

Barry S. Allen
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L-10-133

10 CFR 50.55a

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001**SUBJECT:**

Davis-Besse Nuclear Power Station
Docket No. 50-346, License No. NPF-3
Summary of Design and Analysis of Weld Overlays (Mode 4 Report) – Davis-Besse
Nuclear Power Station (TAC Nos. ME0477 and ME0478)

By correspondence dated January 30, 2009 (Accession No. ML090350070); with supplements dated July 13, 2009 (Accession No. ML091950627); November 23, 2009 (Accession No. ML093360333); and electronic mail dated December 15, 2009 (Accession No. ML100040016); FirstEnergy Nuclear Operating Company (FENOC) requested alternatives to requirements associated with reactor vessel nozzle, reactor coolant pump nozzle, and reactor coolant piping weld repairs for the Davis-Besse Nuclear Power Station.

By correspondence dated January 21, 2010 (Accession No. ML100080573), Nuclear Regulatory Commission (NRC) staff approved 10 CFR 50.55a Request RR-A33 for the full structural weld overlay alternative. By correspondence dated January 29, 2010 (Accession No. ML100271531), NRC staff approved 10 CFR 50.55a Request RR-A32 for the optimized weld overlay alternative.

The January 30, 2009 correspondence contained commitments to submit, prior to entry into Mode 4, summaries of:

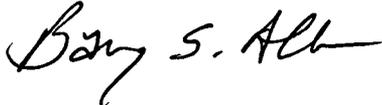
- the residual stress profile in the nozzles,
- the predicted crack growth in the original dissimilar metal welds, after application of the weld overlays, and
- that the application of the weld overlays does not impact the conclusions of the existing nozzle stress reports.

The Enclosure contains the aforementioned summaries.

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NRR

There are no new regulatory commitments contained in this submittal. If there are any questions or additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing, at (330) 761-6071.

Sincerely,

A handwritten signature in black ink that reads "Barry S. Allen". The signature is written in a cursive style with a long horizontal stroke at the end.

Barry S. Allen

Enclosure:

Structural Integrity Associates, Inc., "Summary of Design and Analyses of Weld Overlays for Reactor Coolant Pump Suction and Discharge, Cold Leg Drain, and Core Flood Nozzle Dissimilar Metal Welds for Alloy 600 Primary Water Stress Corrosion Cracking Mitigation," Report No. 0800368.407, Revision 0, June 2010.

cc: NRC Region III Administrator
NRC Resident Inspector
NRC Project Manager
Utility Radiological Safety Board