

United States  
Nuclear Regulatory Commission



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# Report of Investigation

CRYSTAL RIVER NUCLEAR PLANT:

ALLEGED VIOLATION OF PLANT DESIGN BASIS

Office of Investigations

Reported by OI: **RII**

**6/6**

## SYNOPSIS

On August 4, 1995, the U.S. Nuclear Regulatory Commission (NRC), Region II, Office of Investigations (OI), initiated this supplemental investigation to determine if the shift operators at the Florida Power Corporation (FPC) Crystal River Nuclear Plant deliberately performed an unauthorized test and deliberately violated plant procedures.

The investigation consisted of reviewing records, licensee internal memoranda and letters, problem reports, plant procedures, and an internal licensee investigation into this matter. OI Region II then conducted interviews of the midnight shift operators as well as Operations and Engineering management. Their transcripts were provided to the Region II technical staff to assist them in their on-site inspection efforts regarding Crystal River operations.

Based upon the evidence developed in this investigation, it is concluded that the shift supervisor, assistant shift supervisor, and two chief operators on the midnight shift of September 4 and 5, 1994, deliberately conducted an evolution, not required by plant conditions, for the specific purpose of gathering data. Furthermore, when the allowable makeup tank overpressure was exceeded, the operators deliberately delayed taking appropriate action to reduce makeup tank overpressure while gathering that data.

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# LIST OF INTERVIEWEES

	<u>EXHIBIT(S)</u>
ATKINSON, James T., Nuclear Operator.....	2
BEARD, Jr., Percy M., Senior Vice President, Nuclear Production.....	9
BERGSTROM, Carl W., Nuclear Operations Support Manager.....	12
BOLDT, Gary L., Vice President, Nuclear Production.....	10
CZUFIN, David M., Manager, Nuclear Mechanical Shop.....	13
FIELDS, David A., Nuclear Shift Operator.....	6
FLEMING, Paul V., Senior Nuclear Licensing Engineer.....	11
HALNON, Gregory H., Manager Nuclear Plant Operations.....	14 & 15
HICKLE, Bruce J., Director, Nuclear Plant Operations.....	17
HINMAN, James P., Project Engineer, Nuclear Power Technical Support....	18
SALTSMAN, Philip E., Senior Nuclear Mechanical Engineer.....	16
SMITH, Christine, Nuclear Operator.....	3
STEWART, Jack D. Jr., Chief Nuclear Operator.....	4
Van SICKLIN, Mark, Chief Nuclear Operator.....	5
WEISS, Robert P., Assistant Nuclear Shift Supervisor.....	7

## DETAILS OF INVESTIGATION

### Applicable Regulations

Allegation: Possible Deliberate Violation of Plant Procedure

10 CFR 50.59: Changes, tests and experiments

Technical Specification 5.6.1.1

Operating Procedure 103B, Plant Operating Curves, Curve 8

Administrative Instruction-500 (AI-500), Conduct of Operations, paragraph 4.3.1, Procedural Compliance

### Purpose of Investigation

This supplemental investigation was initiated on August 4, 1995, by the U.S. Nuclear Regulatory Commission (NRC), Region II (RII), Office of Investigations (OI), to determine if the shift operators at the Crystal River Nuclear Plant (CRNP) deliberately conducted an unauthorized evolution on September 4, 1994 (Exhibit 1).

### Background

On approximately August 3, 1995, Florida Power Corporation (FPC) was preparing for a predecisional enforcement conference in regard to OI Case No. 2-94-036, which concluded that on September 5, 1994, CRNP control room operators deliberately violated operating procedures when they performed an unauthorized evolution with the makeup tank (MUT). They (FPC) discovered that the same control room crew had, on September 4, 1994, performed an evolution which was almost identical to the one they performed on September 5, 1994. When interviewed in December 1994 and January 1995, the operators did not disclose the September 4, 1994, evolution to the NRC, OI, or FPC management during their review of the incident.

### Reinterview of Reactor Operators

The following operators who were on the September 5, 1994, shift were reinterviewed regarding their participation in the September 4, 1994, evolution (Exhibits 2 through 7).

