May 30, 1985

ENCLOSURE

APPENDIX TO FLORIDA POWER CORPORATION

CRYSTAL RIVER

UNIT 3

SALP BOARD REPORT

(Dated March 5, 1985)

May 30, 1985

I. MEETING SUMMARY

A. A meeting was held at 1:00 p.m. on March 12, 1985, at Florida Power Corporation's St. Petersburg, Florida corporate offices to discuss the SALP Board Report for the Crystal River facility.

B. Licensee Attendees:

L. H. Scott, President
B. L. Griffin, Exective Vice President
W. S. Wilgus, Vice President, Nuclear Operations
M. H. Kleinman, Vice Chairman, Nuclear General Review Committee
E. M. Howard, Director, Site Nuclear Operations
E. E. Renfro, Director, Nuclear Operations, Material and Control
E. C. Simpson, Director, Nuclear Operations, Engineering and Licensing
J. T. Telford, Director, Quality Programs
R. P. Blush, Director, Public Information
G. R. Westafer, Manager, Nuclear Licensing and Fuel Management
P. F. McKee, Nuclear Plant Manager
G. L. Boldt, Nuclear Plant Operations Manager
V. R. Roppel, Nuclear Plant Engineering and Technical Manager
J. Alberdi, Manager of Site Nuclear Operations Technical Service

C. NRC Attendees:

J. A. Olshinski, Deputy Regional Administrator, Region II (RII)
V. L. Brownlee, Chief, Reactor Projects Branch 2, Division of Reactor Projects, RII
D. L. Ziemann, Chief, Procedures and Systems Review Branch, Division of Human Factors Safety, Office of Nuclear Reactor Regulation
T. F. Stetka, Senior Resident Inspector, Crystal River, RII
J. E. Tedrow, Resident Inspector, Crystal River, RII

II. LICENSEE COMMENTS

Licensee comments submitted in response to the SALP Board Report follow.

May 30, 1985

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Florida Power
CORPORATION

April 11, 1985
3F0485-09

Dr. J. Nelson Grace
Regional Administrator, Region II
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, GA 30323

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
IE Inspection Report No. 85-03
Systematic Assessment of Licensee Performance

Dear Sir:

Florida Power Corporation (FPC) provides the attached as our response to the subject inspection report. We also wish to make some generic comments regarding the Systematic Assessment of Licensee Performance (SALP) program in general and the recent review of Crystal River 3 (CR-3).

It is our opinion that the report is developed out of isolated events which give an inaccurate perspective in many of the categories. In many cases, the items used as a basis for the evaluation were misleading. The events or violations cited do not reflect programmatic or management problems, but in most cases represent individual instances of personnel errors or minor procedural deficiencies and focus on old violations or other issues that have little or no significance to current programs.

Many of the specific items were not a valid measure of the management effectiveness or operational safety achieved over the period. As an example, it is inappropriate to include in the report a violation that identified a thermometer in the control room measuring ambient air temperature which was overdue for calibration and ignore the strides made during the period by management in improving the calibration facilities, organizational changes affecting the calibration laboratory management, and assuring that critical safety-related instrumentation is properly calibrated.

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It appears to us, that the SALP report totally ignores the remarkable improvement that has been made at CR-3 in management effectiveness, operational proficiency, dedication to safety and security and professional excellence, and rather, concentrates on a few isolated items having minor safety significance. While other peers in our industry, both private and Federal, hold CR-3 as a prime example of how a single nuclear unit utility can achieve excellence, the SALP report provides an image of mediocrity and in some cases "poor" performance. We do not believe that such treatement is deserved nor does it reflect favorably on the industry and the SALP process.

