dose (mrad)	Limit (mrad)	% of Limit
Q1 - Maximum Gamma Air Dose	1.05E-04	1.50E+01	7.00E-04

Maximum Gamma Air Dose Receptor Location: 1.0 Mile SW

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
XE-133	9.05E+01

Q1 - Maximum Beta Air Dose	3.14E-04	3.00E+01	1.05E-03

Maximum Beta Air Dose Receptor Location: 1.0 Mile SW

Major Contributors (5% or greater to total)

Nuclide	Percentage
XE-133	8.99E+01
KR-85	5.14E+00

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS ANNUAL DOSE SUMMARY REPORT

Oconee Nuclear Station Units 1, 2, & 3

3rd Quarter 2001

=== IODINE, H3, and PARTICULATE DOSE LIMIT ANALYSIS======= Quarter 3 2001 ====

Period-Limit	Critical Age	Critical Organ	Dose (mrem)	Limit (mrem)	Max % of Limit
Q3 - Maximum Organ Dose	CHILD	LIVER	6.97E-03	2.25E+01	3.10E-02

Maximum Organ Dose Receptor Location: 1.0 Mile SW
Critical Pathway: Vegetation

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
H-3	9.92E+01

=== NOBLE GAS DOSE LIMIT ANALYSIS========== Quarter 3 2001 ====

Period-Limit	Dose (mrad)	Limit (mrad)	% of Limit
Q3 - Maximum Gamma Air Dose	1.86E-05	1.50E+01	1.24E-04

Maximum Gamma Air Dose Receptor Location: 1.0 Mile SW

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
AR-41	5.09E+01
XE-135	4.05E+01
XE-133	8.50E+00

Q3 - Maximum Beta Air Dose	1.77E-05	3.00E+01	5.90E-05

Maximum Beta Air Dose Receptor Location: 1.0 Mile SW

Major Contributors (5% or greater to total)

Nuclide	Percentage
XE-135	5.43E+01
XE-133	2.65E+01
AR-41	1.88E+01

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS ANNUAL DOSE SUMMARY REPORT

Oconee Nuclear Station Units 1, 2, & 3

4th Quarter 2001

=== IODINE, H3, and PARTICULATE DOSE LIMIT ANALYSIS======= Quarter 4 2001 ====

Period-Limit	Critical Age	Critical Organ	Dose (mrem)	Limit (mrem)	Max % of Limit
Q4 - Maximum Organ Dose	CHILD	THYROID	4.50E-03	2.25E+01	2.00E-02

Maximum Organ Dose Receptor Location: 1.0 Mile SW
Critical Pathway: Vegetation

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
H-3	9.04E+01
I-131	9.34E+00

=== NOBLE GAS DOSE LIMIT ANALYSIS========== Quarter 4 2001 ====

Period-Limit	Dose (mrad)	Limit (mrad)	% of Limit
Q4 - Maximum Gamma Air Dose	5.20E-05	1.50E+01	3.47E-04

Maximum Gamma Air Dose Receptor Location: 1.0 Mile SW

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
XE-133	8.55E+01
XE-135	1.39E+01

Q4 - Maximum Beta Air Dose	1.45E-04	3.00E+01	4.83E-04

Maximum Beta Air Dose Receptor Location: 1.0 Mile SW

Major Contributors (5% or greater to total)

Nuclide	Percentage
XE-133	9.10E+01
XE-135	6.38E+00

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
PERIOD 1/1/01 TO 1/1/02
GASEOUS ANNUAL DOSE SUMMARY REPORT

Oconee Nuclear Station Units 1, 2, & 3

ANNUAL 2001

=== IODINE, H3, and PARTICULATE DOSE LIMIT ANALYSIS======= Annual 2001 ========

Period-Limit	Critical Age	Critical Organ	Dose (mrem)	Limit (mrem)	Max % of Limit
Yr - Maximum Organ Dose	CHILD	THYROID	3.83E-02	4.50E+01	8.51E-02

Maximum Organ Dose Receptor Location: 1.0 Mile SW
Critical Pathway: Vegetation

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
H-3	6.77E+01
I-131	3.20E+01

=== NOBLE GAS DOSE LIMIT ANALYSIS========== Annual 2001 =======

Period-Limit	Dose (mrad)	Limit (mrad)	% of Limit
Yr - Maximum Gamma Air Dose	2.75E-04	3.00E+01	9.17E-04

Maximum Gamma Air Dose Receptor Location: 1.0 Mile SW

Major Isotopic Contributors (5% or greater to total)

Nuclide	Percentage
XE-133	8.46E+01
XE-135	7.80E+00
AR-41	6.39E+00

Yr - Maximum Beta Air Dose	7.62E-04	6.00E+01	1.27E-03

Maximum Beta Air Dose Receptor Location: 1.0 Mile SW

Major Contributors (5% or greater to total)

Nuclide	Percentage
XE-133	9.08E+01

Oconee Nuclear Station
2001 Radioactive Effluent Releases
40CFR190 Uranium Fuel Cycle Dose* Calculation Results

Maximum Total Body Dose = 3.82E-01 mrem

Maximum Location: Site Boundary (1.0 mile), South-West Sector
Critical Age = Adult

Liquid and Gas Effluent Contribution to Maximum Total Body Dose

Liquid Effluent Dose = 3.64E-01 mrem = 95% of total

Critical Path = Fish
Major Contributors = Cs-137 (86.4%)
H-3 (8.0%)

Gas Effluent Dose = 1.78E-02 mrem = 5% of total

Critical Path = Vegetable
Major Contributor = H-3 (99.6%)

Maximum Organ Dose = 6.32E-01 mrem

Maximum Location: Site Boundary (1.0 mile), South-West Sector
Critical Age = Adult
Critical Organ = GILLI

Liquid and Gas Effluent Contribution to Maximum Organ Dose

Liquid Effluent Dose = 6.14E-01 mrem = 97% of total

Critical Path = Fish
Major Contributors = Nb-95 (88.4%)

Gas Effluent Dose = 1.78E-02 mrem = 3% of total

Critical Path = Vegetable
Major Contributors = H-3 (99.8%)

* Annual dose limits from 40CFR190.10(a) of 25 mrem whole body, 75 mrem to the thyroid, and 25 mrem to any other organ.