

April 03, 1996

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Mr. Percy M. Beard, Jr.
Senior Vice President,
Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear
Licensing
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Dear Mr. Beard:

SUBJECT: CRYSTAL RIVER NUCLEAR GENERATING PLANT UNIT 3 - ISSUANCE OF
INDIVIDUAL NOTICE RE: ONCE-THROUGH-STEAM GENERATOR TUBE REPAIR
CRITERIA (TAC NO. M92548)

Dear Mr. Beard:

Enclosed, for your information, is the Commission's Federal Register
notice of consideration of issuance of amendment and proposed no significant
hazards consideration determination relating to your request dated
March 21, 1996, which proposed technical specifications changes relating to
Once-Through Steam Generator tube repair criteria.

Sincerely,



L. Raghavan, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosure:

1. Federal Register Notice dated March 28, 1996

cc w/enclosure:

See next page

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Mr. Percy M. Beard, Jr.
Florida Power Corporation

Crystal River Unit No. 3
Generating Plant

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Atlanta, Georgia 30323-0199

UNITED STATES NUCLEAR REGULATORY COMMISSIONFLORIDA POWER CORPORATIONDOCKET NO. 50-302NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-72, issued to Florida Power Corporation, et al., (the licensee), for operation of the Crystal River Nuclear Generating Plant, Unit No. 3, (CR3 or the facility) located in Citrus County, Florida.

Currently, the technical specifications (TS) for CR3 relating to the Once Through Steam Generator's (OTSG's) tube inspection acceptance criteria, specify repair limit for removing steam generator tubes from service. This repair limit is based on a structural evaluation of a simplified model of tubes with uniform through wall (T/W) thinning. A recent tube-pull examination at CR3 identified a number of low signal-to-noise (S/N) tube eddy current indications. The licensee indicated that these S/N indications are a substantially different morphology from the model used to develop the current TS inspection and acceptance limit. As a result of the small signal amplitude associated with these S/N indications, they could not be accurately sized by conventional bobbin coil phase angle.

By letter dated May 31, 1995, proposed TS changes which involved a broad and long-term criteria addressing both wear and Inter-Granular-Attack (IGA) degradation mechanisms. The licensee's May 31, 1995 request was noticed in the FEDERAL REGISTER on July 5, 1995 (60 FR 35071). By letter dated March 21, 1996, the licensee superseded its May 31, 1995 request and proposed a more focused TS change which would be applicable for one cycle duration, and only to Inter-Granular-Attack (IGA) degradation mechanism in a limited region of the OTSG. Accordingly, this supersedes that notice in its entirety.

Specifically, the licensee proposed to:

- A. Revise TS 3.4.12 item d, to read:
"150 gpd primary to secondary LEAKAGE through any one steam generator (OTSG)."
- B. Revise TS 5.6.2.10.2, page 5.0-14,
"The results of each sample inspection shall be classified into one of the following three categories:" to read:
"The results of each bobbin coil sample inspection shall be classified into one of the following three categories:"
- C. Revise the Note in TS 5.6.2.10.2, page 5.0-14,
"In all inspections, previously degraded tubes whose degradation has not been spanned by a sleeve must exhibit a significant increase in the applicable imperfection size measurement (> +0.3V bobbin coil amplitude increase for first span IGA indications or >10% further wall penetration for all other imperfections) to be included in the below percentage calculations."
- D. Revise the second sentence in TS 5.6.2.10.4.a.2, page 5.0-16, "Eddy-current...as imperfections" to read:

"Any indication below all degraded tube criteria specified in item below may be considered as imperfections."

- E. Revise TS 5.6.2.10.4.a.4, page 5.0-16, to read:

"Degraded Tube means a tube containing a first span IGA indications with a bobbin coil amplitude [greater than or equal to] 0.65V, an axial extent of [greater than or equal to] 0.13 inches, or a circumferential extent of [greater than or equal to] 0.3 inches or other imperfections [greater than or equal to] 20% of the nominal wall thickness caused by degradation except where all such degradation has been spanned by the installation of a sleeve."

- F. Add TS 5.6.2.10.4.a.7

"First span Inter-granular Attack (IGA) indication means a bobbin coil indication located between the lower tubesheet secondary face and the first tube support plate confirmed by MRPC to have a volumetric morphology characteristic of IGA."

- G. As a result of adding the new TS 5.6.2.10.4.a.7 above, revise applicable TS to reflect the new "first span IGA definition" term. Renumber 5.6.2.10.4.a.8 and 9 to 5.6.2.10.4.a.9 and 10.

- H. Renumber TS 5.6.2.10.4.a.7 to TS 5.6.2.10.4.a.8, and revise to read:

"Plugging/Sleeving Limit means the extent of degradation beyond which the tube shall be restored to serviceability by the installation of a sleeve or removed from service because it may become unserviceable prior to the next inspection. The Limit for first span IGA indications is a bobbin coil amplitude of 1.25V, an axial extent of 0.25 inches, or a circumferential extent of 0.6 inches. The limit for indications other than first span IGA is equal to 40% of the nominal tube or sleeve wall

thickness. No more than five thousand sleeves may be installed in each OTSG."