It is clear from the report that the assessment, contrary to the stated limitations, was not based entirely on activities which occurred during the report period. A training inspection which occurred after the report period was mentioned once in the cover letter and three times in the report. Section G.1 of the report cited a "Severity Level III violation and associated civil penalty" as one of the bases for rating security as Category 3. FPC has challenged the severity level of this violation and the civil penalty. Evidence has been docketed which demonstrates that this violation was improperly classified. No mention was made in the report of the fact that this matter is still under NRC review. The report did note, however, "an apparent improvement in management support of the security program" which occurred during the report period but gave no credit for it. Thus, it seems that negative events can be considered even if they do not occur during the report period, but some positive events may not be considered even if they do.

FPC believes that the items presented in the report do not justify the performance ratings given or that any reasonable rationale for such ratings exists. The trends indicated in the report seemed ambiguous and contradictory, with no clear explanation, when compared to the previous SALP report. Publishing such a report without opportunity for even cursory commentary by the licensee before publication is fraught with opportunity for error.

It is our understanding that the SALP report has already been placed in the Public Document Room (PDR). The submittal of the report to the PDR prior to receipt and resolution of FPC's comments is in FPC's opinion a poor practice. Media interest in the problems of the nuclear industry can only be dealt with fairly when they receive both sides of the story at the same time. The NRC should make a better effort in trying not to detract from the image of nuclear power in the United States as a safe, reliable and economical source of energy. Giving the media mediocre report cards to plants that have been performing well can only help to destroy the industry in the longer term.

In conclusion, we believe that this report is not a fair assessment of FPC's performance during the report period in all areas. We believe that examination of the positive evidence available as well as the negative evidence would have resulted in a more balanced and realistic picture of FPC performance.

Sincerely,

W. S. Wilgus
Vice President Nuclear Operations

AEF/feb

Attachment

May 30, 1985

ENCLOSURE

FLORIDA POWER CORPORATION
REPORT NO. 50-302/83-03 (SALP) RESPONSE

IV - PERFORMANCE ANALYSIS

A. PLANT OPERATIONS (CATEGORY 2) - COMMENTS

1. The alleged instance of inadequate control of plant operations involving containment internal pressure has been misrepresented in our view. The July 1983 to March 1985 operating cycle was the first major operating period conducted subsequent to NRC direction to cease continuous purging of the containment atmosphere. Upon reconstructing this event, it can be seen that containment internal pressure will routinely increase and stabilize at 1 to 1.5 psig due to reactor coolant system heatup from Mode 5 (less than 200°F) to Mode 1 (579°F average Reactor Coolant System temperature and 600°F main steam temperature) with the containment "bottled up" in compliance with technical specifications. If the plant is returned to service during the winter months, subsequent seasonal changes can cause containment pressure to approach the two (2) psig alarm setpoint. It was found that starting an extra Reactor Building fan cooler or shifting cooling water supplies in order to increase (maximize) containment cooling had little impact on reducing pressure.

   This event can be discussed in greater detail, but the point we wish to make is that this event resulted from an inherent problem stemming from the NRC requirement to cease continuous purging, and was not caused by "inadequate control of plant operations because timely action was not taken to maximize containment cooling". It should also be pointed out that the NRC had previously approved the same corrective action immediately upon restart of Cycle 5.

2. The reference to moderate turnover of non-licensed operators and the effect it "might" have on the licensed operator program or future manpower shortages appears to be purely speculative and, therefore, has no place in a performance review.

3. The comments on licensed operator training program documentation are in reference to an assessment made outside the period covered by this report and should not have been included.

B. RADIOLOGICAL CONTROLS (CATEGORY 2) - COMMENTS

The rating, Category 2 and constant, does not appear consistent with the discussion, considering that the area was rated Category 1 in the last SALP report. While this category received a constant rating, we feel that the strides made in ALARA, waste treatment, and radiological performance,

both on-site and off-site, have been significant. With the exception of training program for Chemistry personnel, this category is vastly improved overall, and we firmly believe that an "improving" rating was warranted.

C. MAINTENANCE (CATEGORY 1) - COMMENTS

No comments.

