SUPPLEMENTAL REPORT UNDERSIZED SAFETY RELATED HVAC DAMPER ACTUATORS

San Onofre Nuclear Generating Station Units 2 and 3

Introduction

As indicated in an Edison letter dated June 15, 1979, this report is submitted to provide supplemental information to the final 10CFR50.55(e) report submitted on May 18, 1979 entitled, "Undersized Safety Related HVAC Damper Actuators, San Onofre Nuclear Generating Station, Units 2 and 3." Specifically, the May 18, 1979 final report identified fifteen (15) damper actuators which were undersized due to inadequate communication of engineering design information/criteria by University Mechanical & Engineering Contractors, Inc. (UMEC) among sub-tier suppliers, Air Balance (damper manufacturer) and Johnson Controls, Inc. (supplier of damper actuators).

In order to assess the generic implications of the deficiency described in the May 18, 1979 report, an investigation was conducted of the methods and effectiveness of UMEC's control of design information/criteria among sub-tier suppliers. Specifically, the investigation included identification of all UMEC vendors who have responsibility for special engineering/design (see Table 1) and an evaluation of the methods and the effectiveness of those methods in establishing and/or transmitting and controlling design criteria to vendors.

Discussion

"Submittal Data Logging and Tracking" describes the method of controlling and transmitting design criteria. This UMEC system of design transmittal (a formal, "numbered transmittal" system) was reviewed and resulting correspondence and records were sampled. This review indicated that the procedures were adequate to provide control for the transmittal of documentation and design information and that all activities required by this procedure were being performed. To further assess the adequacy of implementation of the procedure for control and transmittal of design documentation, a series of correspondence entailing some thirty-three (33) "packages" and their associated correspondence were reviewed. These "packages" included formal transmittals of design data between UMEC and their sub-tier suppliers. There were no deficiencies noted as a result of this review.

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In conclusion, based on the above described investigation and review; the utilization of UMEC's Work Plan Procedure NQ-17, Revision 2, has provided adequate control for the transmittal of design or special engineering information to sub-tier suppliers. Auditing by the Project QA Organization will be scheduled and conducted to verify continued compliance with the UMEC design information transmittal procedures in the future.

TABLE I

UMEC VENDORS (ACTIVE & INACTIVE) WITH RESPONSIBILITY FOR SPECIAL ENGINEERING OR DESIGN

VENDOR		MATERIAL
1.	Air Balance	Dampers
. 2.	Airolite	Louvers
3.	American Air Filter	Cooling Coils
4.	American Warming & Ventilating	Dampers
5.	Amber Booth	Fan Vibration Isolators
6.	Bahnson Company	Air Washers
7.	Buffalo Forge Company	Fans
8.	Carrier Corporation	Air Handlers
9.	CVI Corporation	Fan Coil Units
10.	Dawson Company	Compression Tanks
11.	Harrington Plastics	Fiberglass Duct
12.	Indeeco	Heaters
13.	Johnson Controls, Inc.	Instrumentation and Controls
14.	Joy Mfg. Company	Fans
15.	Mason Industries	Noise and Vibration Controls
16.	Pathway Bellows	Heater Manifolds
17.	S&T Western	Seismic Consultant
18.	Techno Corporation	Dampers
19.	Union Pump	Pumps