



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 9 1980

Ms Sue Ray
P. O. Box 371
North New Portland, Maine 04961

Dear Ms Ray:

In response to your allegation contained in a letter to Chairman Hendrie, undated, an inquiry was made by our Resident Inspector into the activities involved in the construction of the forced-draft cooling towers at Palo Verde. His findings are as follows:

1. The cooling towers are not required to operate in order to maintain nuclear safety during operation of the plant or in the case of a shut-down. Therefore, these particular components are not safety-related with respect to NRC rules and regulations. If these components were safety-related it would be a requirement by NRC regulations that the activities associated with the construction of the cooling towers for example, be accomplished in accordance with 10 CFR 50, Appendix B of the regulations. This describes the eighteen criteria which must be met by the licensee's quality program. These provide for a comprehensive system of controls to assure that quality is built into the facility.
2. Although the NRC program does not require it, Arizona Public Service imposed, through their Architect-Engineer (Bechtel Corp.), a formal Appendix B QA program on Marley Cooling Towers, the tower vendor. Marley Cooling Towers, in turn, obtained the services of a consultant for the development of their QA program. Subsequent experience indicated that the program, as written, was overly extensive for the classification of the structure involved and was presenting a problem for Marley in their effort to implement the myriad of detailed requirements contained in the program. The problem was remedied by revising the Marley QA program to more realistic dimensions, as approved by Bechtel.
3. In addition to implementing a QA program at their Yuma, Arizona fabrication plant (cast concrete baffle support segments) Marley also covered their erection activities at the site with QC engineers. Bechtel QA, in turn, audited Marley regularly and Arizona Public Service QA also completed surveillance activities on the Marley program.
4. The cooling tower catch basins, curbing and fandeck column foundations were constructed by Bechtel under an Appendix B QA program. This program was also reviewed by Arizona Public Service QA.

1930 290

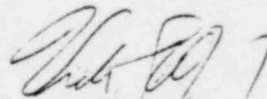
8001220236

5. Our Resident Inspector, has inspected two of the three towers and noted only minor shrinkage cracks in the fandeck support columns, and some minor honeycombing and slight spalling in other locations. All of these items are on record and the minor shrinkage cracks are being evaluated by the licensee for consideration of any rebar moisture exposure potential. Repairs will be made if warranted, according to Bechtel and APS.

Our conclusion is that the forced-draft cooling towers are not related to nuclear safety and NRC regulation, however we did inspect two of the three towers and no unusual conditions were noted. As was stated in the letter of December 6, 1979 to you from our Region V office, if you have details of matters relating to nuclear plant safety, please provide those details. At the present time we do not have any evidence that would raise questions with regard to nuclear plant safety related to the cooling towers.

Your interest in the safety of the Palo Verde nuclear power plants is greatly appreciated.

Sincerely,



Victor Stello, Jr.
Director
Office of Inspection
and Enforcement

1930 291