

UNITED STATES NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, D. C. 20555

December 19, 1983

Mr. William J. Dircks Executive Director for Operations U. S. Nuclear Regulatory Commission Washington, DC 20555

Dear Mr. Dircks:

SUBJECT: ACRS ACTION ON REVISION 1 TO PROPOSED REGULATORY GUIDE 1.89 ON

ENVIRONMENTAL QUALIFICATION OF ELECTRIC EQUIPMENT IMPORTANT

TO SAFETY FOR NUCLEAR POWER PLANTS

During its 284th meeting, December 15-16, 1983, the Advisory Committee on Reactor Safeguards concurred in the regulatory position of the proposed Regulatory Guide 1.89 on Environmental Qualification of Electric Equipment Important to Safety For Nuclear Power Plants (Task No. EE 042-2), dated November, 1983.

We note that the title of the Regulatory Guide refers to "electric equipment important to safety" whereas the Guide itself applies to "safety-related" electrical equipment and to only certain equipment in the larger category of "important to safety." We believe that the current attempts to clarify these categories is poorly served by the lack of clarity and specificity produced by this difference between title and text. In our view, a more appropriate, and correct, title would refer to "certain electrical equipment important to safety."

In addition, we note that this Guide provides specific guidance for qualification of certain electrical equipment important to safety only for environments resulting from LOCA and MSLB. In the past, the Committee has expressed concerns related to the qualification of such equipment for other off-normal or accident situations, particularly as may be experienced by equipment which is located in a normally "mild" environment. Such situations might include sprays caused by inadvertent activation of fire suppression equipment or failure of fire protection piping. We have also expressed reservations concerning the qualification of electrical equipment located in wet-steam environments caused by failure of hot water or steam lines located outside containment, resulting in condensation or deposition of entrained water droplets in the equipment. We reaffirm these

concerns and recommend that the NRC Staff consider the need to provide additional regulatory guidance concerning qualification for such conditions.

Sincerely,

J. J. Ray Chairman

Reference: Revision 1 to Regulatory Guide 1.89, "Environmental

Qualification of Electric Equipment Important to Safety for Nuclear Power Plants," Division 1, Task

EE 042-2, dated November 1983