D. SURVEILLANCE (CATEGORY 3) - RESPONSE

Surveillance Procedure

Florida Power Corporation believes our surveillance program is much better than the category 3 rating implies. The SALP report does not reflect the improvements that were made during the evaluation period. An in-depth review of the technical adequacy of SP's was made during the period to ensure that all technical specification surveillance requirements were correctly referenced and satisfied within each procedure. This effort utilized three plant staff engineers, as well as representatives from Quality Programs and Licensing, and resulted in several procedure revisions. The violations referenced in the report are primarily administrative errors, do not represent any true safety significance, and do not indicate a declining trend of performance in this area.

Program Improvements (Corrective Action)

Since the evaluation, several actions have been taken to improve the surveillance program. An SP writer's guide has been implemented to ensure consistency of format and technical adequacy through an extensive checklist for use during procedure revisions and biennial review. In addition, much of the writer's guide is devoted to the proper implementation of human factor guidelines in the surveillance procedures.

As mentioned in the SALP report, responsibility for SP's is assigned to the plant Engineering and Technical Services department. Each plant engineer is responsible for a number of SP's consistent with plant system assignments. Since October of 1984, each engineer has been required to perform a field validation of any surveillance procedure which undergoes a significant revision. This validation includes "hands-on" performance/walkdown of the procedure with the appropriate end user (I&C technician, mechanic, electrician, operator), and any identified problems/comments are resolved prior to final issue of the procedure. In addition, personnel from Operations and Maintenance are identified to review proposed revisions as part of the review process before the validation takes place. As a further check to enhance the quality of SP's, a program is being established for walkdowns of selected SP's by key management personnel on a continuing basis.

The method of issuing new procedures and revising existing procedures has also been improved. A parallel review process is being established along

with a tracking program for procedure status during revision and quicker turnaround from document control. This new system will be very effective in timely issue of new/revised procedures. In addition, procedures are annotated to indicate implementation of NRC actions during the review process and are tracked by a computerized tracking system to ensure due dates are met.

Microfilm Records

Florida Power Corporation disagrees with the NRC opinion expressed in this area. Nuclear operations procedure NOD-04 specifies the standards for hard copy documents to be microfilmed. The CR-3 film process meets or exceeds all applicable ANSI standards for film quality density resolution, visual page to page, overall film quality, and archival quality. Occasionally, some difficulty in legibility has occurred, as a result of source document quality. As a part of a continuing effort to eliminate this problem, a training video presentation is being prepared.

Inservice Testing (IST) of Pumps and Valves

The summary listing of the status of the IST of pumps and valves was established in February 1985.

Secondary Water Chemistry Programs

The secondary chemistry at CR-3 has consistently exceeded the recommendations in the "Steam Generator Owners Group/EPRI" guidelines, as seen in the graphs of secondary chemistry parameters (See Attachment A). The virtual absence of primary to secondary leakage in CR-3 steam generators attests to a very effective water chemistry program. EPRI guidelines for parameter limit actions and monitoring requirements are being evaluated.

Although we have not experienced "continual failure of CuNi condenser tubes" as stated in the report, several programs have been instituted to minimize condenser in-leakage problems. A policy specifying strict action levels for salt water in-leakage has been in use for nearly two years and CR-3 staff personnel are well trained in its application. Our technicians can readily determine whether leakage is from a condenser tube or from the tube to tubesheet interface and locate it for repair. We have also applied an epoxy coating that has been very effective in sealing tube to tubesheet leakage. For longer range planning, a condenser study is being conducted to identify a replacement tubing material if and when retubing becomes necessary.

The concern with the rapid depletion of the condensate demineralizing system resin has been resolved. Extensive testing of the resin indicated existing resin fines upon receipt. Florida Power Corporation created a purchase specification with more stringent requirements which is becoming a model for the industry, as evidenced by inquiries and copy requests from other utilities.