<u>NAME</u>	<u>TITLE</u>	<u>DATE OF INTERVIEW</u>
James T. ATKINSON	Nuclear Operator	08/08/95
Christine M. SMITH	Nuclear Operator	08/08/95
Jack D. STEWART, Jr.	Former Chief Nuclear Operator	08/08/95
Mark Van SICKLIN	Former Chief Nuclear Operator	08/08/95

### Coordination with Licensee

FPC conducted an internal investigation into the following:

1. Did the operating crew conduct an unauthorized evolution on the MUT on September 4, 1994?
2. Did members of the operating crew agree among themselves not to disclose the September 4, 1994, evolution?
3. What are the generic implications or extent of condition (e.g., did the crew perform other unauthorized evolutions); were unauthorized evolutions performed by other crews?

A copy of the FPC final report of investigation, dated August 29, 1995, was received by OI:RII. At FPC's request for a very limited distribution, a copy of their report is being maintained in the case file. A copy was provided to the RII staff on September 20, 1995, under separate cover, for technical assessment.

### Coordination with NRC Staff

Copies of transcripts, the licensee investigative report, as well as additional technical data provided by the operators, were reviewed by the RII technical staff to assess whether or not a violation of NRC regulations had occurred. By memorandum, dated January 16, 1996 (Exhibit 19), Albert F. GIBSON, Director, Division of Reactor Safety, advised that the operators' actions caused the licensee to be in violation of NRC regulations.

### Evidence

#### Interview of FIELDS (Exhibit 6)

On August 31, 1995, FIELDS was interviewed by OI:RII and stated substantially as follows:

FIELDS stated he and his crew performed an evolution on September 4, 1994, which was very similar to the one performed on September 5, 1994. They did the evolution by filling the MUT to 86 inches, pressurized it to the maximum allowed by Curve 8, and selected the bleed handle on the main control board to the bleed position and bled the tank down as allowed by Operating Procedure 402. To the best of his recollection, there was not a person dressed out in the auxiliary to vent hydrogen like on the September 5 evolution, but the operator was notified via the control board to stand by and be ready to vent the tank if necessary. FIELDS, when asked about the annunciator alarm response, stated they had reviewed the procedure and knew what response was required and knew that basically it said to vent the pressure off or lower the level. FIELDS claimed there was no requirement to immediately clear the alarm and felt comfortable that they were covered under AI-500.

### Conclusion

Based upon the evidence developed in this investigation, it is concluded that the shift supervisor, assistant shift supervisor, and two chief operators on the midnight shift of September 4 and 5, 1994, deliberately conducted an evolution, not required by plant conditions, for the specific purpose of gathering data. Furthermore, when the allowable MUT overpressure was exceeded, the operators deliberately delayed taking appropriate action to reduce MUT overpressure while gathering that data.

## SUPPLEMENTAL INFORMATION

This matter was referred to the Department of Justice on January 22, 1996. William P. SELLERS, Senior Legal Advisor for Regulatory Enforcement, General Litigation and Legal Advice Section, Criminal Division, stated he declines prosecution in lieu of civil remedies available to the NRC.



## LIST OF EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
1	Investigation Status Record, dated August 4, 1995.
2	Transcribed Interview of ATKINSON, dated August 8, 1995.
3	Transcribed Interview of SMITH, dated August 8, 1995.
4	Transcribed Interview of STEWART, dated August 8, 1995.
5	Transcribed Interview of Van SICKLIN, dated August 8, 1995.
6	Transcribed Interview of FIELDS, dated August 31, 1995.
7	Transcribed Interview of WEISS, dated August 31, 1995.
8	Memorandum from HINMAN to HICKLE, dated September 2, 1994.
9	Transcribed Interview of BEARD, dated November 28, 1995.
10	Transcribed Interview of BOLDT, dated November 28, 1995.
11	Transcribed Interview of FLEMING, dated November 28, 1995.
12	Transcribed Interview of BERGSTROM, dated November 29, 1995.
13	Transcribed Interview of CZUFIN, dated November 29, 1995.
14	Transcribed Interview of HALNON, dated November 29, 1995.
15	Transcribed Interview of HALNON, dated November 30, 1995.
16	Transcribed Interview of SALTSMAN, dated November 29, 1995.
17	Transcribed Interview of HICKLE, dated November 30, 1995.
18	Transcribed Interview of HINMAN, dated November 30, 1995.
19	Memorandum from GIBSON to William J. McNulty, OI:RII, dated January 16, 1996.