I. Revise TS 5.7.2.c.2, page 5.0-29, to read:

"Following each inservice inspection of steam generator (OTSG) tubes, the NRC shall be notified of the following prior to plant ascension into Mode 4.

1. Number of tubes plugged and sleeved
2. Crack like indications in the first span
3. An assessment of growth in the first span indications, and
4. Results of in-situ pressure testing, if performed.

The complete results of the OTSG tube inservice inspection shall be submitted to the NRC within 90 days following the completion of the inspection. The report shall include:

1. Number and extent of tubes inspected,
2. Location and percent of wall-thickness penetration for each indication of an imperfection,
3. Location, bobbin coil amplitude, and axial and circumferential extent (if determined) for each first span IGA indication, and
4. Identification of tubes plugged and tubes sleeved."

The licensee requested that the above proposed license amendment be processed as an emergency or exigent amendment to prevent delay of the restart of the facility which is currently in an refueling outage. The licensee described the circumstances involving the request and stated that its request meets the requirements of 10 CFR 50.91a(5) and (6). The licensee stated that the complexity of the issues involved, differences between the licensee's and the industry's approach, and evolving industry/NRC interactions on the steam

generator integrity issues resulted in a longer than anticipated NRC staff review time of the licensee's previous submittal (May 31, 1995). As a result, staff review of the licensee's May 31, 1995 submittal has not been completed. Therefore, the licensee proposed this more limited license amendment as described herein. Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed change will not significantly increase the probability or consequences of an accident previously evaluated. The relevant accidents are excessive leakage or steam generator tube rupture (as a consequence of MSLB [Main steam Line Break] or otherwise).

RG [Regulatory Guide] 1.121 establishes a standard method for demonstrating structural integrity under worse-than-DBE [design basis Event] conditions. The existing TS is based on this RG. The first span, IGA disposition strategy continues to rely on this guidance. Current TW [through wall] sizing techniques would allow defects greater than the current TS limit of 40 % to remain in service since these techniques do not accurately measure percent wall penetration for small volume indications. The proposed disposition strategy is based on measurable eddy current parameters of voltage, axial extent, and circumferential extent has been shown to provide a higher confidence that unacceptable flaws are removed from service. Therefore, the

probability of a Steam Generator Tube Rupture (SGTR) is not increased and may well be decreased by implementation of this S/N disposition strategy.

The probability of OTSG tube leakage during normal operation or accident conditions is not adversely affected by the proposed S/N disposition strategy. Operating history indicates essentially no primary to secondary leakage through the OTSG tubes at CR-3. Growth rate studies imply this trend could be expected to continue. However, for conservatism the OTSG leakage limit has been reduced from 1 gallon per minute through all OTSGs to 150 gallons per day through any one OTSG. This change is consistent with the guidance provided in Generic Letter 95-05. Small volume indications which might leak during worse-case FWLB [Feedwater Line Break] conditions are addressed in the RG 1.121 evaluation. The disposition strategy ensure these indications are removed from service as part of the inservice inspection. Once detected, the proposed criteria is at least as effective in determining those indications which should be removed from service as are the existing TS limits.

The first span IGA disposition strategy is an integral part of an overall effort to better address these and similar phenomena in OTSGs.

2. The proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The key 'new or different' accidents addressed in this and similar proposals is the potential for MSLB-induced multiple SGTR or excessive primary-to-secondary leakage during such events. While these events are addressed in CR-3 Emergency Operating Procedures (EOPs), they are beyond those licensed for the facility.

However, as noted above, the probability of MSLB induced multiple SGTR is reduced by more effective screening and plugging/sleeving criteria. The probability of detection and identification of tubes which should be removed from service is maintained or improved by the S/N disposition strategy. The likelihood of adverse effects from plugging sound tubes is reduced. The operation of the OTSG or related structures, systems or components is otherwise unaffected.

3. The proposed change will not involve a significant reduction to any margin of safety.

The margins of safety defined in RG 1.121, including the required pressure used in the structural analysis, are retained. The probability of detecting degradation is unchanged since bobbin coil methods will continue to be the primary means of initial detection. The probability of leakage remains acceptably small. The proposed S/N disposition strategy is an enhancement to the inservice inspection of OTSG tubing that will provide a higher level of confidence that tubes exceeding the allowable limits are repaired while sound tubes are left in service. Based upon results of the various growth rate studies, the probability

of an accident at the end of cycle is essentially the same as the beginning.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 15-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 15-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D22, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from

7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By April 29, 1996 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Coastal Region Library, 8619 W. Crystal Street, Crystal River, Florida 32629. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing.

The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

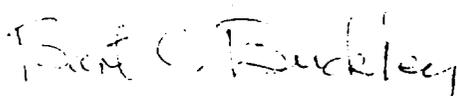
A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to Eugene V. Imbro: petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to A. H. Stephens, General Counsel, Florida Power Corporation, MAC - A5D, P. O. Box 14042, St. Petersburg, Florida 33733, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated March 21, 1996, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room, located at the Coastal Region Library, 8619 W. Crystal Street, Crystal River, Florida 32629.

Dated at Rockville, Maryland, this 25th day of March 1996.

FOR THE NUCLEAR REGULATORY COMMISSION



Bart C. Buckley, Acting Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation