



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30323

Report No.: 50-302/85-17

Licensee: Florida Power Corporation  
3201 34th Street, South  
St. Petersburg, FL 33733

Docket No.: 50-302

License No.: DPR-72

Facility Name: Crystal River 3

Inspection Conducted: April 2-5 and 15-19, 1985

Inspector: J. J. Blake  
for N. Economos

5/20/85  
Date Signed

Approved by: J. J. Blake  
J. J. Blake, Section Chief  
Engineering Branch  
Division of Reactor Safety

5/28/85  
Date Signed

SUMMARY

Scope: This routine, announced inspection entailed 74 inspector-hours on site in the areas of inspector action on previous enforcement matters; inspector identified follow-up items; ten year outage inservice inspection (ISI) work observation, procedure review and evaluation of ISI data; observation of welding activities, review of welder qualification program; broken make-up pump MUP-1C stud; Eddy Current Examination of once through steam generators.

Results: One violation was identified - Control of Field Welding - paragraph 5.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*V. R. Roppel, Nuclear Plant Engineering and Technical Services Manager
- \*J. Lander, Nuclear Outage and Modifications Manager
- \*C. G. Brown, Assistant Nuclear Outage Modifications Manager
- \*W. L. Rossfeld, Site Nuclear Compliance Manager
- \*C. G. Brown, Assistant Nuclear Outage Modifications Manager
- \*J. Alberdi, Site Nuclear Operations Technical Services Manager
- \*K. R. Wilson, Supervisor Site Nuclear Licensing Manager
- \*W. G. Newman, III, Nuclear ISI Specialist
- \*J. C. Hicks, Material Technology Manager
- \*B. F. Szymanski, Nuclear Welding Engineer
- \*J. Derrico, Material Technology

Other licensee employees contacted included construction craftsmen, technicians and office personnel.

#### Other Organizations

Babcock and Wilcox (B&W) Special Products and Integrated Field Services  
R. N. Brown, Manager, Field Operations  
G. A. Terning, Level III Examiner (U/T)  
R. A. Michalski, Level II Examiner U/T  
C. E. Thompson, ISI Coordinator

Fluor Mechanical Services, Inc. (FLUOR)

- \*J. J. Warren, Project Engineer
- J. Dexter, Field Engineer
- B. Drake, Welding Engineer
- J. Burlotos, Mechanical Engineer

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on April 19, 1985, with those persons indicated in paragraph 1 above. The licensee was informed of the inspection findings listed below and again during a telephone conference on April 24, 1985, requested by the licensee to discuss further the inspection findings.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

Violation 302/85-17-01, Control of Field Welding activities, paragraph 5.

Unresolved Item 302/85-17-02, Control of Filler Metal

Inspector Followup Item (IFI) 302/85-17-03, Eddy Current Inspection of Once-through Steam Generator (OTSG) "B" Tubes, paragraph 7.

IFI 302/85-17-04, Failure Analysis of Pump MUP-1C Broken Stud, paragraph 8.

3. Licensee Action on Previous Enforcement Matters

(Open) Unresolved Item (302/84-26-07): Review the licensee's contractual relationship with the onsite contractor to determine welder qualification requirements.

This item was identified as a result of an allegation made to the Commission, concerning welder qualification of the contracted welding organization, Fluor. The Resident Inspector reported that he reviewed the welder qualification process and concluded that welder qualifications may not be in accordance with Code requirements in that,

- a. Welders formally qualified by the licensee's former contractor, Catalytic, have not been requalified by Fluor; and,
- b. Current Fluor welders have been qualified by Florida Power Corporation (FPC) procedures, but not by Fluor procedures.

