

*Southern California Edison Company*

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January 31, 1990

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

Gentlemen:

Subject: Docket No. 50-206  
NRC Bulletin No. 89-02  
San Onofre Nuclear Generating Station  
Unit 1

This letter provides the Southern California Edison response for San Onofre Unit 1 to NRC Bulletin 89-02, "Stress Corrosion Cracking of High-Hardness Type 410 Stainless Steel Internal Preloaded Bolting in Anchor-Darling Model S350W Swing Check Valves or Valves of Similar Design." As requested in Action I of the Bulletin, a design review of applicable safety related check valves at San Onofre Unit 1 has been performed as defined below. This review found no Anchor-Darling Model S350W or swing check valves of similar design with internal preloaded type 410 stainless steel bolting.

Bulletin 89-02 requests identification, disassembly and inspection of all safety related Anchor Darling Model S350W swing check valves or check valves of similar design with internal preloaded type 410 stainless steel bolting. The specific failures which led to this Bulletin occurred in Anchor Darling Model S350W swing check valves with type 410 stainless steel retaining block studs. These studs, which retain the blocks that attach the valve disk assembly to the valve body, were cracked from stress corrosion cracking (SCC) because improper heat treating resulted in high hardness and an increased susceptibility to SCC.

Our review involved all 158 safety related check valves in the In-Service Testing (IST) program. This included both active and passive safety related check valves. An active valve must change position in order to accomplish a specific function. Thus, a safety related active valve must either swing open or closed to perform its safety function and could be in either position during normal plant operation. A passive valve is not required to change position in order to accomplish a specific function. The passive safety related check valves are closed during normal operation and are required to remain closed to perform their safety related function.

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Our design review has determined that neither Anchor-Darling Model S350W swing check valves nor any other check valves of similar design with internal preloaded type 410 stainless steel bolting are used in active or in passive safety related applications as described above.

There are other safety related passive check valves at San Onofre Unit 1 which are not in the IST program and were not included in the scope of this review. These valves are classified as safety related because the external pressure boundary of the valve forms part of the safety related piping system pressure boundary. These valves are normally closed but are able to perform their safety function regardless of disc position because the check function of these valves is not safety-related. These valves are not required to perform any other safety function, following a design basis event. The safety function of these valves would not be affected by the bolting material failures which are the subject of this Bulletin and these valves are therefore excluded from the scope of the review.

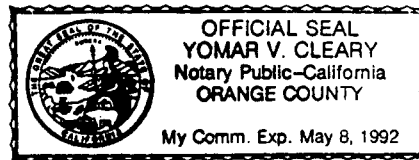
Based on our review, no further actions pursuant to this Bulletin are required for Unit 1.

Respectfully submitted,

By: *F. R. Nandy*  
F. R. Nandy  
Manager of Nuclear Licensing

Subscribed and sworn to before me this  
31 day of January.

*Yomar V. Cleary*  
Notary Public in the State  
of California



cc: J. B. Martin, Regional Administrator, NRC Region V  
C. Caldwell, NRC Senior Resident Inspector, San Onofre Units 1, 2 and 3