

September 13, 1995

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

Dear Mr. Farrar:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING CIRCUMFERENTIAL
CRACKING OF STEAM GENERATOR TUBES - BRAIDWOOD AND BYRON STATIONS
(TAC NOS. M92224, M92225, M92226 AND M92227)

On April 28, 1995, the U.S. Nuclear Regulatory Commission issued Generic Letter (GL) 95-03, "Circumferential Cracking of Steam Generator Tubes" which requested addressees to evaluate recent operating experience related to circumferential cracking, justify continued operation until the next scheduled steam generator tube inspections, and to develop plans for the next steam generator tube inspections. The staff has reviewed the response provided by Commonwealth Edison Company for Braidwood and Byron Stations. As a result of the review of your response, the staff has identified areas for which additional information and/or clarification is needed. The enclosures to this letter contain the information needed for the staff to complete its review of your response to GL 95-03. Please provide your response within 30 days of receipt of this letter.

This request is within the original reporting burden for information collection of 350 hours covered by the Office of Management and Budget clearance number 3150-0011, which expires July 31, 1997.

Sincerely,

Original signed by:

George F. Dick, Jr., Project Manager
Project Directorate III-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

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PDR ADOCK 05000454
PDR

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

Enclosures: As stated

cc w/encls: See next page

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D. L. Farrar
Commonwealth Edison Company

Byron/Braidwood Power Stations

cc:

Mr. William P. Poirier, Director
Westinghouse Electric Corporation
Energy Systems Business Unit
Post Office Box 355, Bay 236 West
Pittsburgh, Pennsylvania 15230

Attorney General
500 South Second Street
Springfield, Illinois 62701

Joseph Gallo
Gallo & Ross
1250 Eye St., N.W.
Suite 302
Washington, DC 20005

EIS Review Coordinator
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604-3590

Michael I. Miller, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60603

Illinois Department of
Nuclear Safety
Office of Nuclear Facility Safety
1035 Outer Park Drive
Springfield, Illinois 62704

Howard A. Learner
Environmental law and Policy
Center of the Midwest
203 North LaSalle Street
Suite 1390
Chicago, Illinois 60601

Commonwealth Edison Company
Byron Station Manager
4450 North German Church Road
Byron, Illinois 61010

U.S. Nuclear Regulatory Commission
Byron Resident Inspectors Office
4448 North German Church Road
Byron, Illinois 61010-9750

Kenneth Graesser, Site Vice President
Byron Station
Commonwealth Edison Station
4450 N. German Church Road
Byron, Illinois 61010

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

U.S. Nuclear Regulatory Commission
Braidwood Resident Inspectors Office
Rural Route #1, Box 79
Braceville, Illinois 60407

Ms. Lorraine Creek
Rt. 1, Box 182
Manteno, Illinois 60950

Mr. Ron Stephens
Illinois Emergency Services
and Disaster Agency
110 East Adams Street
Springfield, Illinois 62706

Chairman, Ogle County Board
Post Office Box 357
Oregon, Illinois 61061

Chairman
Will County Board of Supervisors
Will County Board Courthouse
Joliet, Illinois 60434

Mrs. Phillip B. Johnson
1907 Stratford Lane
Rockford, Illinois 61107

Commonwealth Edison Company
Braidwood Station Manager
Rt. 1, Box 84
Braceville, Illinois 60407

George L. Edgar
Morgan, Lewis and Bochius
1800 M Street, N.W.
Washington, DC 20036

REQUEST FOR ADDITIONAL INFORMATION
REGARDING CIRCUMFERENTIAL CRACKING OF STEAM GENERATOR TUBES
BRAIDWOOD STATION, UNIT 1 AND BYRON STATION, UNIT 1
DOCKET NOS. STN 50-456 AND STN 50-454

1. It was stated that the largest circumferential crack identified during the Byron, Unit 1, inspection was removed from the steam generator. Clarify whether or not this was the largest indication identified during the field examination or subsequent analysis determined that this was the largest indication. If subsequent analysis determined it to be the largest indication, were all the data systematically reviewed with the same criteria?

2. Several plants with preheater model steam generators expanded tubes into the tube support plate in the preheater region to minimize the potential for vibration induced wear. Since these expansions contain similarities to other expanded regions which have experienced circumferential cracking, discuss whether or not this area is susceptible to circumferential cracking. If this area is susceptible to circumferential cracking, please submit the information requested in Generic Letter (GL) 95-03 per the guidance contained in the GL.

REQUEST FOR ADDITIONAL INFORMATION

REGARDING CIRCUMFERENTIAL CRACKING OF STEAM GENERATOR TUBES

BRAIDWOOD STATION, UNIT 2 AND BYRON STATION, UNIT 2

DOCKET NOS. STN 50-457 AND STN 50-455

1. In your response, it was indicated that dented locations (specifically dented support plate locations) are susceptible to circumferential cracking and that plans are in place for detecting circumferential cracking at dented tube support plates (TSP) if it develops. Specify the inspections performed (scope and probe) during the previous Byron, Unit 2, and Braidwood, Unit 2, steam generator tube inspection outages.

It was indicated that dents greater than 5.0 volts will be inspected with an Appendix H qualified probe. Provide the procedures used for sizing the dents. If the procedure is identical to the procedure for the voltage-based repair criteria, a detailed description is not necessary.

Future inspection plans for dented (> 5 volts) intersections concentrate at the lowest hot-leg TSPs. A large dent at an upper TSP may be more significant in terms of corrosion susceptibility as a result of higher stresses than a small dent at a lower TSP even though the temperature is lower at the upper TSP. Given this, discuss the basis for the proposed sample strategy given that cracking depends on many factors including temperature and stress levels.

Clarify if the 20 percent sample of dents will be determined from the number of dents greater than 5.0 volts at all TSPs or from the number of dents greater than 5.0 volts at the lowest hot leg TSP.

2. Several plants with preheater model steam generators expanded tubes into the TSP in the preheater region to minimize the potential for vibration induced wear. Since these expansions contain similarities to other expanded regions which have experienced circumferential cracking, discuss whether or not this area is susceptible to circumferential cracking. If this area is susceptible to circumferential cracking, please submit the information requested in Generic Letter (GL) 95-03 per the guidance contained in the GL.