



A Centenor Energy Company

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Vice President - Nuclear
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Docket Number 50-346

License Number NPF-3

Serial Number 1807

June 14, 1990

United States Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: Response to NRC Bulletin No. 89-02 Regarding Potential Stress
Corrosion Cracking of Internal Preloaded Bolting in Swing Check
Valves and Justification for Alternate Inspection Schedule for
One Valve

Gentlemen:

The subject bulletin requested licensees to disassemble and inspect all safety-related Anchor Darling Model S350W swing check valves supplied with internal retaining block studs of ASTM specification A193 Grade B6 Type 410SS. The bulletin also requested licensees to review the design of other safety-related check valves to determine if similar designs and material selection to the Anchor Darling Model S350W are used.

Toledo Edison's review determined that there are no Anchor Darling swing check valves installed in safety related applications. However, the review identified twelve (12) Velan valves of similar design. These valves are installed in the Component Cooling Water, Containment Ventilation and Service Water Systems. An original procurement document review and a query to the valve vendor could not determine whether the bolting in question has a hardness of less than Rc26. Therefore, for (11) of the twelve (12) valves, Toledo Edison replaced the existing bolting during the ongoing sixth refueling outage with A193 B6 410SS bolting of a known hardness of less than Rc26, or replaced with a vendor approved alternative material, or removed their internals if the valves' functions were not required. Visual inspections of the retaining block bolts removed identified no cracking. Non-destructive examinations were not performed since Toledo Edison does not plan to re-use the bolting material.

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Replacement of the bolting material in one (1) remaining swing check valve will not be accomplished during the sixth refueling outage as originally planned. The inspection of CC-91, Component Cooling Water (CCW) Auxiliaries to CCW Train 2 Return Header Swing Check Valve, required a plant lineup and system drain which would significantly impact the current outage schedule. Therefore, the valve CC-91 bolting replacement and inspection will be performed during the seventh refueling outage.

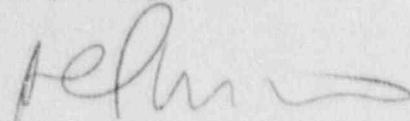
Inspection of this valve during the sixth refueling outage was not considered critical, since a modification to improve the design of the disc anti-rotation device was implemented during the last refueling outage which resulted in the valve being completely disassembled and inspected. No evidence of bolting degradation was identified at that time. Valve CC-91 is a "Ring" hanger bracket design valve rather than the "Retaining Block" hanger design of the Anchor Darling valves. A failure of one of the three bolts securing the hanger bracket ring would not impair the functionality of the valve to the same degree as a bolting failure in a two bolt hanger retaining block design valve. The bolts in question are lockwired from the bolt head to the retraining ring, which would retain any loose bolt parts that could cause binding of valve disc and impair its function were a bolt to fail. Inspection of four similar valves of this type did not reveal any evidence of bolting failures.

Additionally, CC-91 was satisfactorily tested during the sixth refueling outage for reverse flow per the In-Service-Test (IST) Program and will continue to be reverse flow tested on a cold shutdown frequency in accordance with the IST program. This testing will identify any problems with the safety function of the valve.

Based on the above, deferral of the CC-91 inspection to the seventh refueling outage is justified.

If you have any questions concerning this matter, please contact
Mr. R. W. Schrauder, Manager - Nuclear Licensing, at (419) 249-2366.

Very truly yours,



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Enclosure

cc: P. M. Byron, DB-1 NRC Senior Resident Inspector
A. B. Davis, Regional Administrator, NRC Region III
T. V. Wambach, DB-1 NRC Senior Project Manager

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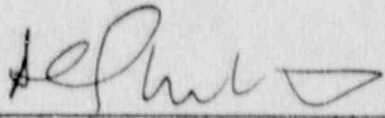
For

Davis-Besse Nuclear Power Station

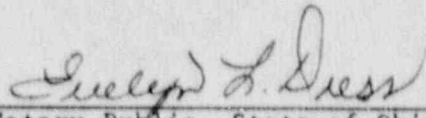
Unit No. 1

This letter is submitted in conformance with Atomic Energy Act of 1954 Section 182a as amended and 10CFR50.54(f), in response to NRC Bulletin 89-02 (Log No. 1-2123), "Stress Corrosion Cracking of High-Hardness Type 410 Stainless Steel Internal Preloaded Bolting in Anchor Darling Model 5350W Swing Check Valves or Valves of Similar Design."

By:


D. C. Shelton, Vice President, Nuclear

Sworn and subscribed before me this 14th day of June, 1990.


Notary Public, State of Ohio

EVELYN L. DRESS
NOTARY PUBLIC, STATE OF OHIO
My Commission Expires July 26, 1994