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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DEC 2 8 1979

MEMORANDUM FOR: John F. Stolz, Chief, Light Water Reactors Branch #1
Robert L. Baer, Chief, Light Water Reactors Branch #2
Olan D. Parr, Chief, Light Water Reactors Branch #3
Lester Rubenstein, Acting Chief, Light Water Reactors Branch #4

FROM: D. F. Ross, Jr., Acting Director, Division of Project Management

SUBJECT: ISSUANCE OF NUREG-0313, REV. 1, "TECHNICAL REPORT ON MATERIAL SELECTION AND PROCESSING GUIDELINES FOR BWR COOLANT PRESSURE BOUNDARY PIPING" (GENERIC TASK A-42)

The staff has completed the review of the above subject and has issued a "For Comment" edition of NUREG-0313, Rev. 1 which describes the staff's resolution of the Generic Technical Activity A-42.

NUREG-0313, Rev. 1 updates and supersedes the NRC technical positions established in the original NUREG-0313, which was published in July 1977, by incorporating the recommendations made in the recent NRC Pipe Crack Study Group report, NUREG-0531, "Investigation and Evaluation of Stress-Corrosion Cracking in Piping of Light Water Reactor Plants."

This NUREG report sets forth the NRC staff's revised acceptable methods to reduce the intergranular stress corrosion cracking susceptibility of BWR ASME Code Class 1 and 2 pressure boundary piping and safe ends. Recognizing that complete compliance with the guidelines described in the report may not be practical, or even possible for all BWR plants, varying degrees of conformance to the staff's guidelines are provided in the report. For plants that cannot fully comply with the specified material selection, testing, and processing guidelines, varying degrees of augmented inservice inspection and leak detection requirements are presented.

The enclosed sample letter should be transmitted to each BWR applicant within seven days of your receipt of this memorandum. Copies of NUREG-0313, Rev. 1 can be obtained from Publications Service Unit (x27333).

D. F. Ross, Jr., Acting Director
Division of Project Management

Contact: C. Y. Cheng
x28033

Enclosure: As stated

cc: See next page

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J. Stolz
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O. Parr
L. Rubenstein

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cc: E. Case
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C. Cheng

SAMPLE LETTER

Applicant:

Attached for your review and comment is the "For Comment" edition of NUREG-0313, Rev. 1, "Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping." The report constitutes the staff's resolution of the NRC's Generic Technical Activity A-42, "Pipe Cracks in Boiling Water Reactors," which was an "Unresolved Safety Issue" pursuant to Section 210 of the Energy Reorganization Act of 1974.

This report, NUREG-0313, Rev. 1, identifies NRC requirements resulting from the recent publication, NUREG-0531, "Investigation and Evaluation of Stress-Corrosion Cracking in Piping of Light Water Reactor Plants," by the NRC Pipe Crack Study Group (PCSG). The Study Group was specifically chartered to reexamine our previous conclusions and recommendations on this subject in view of cracks recently discovered in large diameter pipes, to evaluate the significance of safe end cracking at Duane Arnold relative to similar material and design aspects at other facilities, and to examine detection capabilities.

NUREG-0313, Rev. 1 sets forth the NRC staff's revised acceptable methods to reduce the intergranular stress corrosion cracking susceptibility of BWR ASME Code Class 1 & 2 pressure boundary piping and safe ends. For plants that cannot fully comply with the material selection, testing, and processing guidelines of this report, varying degrees of augmented inservice inspection and leak detection requirements are presented.

At this time public comments are being solicited from interested organizations, groups, and individuals. Any comments you may have should be forwarded to Dr. C. Y. Cheng, Engineering Branch, Division of Operating Reactors, Nuclear Regulatory Commission, Washington, D.C. 20555, by January 16, 1980.

At the completion of the 60-day public comment period, the staff will evaluate the comments received and, if needed, modify our positions in NUREG-0313, Rev.1. At that time, the staff will inform you of our final requirements. In the meantime, in order to expedite the implementation of the staff's position specified in NUREG-0313, Rev. 1, we request that you (1) begin to review all of the pressure boundary piping, safe end, and fitting material, including weld metal, in your facility to determine if it meets the material selection and processing guidelines set forth in the enclosed report, (2) lay out plans and schedules for any replace-

ments of non-conforming materials, and (3) start to prepare submittal to the staff to demonstrate that implementing the staff's guidelines specified in Part II of the enclosed report would result in undue hardship. Hardship requests will be reviewed on a case by case basis and will be considered only for plants that have been issued a CP and are in the later stages of construction.

Sincerely,

D.F. Ross

Domenic B. ~~Vassallo~~, Acting Director
Division of Project Management

Enclosure:
NUREG-0313, Rev. 1