An aggressive program to solve the once through steam generator (OTSG) debris buildup problem was launched in early 1983 with the formation of the OTSG Task Force. This is a full-time group composed of several multidisciplined Florida Power Corporation engineers and technicians. It is augmented by operations and technical support staff, as well as technical assistance from the OTSG vendor and a highly respected consulting firm. We are attacking this problem on several fronts:

1. Florida Power Corporation will bore two inspection ports to the secondary side of the "A" OTSG during Refuel V. These inspection ports will allow characterization of the type and composition of the flow blockage debris. This will be accomplished with state-of-the-art fibroscopic video and mechanical equipment.

2. A hydraulic cleaning method will be used during Refuel V to remove deposits in both OTSG's. This method was developed with the participation of Florida Power Corporation and truly represents the leading edge of technology in this field. The success of this project has already been demonstrated at another utility with on-site, hands-on, participation by Florida Power Corporation engineers.

3. An extensive secondary system study was performed during 1984 to determine all potential sources of oxygen, silica, iron, and copper in our feedwater system which may affect the deposition rate in the OTSG. Several plant improvements have resulted:

   - Several condenser air in-leakage paths have been identified for repair during Refuel V.

   - Secondary system pH has been increased since initial startup, resulting in a 60% reduction in iron deposition rate as measured by an integrated sample.

   - Amerzine addition to the condensate storage tank is used to deoxygenate water used for condensate makeup and emergency feedwater supply.

   - We are planning to replace secondary in-line monitors (O_2, pH, conductivity) with better equipment and add in line ion chromatography and a total organic carbon analyzer within the next year.

4. Long term planning includes involvement with chemical cleaning technology should that become necessary at a later time.

In summary, Florida Power Corporation believes we have a very effective overall surveillance program and will continue to give management attention to improvement. One of our primary objectives for the next SALP evaluation period will be to create a heightened awareness within the NRC of the improvements and positive results of our surveillance program.

E. FIRE PROTECTION (NOT RATED) - COMMENTS

No comments.

F. EMERGENCY PREPAREDNESS (CATEGORY 2) - COMMENTS

Present emphasis in the area of Emergency Preparedness will correct noted deficiencies.

G. SECURITY (CATEGORY 3) - RESPONSE

We are very disappointed with your decision to rate Security as a Category 3. It is our feeling that the overall program and the efforts toward improvement are deserving of a higher rating.

We are concerned, following evaluation of your SALP report, that the proposed Severity Level III Violation may have unjustly influenced your overall assessment of our Security Program resulting in the Category 3 rating. As you are aware, FPC does not agree with such a severity level for the identified violations. Consequently, we have formally requested that such violations be downgraded to a Severity Level V and the proposed imposition of a civil penalty be withdrawn. This is based on our position that the violations were minor in nature and did not pose a compromise to the protection of the public health and safety. We feel our response to the proposed Civil Penalty Action EA84-104 justifies our position on this concern.

SECTION 1:

The first concern references a long standing regulatory issue relating to the functional capability of the Protected Area intrusion system.

The Security organization has identified and is aggressively pursuing, as a departmental goal for 1985, the correction of problems associated with the intrusion detection system. This has involved the development of a comprehensive study identifying all known security hardware problem areas and proposed solutions to concerns. Input to the study has been provided by FPC Security and Engineering personnel along with outside engineering firms. Evaluation of problems and recommended corrective actions have already been completed by FPC Security and Engineering personnel.

Management support of this goal has resulted in the following preliminary implementation schedule which has a 90% confidence factor in its achievability.

Begin engineering for modification by April 1985
Final design phase by August 1985
Begin construction by October 1985
Complete construction by December 1985

The second concern references a tendency to rely on the NRC to identify problems and contractors to provide solutions rather than maintaining a rigorous self-audit and evaluation program.