In order to gain a better understanding of this issue, the inspector held discussions with cognizant licensee personnel, and reviewed all pertinent documents. As a result of this work effort the inspector has determined that the licensee's decision to transfer qualification records of welders previously employed by Catalytic to the present weld contractor Fluor, was based in part on the following consideration: ASME Section XI, IWA-4300(c), states in part that - "Welders need not be employed directly by the repair organization provided the use of such welders is controlled by the Quality Assurance Program of the repair organization. This program shall include...requirements for complete and exclusive administration and technical supervision of all welders by the repair organization. In this case FPC has assumed the role of the "repair organization". Also, in a interoffice correspondence memo issued by Material Technology on March 26, 1984, the licensee states that:

Welders qualified by Catalytic were under FPC's QA program and followed the FPC Welder Qualification Program for recordkeeping. All aspects of Catalytic's Welder Qualification was subject to review, surveillance, and approval by FPC. FPC and Catalytic procedures were used interchangeably at times utilizing each other's supervision, and many of the Catalytic welders were qualified by radiography done by FPC.

In order to ascertain whether the aforementioned Code requirement and FPC's position could be supported by objective evidence, the inspector reviewed welder qualification records selected at random, and other related documents e.g., memoranda. This record research and review disclosed that:  
 a) welders were qualified to Catalytic's weld procedures b) welder qualification records are on a Catalytic document c) welder qualifications

were certified by Catalytic's Welding Engineer d) welder performance qualifications were updated and kept in Catalytic's files.

The inspector discussed his findings with cognizant licensee representatives and stated that based on the review of records generated while Catalytic was the weld contractor, there was no evidence to support the requirement of ASME Section XI, IWA-4300(c)(1), which stipulates that the repair organization, (licensee) exercise complete and exclusive administrative and technical supervision of all welders. For similar reasons, the inspector stated that the statement in the March 26, 1984 memo cannot be substantiated by objective evidence.

Since the issue under discussion involves compliance with an administrative code requirement and not a technical requirement, e.g., welder performance adequacy, the licensee offered to review the possible options that could be taken to resolve this issue in a satisfactory manner. Therefore, this unresolved item will remain open pending review of licensee action(s) on this matter on a future inspection.

(Closed) Violation (302/84-14-01): Summary Status Listing of Pump and Valve Tests. The licensee's letters of response dated June 29, 1984, November 1, 1984, and January 18, 1985, have been reviewed and determined acceptable by Region II. The inspector held discussions with the Nuclear Records Management Supervisor and examined the corrective actions as stated in the letters of response. The inspector concluded that the licensee had determined the full extent of the subject noncompliance, performed the necessary follow-up actions to correct the present conditions and developed the necessary corrective actions to preclude recurrence of the unsatisfactory records storage conditions. The corrective actions identified in the letters of response have been implemented.

(Closed) Unresolved Item (302/84-14-02): Missing Pump Test Records. This matter was discussed with cognizant licensee personnel who verified the records of the requested pump tests were on file and produced copies for the inspector's review.

(Closed) Unresolved Item (302/84-14-03): Pump Reference Value Ranges. This matter was discussed with cognizant licensee personnel who stated that the pump test alert and action range limits, in Surveillance Procedure SP-340, Rev. 33, questioned during the inspection documented in Report 302/84-14 have been changed and the procedure revised. The new limits are in line with Code requirements and are intended to be used by the test engineer for comparison with those on the summary list of a newly developed matrix which contains baseline values.

(Closed) Inspector Followup Item (302/84-14-04): Inconsistency in Makeup Pump Record. This matter was identified when a review of Makeup Pump MUP-1B discharge pressures for January 4, 1982 and June 3, 1982, from pressure gage (MV-2-PI) were 2730 psig and 150 psig, respectively.

The inspector discussed this matter with the licensee and reviewed a memorandum, Serial No. PER 84-0270, November 20, 1984, written at the request of the inspector to explain the inconsistency, to describe the evaluation of the condition in question, and the measures taken to correct the problem. As described in the aforementioned memo, the data in question was taken to verify closure for check valves MUV-6 and MUV-7 on the discharge side of Makeup Pump 1B. The licensee's investigation determined that both pressure gages were on the upstream side of the valves and could not provide any meaningful data on valve position under most conditions. Therefore, the licensee has revised the applicable procedure to require the measure of backflow by comparing pump suction pressure to makeup tank pressure. The licensee's position is that, although this does not necessarily verify individual valve closure, it shows that the check valves on the discharge side of the two idle makeup pumps have closed. The licensee concludes that if this is done in conjunction with the pump tests, as one pump is secured, then it will demonstrate that the check valves for that pump have closed.

