



**Florida  
Power**  
CORPORATION

NOV 13 2 11:04

TIC  
50-302

November 9, 1979

File: 3-0-3-a-3

Mr. J. P. O'Reilly  
Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Suite 3100  
101 Marietta Street, N.W.  
Atlanta, GA 30303

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
IE Bulletin 79-14 Report

Dear Mr. O'Reilly:

By letter, dated October 30, 1979, we submitted to you a copy of the IE Bulletin 79-14 Report for Florida Power Corporation's Crystal River Unit 3 Nuclear Plant, which was prepared by Gilbert Associates, Inc.

The report was Florida Power Corporation's response to NRC IE Bulletin 79-14, dated July 2, 1979, including Revision 1, dated July 18, 1978, Supplement 1, dated August 15, 1979, and Supplement 2, dated September 7, 1979, for the Crystal River Unit No. 3 power plant.

We are now resubmitting to you the following three (3) pages from the subject report containing revisions or information previously identified to be supplied later:

5-1  
5-4  
5-6

790800

COPIES

General Office 3201 Thirty-fourth Street South • P.O. Box 14042, St. Petersburg, Florida 33733 • 813-866-5151

1399 330

7911270 542

If you have any questions regarding these changes, please contact this office.

Very truly yours,

FLORIDA POWER CORPORATION

*E. C. Simpson for*

G. C. Moore  
Assistant Vice President  
Power Production

Simpson(IEBul79-14)DN75

Enclosure

cc: Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Director  
Division of Operating Reactors  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

1399 331

## SECTION 5 SUMMARY REPORT

The verification of safety related piping system seismic analysis was completed in five phases. The following is a summary of those phases and the results found.

### Phase I Site Inspection

Section 3 of this report describes in detail the work done as a part of the site inspection. The discrepancies found warranted the re-analysis of thirteen (13) out of two hundred and five (205) total analyses. The decision to rerun an analysis was based on the magnitude of change and the margin between the original stress level and the code allowable stress level. As of the date of this report all of the re-analysis have been completed with only one line showing a new stress level above the code allowable. This line is identified on the list of rerun analysis attached to the end of this section as Rerun No. 3, analysis number CR 152. In this case the pipe stress is above the FSAR committed allowable stress level of  $1.2 S_h$  for 2 OBE but below  $1.2 S_h$  for 1 OBE. Since the 2 OBE loading is more stringent than current requirements applicable to nuclear plants it was determined that the plant could continue to operate safely. An additional support has been designed and will be installed which will lower the stress to below the code allowable stress.

### Phase II Valves

The valve weights and centers of gravity as used in the original analysis were checked against the valve manufacturers drawing which in accordance with FPC's construction acceptance records represents the installed valve. Out of seven hundred and twenty four (724) valves identified as having been used in the analysis, as of the date of this report six hundred and eighty eight (688) have been checked. Seven (7) analyses have been identified as requiring a rerun. None of these lines have resulted in an overstressed condition.

### Phase III Pipe

Pipe material, diameter and wall thickness as used in the original analysis was checked against the pipe fabricators spool sheets which in accordance with FPC's construction acceptance records represents the installed piping. As of the date of this report two hundred and three (203) of two hundred and five (205) analyses have been checked against these records and no discrepancies have been found which would warrant a re-analysis. The material discrepancies found have been limited to the substitution of one type specification stainless steel for the original. In these cases the installed pipe material had the same modulus of elasticity and allowable stress level as the analyzed material and therefore did not require re-analysis.

### Phase IV DELETED

1399 332

Rerun #5

Analysis No. CR-148

- a. Reason for rerun: Support assembly identified as rigid rod type on isometric was identified as spring type by inspection.
- b. Type Analysis: Seismic - OBE
- c. Original Stress Level: 5519 psi
- d. New Stress Level: 5524 psi
- e. Resolution: Satisfactory

Rerun #6

Analysis No. CR-143

- a. Reason for rerun: Support assembly identified as rigid rod type on isometric was identified as spring type by inspection.
- b. Type Analysis: Seismic - OBE
- c. Original Stress Level: 3007 psi
- d. New Stress Level: 3030 psi
- e. Resolution: Satisfactory

Rerun #7

Analysis No. CR-108

- a. Reason for rerun: Section of piping was rerouted in comparison to isometric.
- b. Type Analysis: Seismic - OBE
- c. Original Stress Level: 2512 psi
- d. New Stress Level: 3034 psi
- e. Allowable Stress Level: 7359 psi
- f. Resolution: Satisfactory

Rerun #8

Analysis No. CR-146

- a. Reason for rerun: Spring type support assembly SWH-466 was not installed.
- b. Type Analysis: Deadload
- c. Original Stress Level: 1630 psi
- d. New Stress Level: 4924 psi
- e. Allowable Stress Level: 14475 psi
- f. Resolution: Satisfactory

1399 333

Rerun #13      Analysis No. EDS-C-026

- a. Reason for rerun: Piping reroute
- b. Type Analysis: Seismic - OBE
- c. Original Stress Level; 1398 psi
- d. New Stress Level; 2091 psi
- e. Allowable Stress Level: 6797 psi
- f. Resolution: Satisfactory

Rerun #14      Analysis CR-46 (see rerun #11)

- a. Reason for rerun: Valve weight(s) and/or center of gravity differences.
- b. Type Analysis: Seismic - OBE
- c. Original Stress Level: 2074 psi
- d. New Stress Level: 3739 psi
- e. Allowable Stress Level: 5857 psi
- f. Resolution: Satisfactory

Rerun #15      Analysis CR-53

- a. Reason for rerun: Valve weight(s) and/or center of gravity differences.
- b. Type Analysis: Seismic - OBE
- c. Original Stress Level: 7438 psi
- d. New Stress Level: 7455 psi
- e. Allowable Stress Level: 8587 psi
- f. Resolution: Satisfactory

1399 334