Technical self sufficiency in the area of security has been a concern of FPC management for some time. The improvements noted in the report reflects management attention to this concern. We are confident the following accomplishments and future plans will eliminate future concerns in this area:

A. A Security management staff has been assembled which is composed of professional security personnel.

1. Nuclear Security Superintendent - Four year degree in Criminology, eight (8) years law enforcement background, ten (10) years experience in Nuclear Power Plant Security.

2. Nuclear Security Officer - Four year degree in Government and Criminal Justice, twelve (12) years experience in Nuclear Power Plant Security.

3. Nuclear Security Specialist - Two year degree in Criminal Justice, twenty (20) years of Security experience in Physical, Technical and Personnel Security, and four (4) years experience in Nuclear Power Plant Security.

B. The assignment of a dedicated plant engineer to assist, as required, with security equipment concerns and issues.

C. The assignment of a full time security force officer to outage and modifications activities.

D. The implementation of a security equipment preventive maintenance program. This program was designed by FPC Maintenance and Engineering personnel.

* E. The completion of an extensive vital area barrier survey by FPC Security, Operations and Engineering personnel.

* F. The completion of a Security Plan technical review by FPC Security, Quality Programs and Engineering personnel.

* G. The completion of a technical review of the Training and Qualification Plan by FPC Security personnel.

* H. Complete a technical review of security procedures by FPC Security personnel by June 1985.

I. Complete an engineering study and evaluation of the CAS/SAS access control equipment by FPC Security and Engineering personnel by late 1985 or early 1986.

3. Establishment of a 1986 Goal to update and replace equipment as recommended by the above study.

    * These areas are felt to represent accomplishments and commitments toward a rigorous self-audit posture. FPC will continue to aggressively pursue such activities.

The third concern references the lack of a thorough understanding by licensee personnel of the Physical Security Plan and associated procedures. This lack of understanding resulted in six (6) of the violations identified.

To address this concern, management has directed the Security staff to implement a Security Awareness Training program. This training will be oriented to security issues which are the responsibility of all plant employees. Such training is to be provided to key managers of the Nuclear Operations staff. We feel the accomplishment of this training will instill appropriate awareness of security requirements by FPC personnel. This combined with the previously mentioned response actions should serve to reduce violations during the next reporting period.

The final paragraph in this section stated, in part:

> "It should be noted that late in the assessment period, there was an apparent improvement in management support of the Security program. However, this trend occurred too late to show a meaningful improvement during this period."

We share your assessment of the improving management support of the Security program. We remain confident this improving support has resulted in the further enhancement of the sound foundation for the Security effort at our facility. This improvement will continue toward the elimination of concerns identified per your SALP report.

SECTION 2:

Trend - Declining

As stated earlier, we remain confident the above identified response actions will reverse future perceptions of a declining trend. The above actions do not support a finding of a declining trend.

SECTION 3:

Broad Recommendations - Increased licensee management attention and involvement in the Security program.

As stated within the above response, we feel the commitments already in place provide for a sound security foundation. This, combined with further corrective activities, will correct the concerns noted in the 1983/84 SALP report.

H. REFUELING (NOT RATED) - COMMENTS

No comments.

I. QUALITY PROGRAMS AND ADMINISTRATIVE CONTROLS AFFECTING QUALITY (CATEGORY 2) - COMMENTS

Florida Power Corporation understands the issues identified in this evaluation and is taking steps to improve the handling of program nonconformances. These changes will result in an increased involvement of QA in those programs designed to evaluate and correct problems.

Quality Programs will review the scope of the audit that is conducted every six months to assure that it contains sufficient depth to evaluate the effectiveness of existing corrective action systems in each of the operating organizational areas. Specific consideration will be given to address the implementation of program procedures and controls in order to determine their effectiveness in addition to reviewing the more programmatic issues.

Secondly, Quality Programs will conduct periodic reviews of both the surveillance test program and the various corrective action systems. The reviews will be conducted in conjunction with the audits in these areas in order to maintain a closer continuing overview during the SALP report period.