(Closed) Violation (302/82-03-01): Failure to Retrieve Construction Radiographs. The licensee's letters of response dated April 30, 1982 and August 13, 1982, along with Quality Programs Surveillance Report (QPSR) No 84-CHL-28 January 17, 1985, have been reviewed and determined acceptable by the Region II staff. The inspector held discussions with the Nuclear Records Management Supervisor and examined the corrective actions as stated in the letter of response. The inspector concluded that the licensee had determined the full extent of the subject noncompliance, performed the necessary follow-up actions to correct the present conditions and developed the necessary corrective actions to preclude recurrence of the unsatisfactory records storage conditions. The corrective actions identified in the letters of response have been implemented.

#### 4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraph 5.

#### 5. Independent Inspection (92706)

##### a. Welding of Safety-Related Piping

On the evening of April 18, 1985, the inspector performed a walk-through inspection in the fab shop to observe welding of safety-related pipe welds in progress. The inspector observed two completed welds on a pipe assembly fabricated for the makeup system (MU). The welds, which were numbered MU-85-74 and -75 were being fabricated in accordance with ANSI B31.7, 1969 Edition, Class 1 requirements. In that both welds had been welded out at the time of this inspection, the inspector observed the surface of the completed welds for uniformity, contour, cleanliness undercut, mismatch and reinforcement height.

Also, the inspector reviewed related quality records including weld data sheets filler metal issue slips and NDE records as applicable for completeness, clarity and accuracy. As a result of this review and discussions with welders who made the welds, the inspector made the following observations:

- (1) The designated welding procedure, WPS 8/8-TS-Q, approved and issued by the cognizant welding engineer, required the welds to be fabricated with a combination Tungsten Inert Gas (TIG)/Shielded Metal Arc (SMAW) technique. However, contrary to this requirement both welds were fabricated with a procedure requiring the use of the TIG process only. Through discussions with craft and field supervision the inspector ascertained that a total of 21 welds had been fabricated over a three-week period in a similar manner which was in violation of the work instructions, on the authorized Weld Data Sheet. Moreover, discussions with the cognizant Fluor welding engineer on the morning of April 19, 1985, disclosed that at the time the weld package was issued to the field, the welding foreman in charge disagreed with the weld procedure selection and met with the welding engineer in order to have the procedure changed. During this discussion the welding engineer indicated to the inspector that he had given no authorization to the foreman to change the documented instructions on the weld data sheet and indicated that it was his understanding that the work would proceed as directed. In subsequent discussions with the licensee, the inspector stated that he had serious concerns over the adequacy of the welding QA/QC program because it appears that 21, Class 1, weld joints were fabricated with an unauthorized welding procedure and without detection by QA/QC even though adherence to Weld Data Sheet and Weld Procedure Specification is an inspection point requiring verification. Also, the inspector stated that proceeding to perform work which is knowingly in violation of procedural requirements indicates a disregard and/or lack of knowledge of the regulation which requires documented instructions, and activities to be accomplished with such documented instructions. During this discussion the licensee informed the inspector that on April 18, 1985, the same day the inspector identified the problem, QC had issued a Nonconforming Operations Report NCOR #85-58 on this issue and asked whether this would be regarded as a licensee identified item. The inspector has reviewed this matter with management and has determined that for the reasons stated above, it cannot be considered as a licensee identified item. Performing work without an approved documented procedure and the failure to verify weld procedure adherence as required by the applicable weld control procedure appears to be in violation of 10 CFR 50, Appendix "B", Criterion V, and was identified as a Violation 50-302/85-17-01, Control of Field Welding.

