

GPU Nuclear
100 Interpace Parkway
Parsippany, New Jersey 07054
201 263-6500
TELEX 136-482
Writer's Direct Dial Number:

November 26, 1985
5211-85-2195

Office of Nuclear Reactor Regulation
Attn: John Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Sir:

Three Mile Island Nuclear Station Unit I (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Environmental Qualification of
Safety Related Electrical Equipment

The purpose of this letter is to document that GPU Nuclear Corporation has established and carried out a program for ensuring the environmental qualification of safety-related electrical equipment in accordance with 10CFR50.49.

The TMI-1 Environmental Qualification Program was comprised of four elements:

1. A methodology and criteria for definition of systems and components required to be environmentally qualified was prepared. Using that methodology and criteria, an Environmental Qualification Master List (all safety-related electrical equipment in harsh environments relied upon during design basis events to bring the plant to safe shutdown) was developed. This master list also includes non-safety-related electric equipment the failure of which under postulated conditions could prevent satisfactory accomplishment of safety functions, and it includes certain Regulatory Guide 1.97 post-accident monitoring equipment. GPU Nuclear has qualified each component on that list using the DOR Guidelines, NUREG 0588, or 10CFR50.49 as appropriate. As part of developing the Master List, plant walkdowns of selected components were conducted in late 1984 and early 1985 to verify the make, model, and location of equipment. Some types of equipment, such as Limitorque motors and terminal boxes, were sampled to verify identification of subcomponents. All deficiencies noted (i.e., damage, unqualified parts, missing seals, etc.) have been resolved.

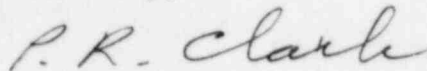
8512030219 851126
PDR ADJCK 05000289
P PDR

A048
1/0

2. The environmental service conditions in plant areas were calculated to identify harsh accident environments.
3. Documentation of environmental qualification for components identified in Item 1 to withstand the conditions calculated in Item 2, above. This qualification is documented in an auditable form maintained in the corporate file system with a duplicate set maintained at TMI-1 for the life of the plant.
4. Maintenance procedures which provides guidelines and requirements for the preventative maintenance, corrective maintenance, and surveillance for maintaining the environmental qualification of equipment were developed and are in place.

In summary, GPU Nuclear Corporation has completed an extensive program to define and qualify equipment as required in accordance with 10CFR50.49. We have also developed and put in place a system to ensure maintenance and surveillance that will maintain the environmental qualification of equipment. Adequate inspection has been performed to provide reasonable assurance that TMI-1 meets the requirements of 10CFR50.49.

Sincerely,



P. R. Clark
President

PRC:gpa
2627f

cc: John Thoma
R. Conte