

**Florida
Power**
CORPORATION

October 26, 1979

File: 3-0-17

Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Compliance to 40 CFR190

Dear Sir:

As required by Mr. W. P. Gammill's letter of September 17, 1979 (received on October 4, 1979), Florida Power's method of demonstrating compliance with 40 CFR 190 is attached. This procedure, which is an alternate to the method referenced in your letter, will be implemented on or before December 1, 1979.

If you require any further information, please contact me.

Sincerely,

FLORIDA POWER CORPORATION

G. C. Moore
G. C. Moore
Assistant Vice President
Power Production

Attachment

GCMhewRc
DN-88

1270 356

7911050272 *

STATE OF FLORIDA

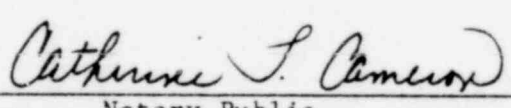
COUNTY OF PINELLAS

G. C. Moore states that he is the Assistant Vice President, Power Production, of Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.



G. C. Moore

Subscribed and sworn to before me, a Notary Public in and for the State and County above named, this 26th day of October, 1979.



Notary Public

Notary Public, State of Florida at Large,
My Commission Expires: August 8, 1983

CameronNotary 3(D12)

1270 357

DEMONSTRATION OF COMPLIANCE TO 40 CFR 190

1.0 PURPOSE

To demonstrate compliance to the EPA radiation dose limitations of 40 CFR 190: that the dose or dose commitment to any member of the public from uranium fuel cycle sources is limited to less than or equal to 25 mrem to the total body or any organ (except thyroid, which is limited to less than or equal to 75 mrem) over 12 consecutive months.

2.0 SCOPE

This procedure will evaluate the calculated dose to any member of the public for the last four (4) consecutive quarters on a semiannual basis to ascertain if the calculated dose is within the 40 CFR 190 limitations. This procedure will also evaluate the calculated dose to any member of the public for the last two (2) consecutive quarters and will predict the dose for the next two (2) consecutive quarters on a semiannual basis to ascertain if the total projected dose is within 40 CFR 190 limitations. Dose contributions from other nuclear fuel cycle facilities at the same site or within a radius of five (5) miles will also be considered. Compliance to 40 CFR 190 will be demonstrated within 30 days of the issuance of each Effluent and Waste Disposal Semiannual Report.

3.0 APPLICABLE REFERENCE DOCUMENTS

- 3.1 Title 40, Code of Federal Regulations, Part 190.
- 3.2 Effluent and Waste Disposal Semiannual Report for the most recent two (2) semiannual periods.
- 3.3 NSSD-14 "MAINTENANCE AND CONTROL OF RECORDS".

4.0 DEFINITIONS

None

5.0 RESPONSIBILITIES AND ACTIONS

- 5.1 Within 30 days of the issuance of each Effluent and Waste Disposal Semiannual Report, the Senior Radiological Licensing Engineer will, from Table I-1A of each referenced Effluent and Waste Disposal Semiannual Report, complete Attachment 1 for Quarters A, B, C, and D (which represent the last four (4) consecutive quarters, respectively).