- (2) During this work effort the inspector reviewed filler metal issue slips for completeness and accuracy and the transfer of information to the weld sheet. In addition, the inspector reviewed the applicable Nuclear Modification and Outages Procedure MOP-412, Rev. 0, "Control of Welding Consumables", held discussions with craft and supervision to ascertain whether the program met regulatory and Code requirements. As a result of this review and discussions, the inspector noted the following:

FPC does not issue filler metal to a welder thru the use of an individual rod issue ticket, authorized by the weld foreman practice in the nuclear industry, instead they use an individual who is authorized to withdraw filler metal from the rod issuing station. The procedure (MOP-412) does not define the authorized individual, except to the extent that he is one trained in the requirements of the procedure.

He withdraws an unspecified quantity of material sufficient to supply any number of welders working on a designated job. The type of material the amount issued, work request number and the name of the individual, that it was issued to, is documented on a form entitled Welding Electrode Withdrawal Order (WEWO) which is numbered. Traceability is then maintained by documenting on the Weld Data Sheet the WEWO number, weld identification, welder identification and date.

In discussions with licensee representatives during this inspection and again by telephone on April 24, 1985, the inspector stated that the procedure is ambiguous in that it does not describe clearly and succinctly the fact that material is issued to an individual who subsequently distributes it to welders in the field. Also, as stated earlier the amount/quantity of material issued to the authorized individual by the attendant is not specified nor is the amount given the welders defined.

Moreover, the procedure places no clearly defined constraints on the length of time that material can remain in the possession of a welder; except that he must return it when work is completed and/or the need no longer exists, which can be interpreted to mean any length of time required to complete a particular job.

Further, the procedure allows the material to be used on more than one job, provided that it is the proper type and size for each job, e.g., MOP-412, §3.3.7. "Electrodes/filler metal withdrawn in accordance with this procedure may be used on more than one job." However, it does not specify the individual responsible for deciding whether the material meets code and regulatory requirements. In response to these questions, the licensee agreed to review the procedure and address these questions. In view of the licensee's position, the staff agreed to identify this matter as an unresolved item until the licensee's actions can be reviewed on a

future inspection. Unresolved Item 302/85-17-02, Control of Filler Metal.

## 6. NDE Inservice Inspection (ISI)

During this inspection outage, fifth refueling, outage No. 6, ISI examinations were being performed by Babcock and Wilcox under contract with FPC. The examinations were being accomplished in accordance with the ASME Boiler and Pressure Vessel Code, Section XI, 1974 edition, Summer 1975 addenda. The inspector observed a limited amount of work activities due to the limited availability of examination items ready for ISI during this inspection. The inspector reviewed procedures, certification records of equipment, materials, and NDE personnel being utilized during the required ISI examinations of this outage. The observations and/or reviews conducted by the inspector are documented in the following subparagraphs.

### a. Review of Procedures (73052)

- (1) The inspector reviewed the procedures indicated below to determine whether they (procedures) were consistent with regulatory requirements and licensee commitments. The procedures were also reviewed in the areas of procedure approval, equipment qualification of NDE personnel, and compilation of required records.

<u>Procedure No.</u>	<u>Title</u>
ISI-120, Rev. 18	Ultrasonic Examination of Piping and Vessel Welds Joining Similar and Dissimilar Material
ISI-130, Rev. 22	UT Examination of Vessel Welds and Nozzle Inside Radius Section
ISI-131, Rev. 11	Remote U/T Examination Using the ARIS Device
ISI-270, Rev. 13	Wet and Dry Methods of Magnetic Particle Examination of Welds Studs Bolts and Pump Motor Flywheels
ISI-240	Penetrant Examination of Welds and Base Materials, Including Studs and Nuts

Also, the inspector reviewed the contents of the Technical Manual issued for this outage on February 15, 1985, and approved by the licensee on February 27, 1985. In addition to the governing code identified in this paragraph, other sections of the code and certain Regulatory Guides (RG) evoked by reference were as follows:

ASME Section V, Article 4 (74S78) and (80W80) with recording criteria paragraph T-441.9.1



RG 1.150, "Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examination"

