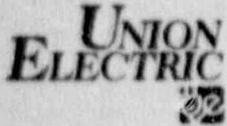


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December 28, 1989

Donald F. Schnell
Senior Vice President
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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
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Gentlemen:

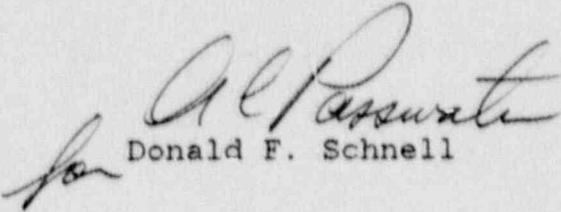
ULNRC-2128

DOCKET NO. 50-483
CALLAWAY PLANT
SAFETY-RELATED MOTOR-OPERATED
VALVE TESTING AND SURVEILLANCE
Reference: NRC Generic Letter No. 89-10,
dated June 28, 1989

The attachment to this letter provides Union Electric's response to Generic Letter 89-10. This generic letter required licensees to advise the NRC in writing, that the schedule and recommendations as detailed in the generic letter would be met.

This letter satisfies the six-month response date as required by Action Item L. If you have any questions concerning this letter, please contact me.

Very truly yours,


Donald F. Schnell

WEK/dvd

Attachment

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ATTACHMENT TO ULNRC-2128
UNION ELECTRIC RESPONSE TO
NRC GENERIC LETTER NO. 89-10

Generic Letter 89-10 requires utilities to develop a program similar to that already established at Callaway Plant to verify operability of all safety-related MOVs. In response to NRC IEB Bulletin No. 85-03, Union Electric initiated a program to verify operability of selected motor-operator valves (MOV) in the Auxiliary Feedwater and Safety Injection systems. This program consisted of 34 safety-related MOVs. After the implementation of the requirements of IEB 85-03, Union Electric expanded the MOV program to include all safety-related MOVs (with untested safety-related MOVs being diagnostically tested as design reviews are completed). When fully implemented, Union Electric will have 153 safety-related MOVs in the testing program.

Callaway Plant's MOV program satisfies the recommendations of the Generic Letter with the following exceptions:

- 1) Generic Letter 89-10 Item C states that all safety-related MOVs are to be demonstrated operable by testing them at design basis differential pressure (DP) and/or flow. In lieu of performing full flow DP testing on each MOV, Union Electric intends to utilize the HENZE-MOVATS DP data base methodology (which contains results of DP tests performed on MOVs). If sufficient data points for a particular type of MOV exist in the data base, then the data points can be used to predict the required amount of thrust to operate against DP conditions. The methodology requires either 4 or more data points from valves of the same type, manufacturer, orifice diameter, and stem diameter; or 20 or more points from valves of the same type to negate the need for "in situ" DP testing. If an MOV cannot satisfy the 4 or 20 criteria, or if an MOV cannot provide the needed thrust as determined from the data base without exceeding thrust limitations of the valve/actuator assembly, it will be evaluated for the need to DP test.

There are several reasons that we feel the data base methodology is an acceptable alternative to DP testing each valve. Union Electric's experience finds the MOV thrust requirements from the data base to be conservative when compared with actual DP tests performed at Callaway Plant. The blowdown testing performed by Idaho National Engineering Laboratories (INEL), as discussed in the Generic Letter, was for two phase flow conditions, which is not indicative of the system conditions for the safety-related MOVs at Callaway Plant. The HENZE-MOVATS DP data base methodology utilizes data from DP tests in single phase conditions similar to Callaway's application. Also, the plant conditions necessary to perform design basis DP testing would result in increasing the probability of abnormal operational occurrences. Union Electric intends to use the HENZE-MOVATS DP data base methodology until it is proven by further research to be nonconservative in single phase conditions.

- 2) The last paragraph in Generic Letter 89-10, Action Item L recommends that the licensee submit in writing to the NRC any future changes to commitments to this Generic Letter. It is Union Electric's intention to submit only those changes which are significant in nature (i.e., such as changes to the scope, basis, or methodology of our MOV program).

There are concerns at Union Electric and within the nuclear industry regarding certain aspects of the Generic Letter. NUMARC has made contact with the NRC and is working to resolve these concerns. It is Union Electric's desire to have the differences resolved between the NRC and the industry, through NUMARC, regarding the requirements of the Generic Letter. We will continue to follow the resolution of these differences and modify our program as necessary.

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