DEMONSTRATION OF COMPLIANCE TO 40 CFR 190

- 5.2 Perform a least square analysis of the mrem/quarter data for the four quarters A, B, C, D and predict the total mrem/quarter dose for Quarters E and F (which represent the next two (2) quarters, respectively) on Attachment 1.
- 5.3 Complete Attachment 2, using the data from Attachment 1.
 - 5.3.1 TOTAL BODY DOSE
 - 5.3.1.1 If the total dose for Quarters A, B, C, and D for the Total Body Dose is less than or equal to 25 mrem, partial compliance to 40 CFR 190 has been demonstrated.
 - 5.3.1.2 If the total dose for Quarters C, D, E, and F for the Total Body Dose is less than or equal to 25 mrem, partial compliance to 40 CFR 190 has been demonstrated.
 - 5.3.1.3 If either step 5.3.1.1 or 5.3.1.2 has failed to demonstrate partial compliance to 40 CFR 190, obtain a variance from the Nuclear Regulatory Commission to permit releases which exceed or may exceed 40 CFR 190.
 - 5.3.2 TOTAL ORGAN DOSE
 - 5.3.2.1 If the total dose for Quarters A, B, C, and D for the Organ Dose is less than or equal to 25 mrem, partial compliance to 40 CFR 190 has been demonstrated.
 - 5.3.2.2 If the total dose for Quarters C, D, E, and F for the Organ Dose is less than or equal to 25 mrem, partial compliance to 40 CFR 190 has been demonstrated.
 - 5.3.2.3 If either step 5.3.2.1 or 5.3.2.2 has failed to demonstrate partial compliance to 40 CFR 190, determine the actual thyroid dose and highest organ dose of the remaining organs from the data used to develop the Effluent and Waste Disposal Semiannual Reports. Complete additional Attachments 1 and 2 to document these calculations. If the thyroid doses for Quarters A, B, C, and D and Quarters C, D, E, and F are less than or equal to 75 mrem, partial compliance to 40 CFR 190 has been demonstrated. If the highest remaining organ doses for Quarters A, B, C, and D and Quarters C, D, E, and F, are less than or equal to 25 mrem, partial compliance to 40 CFR 190 has been demonstrated. If partial compliance to 40 CFR 190 has not been demonstrated for both the thyroid and the highest organ dose, obtain a variance from the Nuclear Regulatory Commission to permit releases which exceed or may exceed 40 CFR 190.
- 5.4 If no variances from the NRC are required, notify the Manager, Nuclear Operations, the Nuclear Plant Manager, the ChemRad Protection Engineer, and the Nuclear QA/QC Manager that compliance to 40 CFR 190 has been fully demonstrated.

DEMONSTRATION OF COMPLIANCE TO 40 CFR 190

5.5 All information obtained in accordance with this procedure will be reviewed by the Manager, Nuclear Support Services, and filed per NSSD-14.

6.0 INTERPRETATION CONTACT

Senior Radiological Licensing Engineer

7.0 REVISION HISTORY

Rev. 0

Date: 12/1/79

Original Release.

1270 360

DEMONSTRATION OF COMPLIANCE TO 40 CFR 190

Attachment 1

	Quarter					
	A	B	C	D	E	F
Total Body Dose (mrem/year)						
Beta Air Dose*	—	—	—	—	N/A	N/A
Gamma Air Dose*	—	—	—	—	N/A	N/A
<u>Individual Total Body Dose -</u>						
Continuous Gaseous	—	—	—	—	N/A	N/A
Batch Gaseous	—	—	—	—	N/A	N/A
Continuous Liquid	—	—	—	—	N/A	N/A
Batch Liquid	—	—	—	—	N/A	N/A
Total mrem/year	—	—	—	—	N/A	N/A
Total mrem/quarter	—	—	—	—	—	—
Organ Dose (mrem/year)						
<u>Individual Organ Dose -</u>						
Continuous Gaseous	—	—	—	—	N/A	N/A
Batch Gaseous	—	—	—	—	N/A	N/A
Continuous Liquid	—	—	—	—	N/A	N/A
Batch Liquid	—	—	—	—	N/A	N/A
Total mrem/year	—	—	—	—	N/A	N/A
Total mrem/quarter	—	—	—	—	—	—

Completed by _____
Date _____

*For purposes of this procedure, 1 mrem = 1 mrad

1270 361

DEMONSTRATION OF COMPLIANCE TO 40 CFR 190

Attachment 2

<u>Total Body Dose (mrem/quarter)</u>		<u>Organ Dose (mrem/quarter)</u>	
Quarter A	_____	Quarter A	_____
B	_____	B	_____
C	_____	C	_____
D	_____	D	_____
TOTAL DOSE	_____ mrem	TOTAL DOSE	_____ mrem
Quarter C	_____	Quarter C	_____
D	_____	D	_____
E	_____	E	_____
F	_____	F	_____
TOTAL DOSE	_____ mrem	TOTAL DOSE	_____ mrem

Are there other nuclear fuel cycle facilities at the Crystal River Site or within a radius of five miles? _____ YES _____ NO.

Completed by _____
Date _____

1270 362