

Entergy Operations, Inc.

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R. F. Burski

Cirector Nuclear Safety Waterford 3

> W3F1-95-0162 A4.05 PR

October 5, 1995

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

Subject:

Waterford 3 SES Docket No. 50-382 License No. NPF-38

Request for Additional Information Regarding

NRC Generic Letter 95-03

Gentlemen:

This letter provides the Entergy Operations, Inc., Waterford 3, response to the NRC requests for additional information dated August 31, 1991 and September 21, 1995, regarding Generic Letter 95-03.

Small Radius U-bend Circumferential Cracking (1.b)

Circumferential cracking in small radius U-bends has not been observed at Waterford 3, and to the best of our information has never occurred in the small radius U-bends of CE designed steam generators. Defects that have been observed in the U-bend region were associated with a steam blanketed region that does not exist in the Waterford 3 design.

Dented Location Circumferential Cracking (1.c)

There are very few dented locations identified in the Waterford 3 Steam Generators, and no cracking at dents has been observed to date. There are no drilled support plates in the Waterford 3 Steam Generators, which have historically been the most susceptible locations for dents. Eggcrate supports and tubesheet locations next to carbon steel stay rods are considered the most susceptible locations in the Waterford 3 Steam Generators.

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Tubes adjacent to stay rods have been examined with Motorized Rotating Pancake Coil (MRPC) Eddy Current technology since the fifth refueling outage, with no defects due to denting identified to date. Eggcrate locations with identified denting are also part of an augmented examination by bobbin coil. Any locations with bobbin signals greater than 10 volts and significant growth since the last outage have been examined since Refuel 5. No defects due to denting have been observed to date.

Sleeve Joint Circumferential Cracking (1.d)

There are currently no sleeves installed in the Waterford 3 Steam Generators. Waterford 3 submitted to the NRC via letter W3F1-95-0152 additional information to the technical specification change request to allow the installation of CE TIG Welded sleeves as an alternative to plugging defective steam generator tubes. Our current information is that no circumferential cracking has been observed to date in sleeves of this design.

Terrain Plots

Waterford 3 Analysis Guidelines for MRPC eddy current data have included use of terrain plots for detection of circumferential flaws since the fifth refueling outage. Both the previous inspection (RFO6) and the current refueling (RFO7) guidelines incorporate the use of terrain plots in the production analysis of MRPC data. Waterford 3 is also free of the top of tubesheet denting phenomenon that contributed to the difficulty in detecting circumferential flaws at Maine Yankee. MRPC data has been analyzed using state of the art industry qualified methods.

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Please contact me or Robert J. Murillo at (504) 739-6715 should there be any questions regarding this matter.

Very truly yours,

Ort Bush

R.F. Burski Director

Nuclear Safety

RFB/RJM/ssf

cc:

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NRC Resident Inspectors Office