- (2) Procedures ISI-120, ISI-130, and ISI-131, were reviewed in the area of technical content relative to: type of apparatus, extent of coverage including beam angles and scanning techniques, calibration requirements, search units, DAC curves, transfer requirements, reference level for monitoring discontinuities, method of demonstrating penetration, levels for evaluating and recording indications, and acceptance standards as applicable.
- (3) Procedure ISI-270 was reviewed for technical content relative to: examination method, use of color contrast particles, surface preparation, surface temperature, particle suspension, viewing conditions, examination directions and overlap, prod spacing, prod magnetizing current, and acceptance criteria as applicable.
- (4) Procedure ISI-240 was reviewed for technical content relative to: method consistent with ASME code, specification of brand names of penetrant materials, specification of limits for sulfur and total halogens for materials, pre-examination surface preparation, minimum drying time following surface cleaning, penetrant application and penetration time, temperature requirements, solvent removal, method of surface drying, type of developer and method of application, examination technique, technique for evaluation, acceptance standards, and requalification requirements as applicable.

b. Observation of Work and Work Activities (73753B)

The inspector observed the ISI activities described below to determine whether these activities were being performed in accordance with regulatory requirements and licensee procedures.

- (1) The below listed personnel qualification records for NDE Examiners were reviewed:

<u>Method</u>	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
Liquid Penetrant		5	
Magnetic Particle		5	
Ultrasonic	1	4	2
Visual		3	

- (2) The above personnel qualification records were reviewed to ascertain whether the records properly reflect the following:
  - o Employer's name
  - o Person certified
  - o Activity qualified to perform

- Level of certification
  - Effective period of certification
  - Signature of individual certifying title and level
  - Basis used for certification, such as the required number of training hours, etc., for the respective NDE method
  - Annual visual acuity and color vision examination and periodic recertification
- (3) A portion of the in-process ultrasonic inspection was observed for the following welds:

<u>Figure No.</u>	<u>Item</u>	<u>Scan</u>
B4.578	Pipe To Ell weld HPI to Loop A2	0° and 45°
B4.5.7.9	Pipe to Ell weld HPI to Loop A2	0° only, battery failure precluded 45° scan on 4/18/75
B4.1.26	Vent connection nozzle carbon steel and inconel weld	

Calibration of the ARIS Device for the 60° scan of reactor vessel upper core barrel circle seam weld Figure number B1.1.1 was observed. The calibration block used was identified by S/N 40704. The inspector observed calibration on the 1/4T, 1/2T and 3/4T holes performed on April 18, 1985.

Within these areas, the inspector noted that during calibration for Figure 4.1.26 U/T examination, several attempts to penetrate the stainless steel calibration block #40734 with a 45°, 2.25MHz transducer were unsuccessful, in that the maximum response obtained from the 3/4T hole ranged between 5 to 10% of full screen height (FSH) with relatively low noise to signal ration, e.g., about 2 to 1. The same transducers used on a carbon steel block produced excellent results. Acceptable results were obtained when a 1MHz, 1"φ transducer was used on the calibration block. Inspection of the weld proved unsuccessful as the contour of the weld joint precluded good contact with the transducer. The inspector discussed the problem with B&W's Level III examiner who agreed to have the examination performed with a smaller diameter 1MHz, transducer which would have to be sent to the site from the Lynchburg Research Center in Virginia.

The inspections were compared with applicable procedures in the following areas:

- (a) Availability of and compliance with approved NDE procedure

- (b) Use of knowledgeable NDE personnel
  - (c) Use of NDE personnel qualified to the proper level
  - (d) Type of apparatus used
  - (e) Extent of coverage of weldment
  - (f) Calibration requirements
  - (g) Search units
  - (h) Beam angles
  - (i) DAC curves
  - (j) Reference level for monitoring discontinuities
  - (k) Method of demonstrating penetration
  - (l) Limits of evaluating and recording indications
  - (m) Recording significant indications
- (4) The following listed ultrasonic equipment and material certification records were reviewed:

Ultrasonic Instruments

Krautkramer-Branson	KB-6000, DB-12064
Krautkramer-Branson	USM-2 DB-12051
Krautkramer-Branson	USM-2 DB-12058

