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Docket No. 50-346

LOWELL E. ROE
Vice President
Facilities Development
(419) 259-5242

Mr. James G. Keppler
Regional Director, Region III
Directorate of Regulatory Operations
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

This letter is submitted in accordance with 10CFR 50.55(e) as a final report regarding the Davis-Besse Nuclear Power Station Unit 1 reactor coolant pump seal injection isolation valve yoke material deficiency, which was reported by telephone conversation between our Mr. C. Domeck and your Mr. F. Jablonski on October 1, 1976.

Previously reported by phone on 9/20/76 and by interim report dated 10/25/76 was a significant deficiency of a broken valve actuator yoke on isolation valve Tag No. MU-HV66B. This valve was supplied to Toledo Edison Company by Babcock and Wilcox Company as part of the NSSS and is a Velan valve with a Kieley & Mueller Incorporated valve actuator assembly.

Description of the Deficiency

During Toledo Edison Company investigation of possible reasons for the above yoke failure, we were informed by Kieley & Mueller that on this order Velan had requested a standard actuator assembly, which has a cast iron yoke, for seven (7) valves to be used on the Davis-Besse Station Unit 1. These seven valves are shown on Figure 9-21, Revision 14 of the FSAR and are Tag Numbers:

MU-HV3, which is a 2½" gate valve
MU-HV33, which is a 2½" gate valve
MU-HV38, which is a 1" globe valve
MU-HV66A, which is a 1½" globe valve
MU-HV66B*, which is a 1½" globe valve
MU-HV66C, which is a 1½" globe valve
MU-HV66D, which is a 1½" globe valve

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* = Kielely & Mueller also stated that the cast iron yoke is satisfactory for valve closure forces involved and the yoke material supplied is not directly related to the breakage of the cast iron yoke.

It was also learned that Kielely & Mueller is normally requested to supply actuator assemblies with steel yokes, instead of their standard cast iron yokes, when the application has seismic requirements. The possible deficiency of cast iron versus steel yokes was brought to the attention of Babcock and Wilcox who confirmed the deficiency on 10/1/76 that the yokes should be steel since they are for seismically qualified valves.

Corrective Action Taken

The seven valves in question are the only valves at the Davis-Besse facility with Kielely & Mueller actuators; B&W has arranged with Velan to replace the present seven cast iron yokes with steel yokes. The replacement yokes are on site and are expected to be completely installed by the end of October.

Safety Implications

The seven actuators are installed in nuclear safety related applications as containment vessel isolation valves. The corrections of the deficiencies as described above prior to the operation of the facility assures that the health and safety of the public are not jeopardized.

Yours very truly,

Sowell E. Roe / ECR

bj pc 29/25-26

cc:

Dr. Ernst Volgenau, Director
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U.S. Nuclear Regulatory Commission
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