

Docket file



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 22, 1994

Docket Nos. STN 50-454, STN 50-455,
and STN 50-456, STN 50-457

Mr. D. L. Farrar, Manager
Nuclear Regulatory Services
Commonwealth Edison Company
Executive Towers West III, Suite 500
1400 OPUS Place
Downers Grove, Illinois 60515

Dear Mr. Farrar:

SUBJECT: STEAM GENERATOR SLEEVING REVIEW (TAC NOS. M87227, M87228, M87229,
AND M87230) 1 2

By letter dated August 13, 1993, and additional supplements Commonwealth Edison Company (CECo or the licensee), submitted an amendment request to the licenses of Braidwood Station (Units 1 and 2) and Byron Station (Units 1 and 2) proposing steam generator (SG) tube sleeving in accordance with the (1) Westinghouse and (2) B&W processes. The NRC technical staff has completed its review of your proposed amendment request and finds it acceptable subject to certain conditions. These conditions, which were discussed with your staff during a telephone call on February 18, 1994, are as follows:

1. Amend the license to reflect a primary-to-secondary leakage limit of 150 gallons per day.
2. Amend the license to reflect an inservice inspection of a minimum of 20 percent of a random sample of the sleeves for axial and circumferential indications at the end of each cycle. In the event that an imperfection of 40 percent or greater depth is detected, an additional 20 percent (minimum) of the unsampled sleeves should be inspected, and if an imperfection of 40 percent or greater depth is detected in the second sample, all remaining sleeves should be inspected. The inservice inspection is required until the licensee demonstrates the corrosion resistance for laser-welded or kinetically welded joints in tubes that bound the material parameters of the tubes installed at Byron and Braidwood SG. If conformance with the requirements of the plant Technical Specifications (TS) for tube structural integrity is not confirmed, the tubes containing the sleeves in question should be removed from service.
3. Add a condition to the license to conduct additional corrosion testing to establish the design life for the kinetically or laser welded sleeved tubes in the presences of a crevice. The testing should determine the effects that material microstructure, chemistry, and joint crevices will have on primary water stress corrosion cracking (PWSCC) initiation and growth, bound the material condition that exist in Byron and Braidwood steam generators, and include the associated stress intensity values.

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- 4. Perform post weld heat treatment at 1400°F minimum soak temperature with a 5-minute minimum soak time on freespan kinetically or laser welded joints until additional supporting data becomes available.

As discussed with your staff, we are expecting a letter stating CECO's intent to incorporate these four conditions. We request that your letter be immediately forthcoming so that we may expeditiously continue to process the license amendment regarding approval of the steam generator tube sleeving.

Sincerely,

Original Signed By

Ramin R. Assa, Project Manager
 Project Directorate III-2
 Division of Reactor Projects - III/IV/V
 Office of Nuclear Reactor Regulation

cc: See next page

DISTRIBUTION: Docket File
 NRC & Local PDRs PDIII-2 r/f
 J. Roe J. Zwolinski
 J. Dyer T. Clark
 R. Assa OGC
 ACRS (10) B. Clayton RIII

OFC	LA:PDIII-2	PM:PDIII-2	D:PDIII-2	EMCB:DE		
NAME	TCLARK <i>JTC</i>	RASSA <i>RA</i>	JDYER <i>JDY</i>	ESullivan <i>ES</i>		
DATE	2/27/94	2/29/94	2/27/94	2/22/94	1/ /94	1/ /94
COPY	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO

Mr. D. L. Farrar
Commonwealth Edison Company

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Mr. D. L. Farrar

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