Ultrasonic Transducers

<u>Angle</u>	<u>Frequency</u>	<u>Data Base No.</u>
60°	2.25MHz	32678
70°	2.25MHz	32682
70°	2.25MHz	32685
45°	2.25MHz	32691
45°	2.25MHz	32949
0°	2.25MHz	32019

Calibration Blocks

DB-40734	3" x 3" x 12"
DB-40737	13.75" $\phi$ x 0.44" Pipe
DB-40763	14" x 3.97"
DB-40704	21" x 9.19"

Thermometer

S/N - 15175

In-process liquid penetrant (PT) inspection was observed for the following welds:

B4.1.33	RTE Mounting Boss	W-Axis
B4.1.35	RTE Mounting Boss	Y-Axis

The inspections were compared with applicable procedure(s) in the following areas:

- (1) Availability of and compliance with approved NDE procedures
- (2) Use of knowledgeable NDE personnel
- (3) Use of NDE personnel qualified to the proper level
- (4) Recording of inspection results
- (5) Method consistent with procedure
- (6) Penetrant materials identified and consistent with ASME Code
- (7) Certification of sulfur and halogen content for penetrant materials
- (8) Surface preparation
- (9) Drying time following surface cleaning
- (10) Penetrant application and penetration time
- (11) Examination surface temperature
- (12) Penetrant removal
- (13) Drying of surface prior to developing
- (14) Developer type, application and time interval after penetration removal
- (15) Time interval between developer application and evaluation
- (16) Evaluation technique
- (17) Reporting examination results

c. Inservice Inspection, Data Review and Evaluation (73755)

Records of completed U/T examinations were selected and reviewed to ascertain whether: the method(s), technique and extent of the examination complied with the ISI plant and applicable procedures; findings were properly recorded and evaluated by qualified personnel; programmatic deviations were recorded as required; personnel, instruments, calibration blocks and NDE materials (couplants) were designated and qualifications/certifications were on file. The applicable code for this activity was identified in paragraph 6.a. above. Records selected for this review were as follows:

B1.4.30 Inlet Nozzle Inner Radius W-X Axis (30°), Noz. taper from Noz. ID

B1.4.4 X-Y Axis (150°), Noz. taper from Noz. ID

B1.4.5 Y-Z Axis (210°), Noz. taper from Noz. ID

B1.4.6 Z-W Axis (330°), Noz. taper from Noz. ID

Inlet Nozzle Bore

B1.4.3 Near Surface Exam. (W-X)(30°), Noz. taper from Noz. ID

B1.4.4 (X-Y)(150°), Noz. taper from Noz. ID

B1.4.5 Y-Z (210°), Noz. taper from Noz. ID

B1.4.6 Z-W (330°), Noz. taper from Noz. ID

Inlet Noz. to Vessel from Noz. ID W-X (30°), Noz. taper from Noz. ID

C2.1.41 Class 2 Components/Welds  
45°ELL to Pipe 14" Decay Heat

ID

C2.1.44	Tee to Reducer	14" Decay Heat
C2.1.53	Pipe to Valve DHV-36	Decay Heat
Fig. 0.2.4	Cracked Bolt Examination Upper Thermal Shield	63 bolts examined, all good
Fig. 0.2.6	Surveillance Specimen Holder Tube	12 of 28 bolts examined exhibited cracks
Fig. 0.2.7	Flow Distributor	90 of 96 bolts examined good, 4 bolts could not be examined because of interference
Fig. 0.21	Upper Core Barrel	120 examined, all good
Fig. 0.2.2	Lower Core Barrel	108 Examined, 7 found cracked
Fig. 0.2.5	Lower Thermal Shield	96 Studs examined, all good
Fig. 0.2.8	Guide Block	23 of 24 bolts examined, all good. One not examined because of inter- ference

Within the areas inspected, no violations or deviations were identified.