J. LICENSING ACTIVITIES (CATEGORY 2) - COMMENTS

The Nuclear Licensing interface activities between the NRC and FPC are based on providing requests and responses based on the safe, legal, and efficient operation of CR-3. FPC believes our licensing activities during the SALP review period promote this philosophy. Included below are clarifications and corrections to items identified in section J of your SALP review of licensing activities.

Living Schedule

The SALP report stated that FPC should be using an integrated schedule for all principal plant activities. FPC has utilized integrated scheduling for nearly a decade. Whenever the need arose, FPC has shared this with the NRC staff (Supplement 1 to NUREG-0737). Our reluctance to pursue an integrated living schedule with staff involvement is based on the lack of any obvious licensing advantages to FPC. FPC is, however, developing a 5-year integrated schedule to use in our internal planning. The integration of this schedule into the NRC living schedule concept will be reviewed later this year.

Decay Heat Technical Specifications

The report faulted FPC for not including an adequate safety analysis in our submittal for amendment of the decay heat removal system technical

specification. In fact, the original NRC request to submit such a change (dated June 11, 1980) was based on NUREG-0103, B&W Standard Technical Specifications, Revision 3, July 1979. The NRC request did not take into account that a Revision 4 to NUREG-0103 was in preparation. FPC responded to the NRC request on October 16, 1980, requesting clarification to certain parts of the Standard Technical Specification which FPC considered operationally non-realistic. Some of these questions were, interestingly enough, answered by changes to the Standard Technical Specification issued at about the same time as Revision 4 to NUREG-0103.

The issue was not raised again until a telephone conversation late in 1983 when the NRC requested FPC to submit a Technical Specification which we considered more operationally realistic. This was submitted on February 16, 1984. Numerous telephone conferences were then held clarifying the B&W NSSS design and operating characteristics, not changes to the design or operation of the system which would have necessitated a safety evaluation. It has been over one year since the last FPC submittal, and the issue is four months overdue for approval according to the "Orange Book" (NUREG 0748 TAC M42121 and M54445).

OTSG Technical Specifications

The comments regarding the acceptability of the maximum level on our technical specification on Once Through Steam Generator level submittal are incorrect. FPC had B&W perform a specific analysis to substantiate this change request. The NRC staff requested FPC to demonstrate the secondary effects of a thermodynamically non-credible event (flooding of the aspirating ports would have resulted in entry into the action statement). Rather than expend critical time convincing the staff of the accuracy of the analysis, we included an existing administrative limit in the technical specifications. FPC considers it fundamentally unfair for the staff to criticize FPC for failure to anticipate what we still believe is a rather minor concern.

Venting Technical Specification

The comments on proposed resolution of this issue are also incorrect. The staff had previously approved the exact same corrective action immediately upon restart of Cycle 5. The staff requested confirmation of several items after the close of the work day and it took hours to retrieve files that would normally have been available in a few minutes for resolution of the request (see also comments under plant operations).

SUPPLEMENTARY COMMENTS - TRAINING

Nuclear Operations Training agrees with the comment concerning the weaknesses in Chemistry Technician training and has initiated plans to provide hands-on training which should increase performance in the radiological controls area.

Please note that Nuclear Operations Training has provided continuous training for the Chemistry Technicians during the evaluation period.

The course entitled, "The How and Why of Procedures", Lesson Plan ST-03, should alleviate many of the concerns quoted in this section. As larger numbers of Staff members attend this course, we believe that the overall trend will be toward greater adherence to procedures. Ongoing efforts continue to increase participation in this course.

The most recent efforts of the Nuclear Operations Training Staff seem to have effected a reversal on the issue of management attention to training. Significant strengthening of "training weaknesses" is exemplified by the success of the recent Emergency Preparedness Exercise. Although the exercise was held after the reporting period, the excellent results achieved were due, in part, to strong management attention to this issue.