Alan 15 196 1

Sandia Laboratories

Albuquerque, New Mexico 87115

SEP 9 1980

SNL/IEHQ, T-MLSR, 02

William R. Rutherford
RCI/OIE
East-West Towers
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Rutherford:

RE: Monthly Letter Status Report for August, 1980. Environmental Qualification of Safety-Related Equipment, B3101, 0711.040.

Authorization for this program was received through DOE/Albuquerque by letter dated July 1, 1980. The official start date for this program was August 1, although some significant effort was directed toward initiation of this work during July as reported in SNL/IEHQ, T-MLSR, 01.

During August, some \$23K was charged against the project budget case; this is rounded to the nearest \$1K. Of this, \$19K was charged for loaded salaries, \$2K was charged for technical support (Sandia service organizations), and \$2K was charged for direct charges (travel, purchases, and the like). Because of the billing process, certain travel/purchases may not be actually reflected in the appropriate-month charges; these usually experience 2-4 weeks delay before actually being billed to the case. To date, the charges billed total \$27K.

Based on an increasing level-of-effort and additional staff support to be dedicated to the project, we estimate that the charges for September and October will be about \$35K each month.

A major effort was devoted to organization, definition, and implementation of the program. E. Minor was officially transferred into the program, effective August 18. During the week of August 25-28, NRC staff visited Sandia Laboratories to discuss the program and to witness the terminal block shock test (discussed below).

W. Rutherford and A. Bennett remained for the entire period;
R. Klecker (NRR) visited through August 27. As a result of the week's discussions, certain target dates were established including the activities related to another verification test, on factory rework and splices.

The following paragraphs briefly discuss the August efforts which were centered in three of the program tasks.

- 3. Qualification Criteria
- 4. Inspection Procedures

Sandia staff continued their review of NUREG-0588, the DOR Guidelines, and the IEEE Standards. As a method of evaluating the Criteria, more detailed inspection procedures were written, for

8101290279

0

internal use, to determine the applicability and inspectability of the Criteria. This effort is continuing.

Detailed review was conducted, and comments prepared, on proposed Regulatory Guide 1.89 Rev. 1, Working Paper B, dated July 24, 1980. These were forwarded to you in letter SRL/IEHQ, T-3, 01, dated August 22, 1980. In a sense, comments on the proposed Guide are also comments on NUREG-0588; the Appendices are directly taken from NUREG-0588, and these are otherwise highly parallel documents. The submitted comments should then be considered as a first review of the qualification criteria per Task 3 of this program.

7. Independent Verification Testing

Significant effort was devoted to this task during August, leading to a very successful shock test of sliding U-link terminal blocks on August 28. A letter report, specifically detailing the test and results, will be submitted during September; a topical report will also be prepared. A brief chronology of events is presented here.

July 25, NEMA-4 enclosures ordered

- 31, Met with Bechtel staff in Gaithersburg August 8, Test plan distributed, SNL/IEHQ, T-7, 01
 - 11-21, Completed NDE of sliding links
 11, Screw torque measurements tests
 - 19-25, Completed facility demonstration tests
 - 22, Received authorization for test, IEHQ/SNL, T-7-1
 - 22, NEMA-4 enclosures arrived
 - 25-27, All assembly/loading/checkout completed
 - 28, Test conducted, visual inspection
 - 29, Screw torque measurements and disassembly

W. Rutherford and A. Bennett, of IE, witnessed the test preparation and the actual test. M. Dileo, of Multi-Amp Corporation, also witnessed the test.

Additional post-test NDEs and test documentation will be conducted during September.

I trust that this report illustrates the progress and direction of the Sandia effort. Please feel free to comment on its style and content relative to future monthly reports.

Very truly yours,

Lloyd L. Bonzon

Systems Safety Information

Division 4445

Copy to:

4400 A. W. Snyder Attn: J. Christy, #0711.040 4440 G. R. Otey

4445 L. O. Cropp, File 7.4 4445 Staff

4445 L. L. Bonzon

4445 L. Bustard 4445 E. Minor