#### 7. Eddy Current Inspection of Once Through Steam Generators (OTSG)(73753)

Discussions with cognizant licensee personnel on the schedule Eddy Current (EC) of OTSGs A and B disclosed that because the upper end of the OTSG tubes had sustained some plastic deformation as a result of a loose part accident several years ago, the entire length of the tubes, entry to exit point, could not be examined as required. In that this violates Technical Specifications (TS) requirements, the licensee issued NCOR 85-53 and has submitted a request for relief to NRR. The inspector stated the matter would be identified as an inspector followup item (IFI) for review and evaluation of results on a future inspection. IFI 302/85-17-03, Eddy Current Examination of OTSG "B".

8. Broken Makeup Pump MUP-1C Casing Stud (92706)

This matter was brought to the attention of the inspector by the Senior Resident Inspector (SRI) with a copy of Field Problem Report M5-65. Discussions with cognizant personnel indicated the bolt failed in the process of being torqued to 300 ft lbs. The report indicated that preliminary visual examination of the fracture surface showed evidence that the bolt may have been cracked some time earlier. At the time of this inspection the bolt had been sent to a laboratory for investigation. The inspector informed the licensee that an inspector followup item would be identified until the Region has had the opportunity to review the investigation report on the failure, IFI 302/85-17-04, Failure Analysis of Pump MUP-1C Broken Stud.

JUN 4 1985

Florida Power Corporation  
ATTN: Mr. W. S. Wilgus  
Vice President Nuclear Operations  
P. O. Box 14042, M.A.C. H-2  
St. Petersburg, FL 33733

Gentlemen:

SUBJECT: REPORT NO. 50-302/85-17

On April 2-5 and 15-19, 1985, NRC inspected activities authorized by NRC Operating License No. DPR-72 for your Crystal River facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements. The violations, references to pertinent requirements, and elements to be included in your response are presented in the enclosed Notice of Violation.

Your attention is invited to unresolved items identified in the inspection report. These matters will be pursued during future inspections.

The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Original Signed by  
Roger D. Walker  
Roger D. Walker, Director  
Division of Reactor Projects

Enclosures:

1. Notice of Violation
2. Inspection Report No. 50-302/85-17

cc w/encls: (See page 2)

~~8507120206~~

IE01

JUN 4 1985

cc w/encls:

- E. M. Howard, Director  
Site Nuclear Operations
- P. F. McKee, Nuclear Plant Manager
- G. R. Westafer, Manager  
Nuclear Operations Licensing  
and Fuel Management

bcc w/encls:

- NRC Resident Inspector
- Document Control Desk
- State of Florida

*[Signature]*  
 RII  
 N. Zonimos: jw  
 5/24/85

*[Signature]*  
 RII  
 J. Blake  
 5/24/85

RII  
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 A. Herdt  
 5/28/85

*[Signature]* 5/21/85  
 RII  
*[Signature]*  
 Brownlee  
 5/30/85

RII  
*[Signature]*  
 P. Bemis  
 5/28/85



ENCLOSURE 1

NOTICE OF VIOLATION

Florida Power Corporation  
Crystal River Unit 3

Docket No. 50-302  
License No. DPR-72

The following violation was identified during an inspection conducted on April 2-5 and 15-19, 1985. The Severity Level was assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

10 CFR Part 50, Appendix B, Criterion V, and Final Safety Analysis Report (FSAR) Section 1.7.1.5 require that activities affecting quality shall be prescribed by documented instructions, procedures or drawings...and shall be accomplished in accordance with these instructions, procedures or drawings. Written instructions issued by the welding engineer required certain safety-related welds in the Make-Up System to be fabricated per weld procedure specification WPS 8/8-TS, which requires the use of a combination of Tungsten Inert Gas and Shielded Metal Arc Welding techniques.

Contrary to this requirement, on April 18, 1985, the inspector determined that a total of 21 welds had been fabricated over a three-week period with the use of an unauthorized weld procedure. The work proceeded through this three-week period without QA/QC detection even though adherence to weld procedure specification requirement is an inspection point requiring verification. The licensee issued a nonconforming operation report No. 85-58 on April 18, 1985.

This is a Severity Level IV violation (Supplement I).

Pursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date:         JUN 4 1985        

*85D7120210*