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December 9, 1983

Mr. Everett A. Wick
High Level Waste
Technical Develop. Branch
Division of Waste Management
Mail Stop SS 965
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

WM Record File A-3167
WM Project 10, 11, 16
Docket No. (PDR)
LPDR - B, N, S

Disposition:
xEW
(PDR 623-53)

*Rec'd orig in Docket Room
for Wick - 12/20/83.*

Dear Dr. Wick:

We have received a request by Norman D. Shutler of the law firm of Deane, Snowdon, Shutler and Gherardi, acting for Teknekron, to review a draft report titled "Parameters and Variables Appearing in Computer Codes for Waste Package Analysis." The letter which is addressed to Dr. Claudio Pescatore, is enclosed for your information.

There are several problems which we feel should be brought to your attention.

1. The report is elementary

This report consists of definition of variables and descriptions of elementary concepts of heat transfer and structural mechanics with tables for conversion of units, and of variables or parameters presented in tabular form. The sources and uncertainties of the numeric data are not discussed critically and references for further reading on the descriptive sections are incomplete.

The material is presented at an undergraduate level and could be better supplied to NRC by providing one or two common college textbooks, and a standard engineering handbook.

Most engineers would be offended by being given definition of density, thermal conductivity, etc. at the high school level, and many people could justifiably question the expenditure of federal funds in a contract to deliver information that is not as complete as that presently available in paperbacks in any college bookstore. In particular, this report would not be favorably viewed by the Advisory Committee or the GAO.

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2. Our review would be most negative

The work required to upgrade this report to professional standards would involve essentially a complete rewrite. It would require deletion of embarrassingly trivial material, inclusion of original references and sources, addition of supplementary references, and a critical review of uncertainties of data and limitations of correlations.

We would have to file a review with all these views to protect our professional standing since once the QA review is submitted, the report supposedly is issued without our further review, and we as members of the Teknekron QA team would appear as endorsing it by implication.

3. The request for this work is not made through approved channels

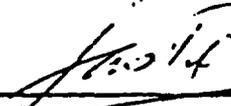
It is the practice for NRC, NMSS to authorize technical assistance tasks directly and with knowledge of the impact of such requests on overall schedules. In this case, the request has been made directly through a law firm with their estimate of the level of effort required for the review. It should be noted that verifying the data presented in the report involves more than the 2 to 3 days estimated by Teknekron even if the review simply consisted in comparing numbers with those reported in standard handbooks.

In addition to the above problems, we are concerned that our response to such a letter without proper NRC authorization may be a violation of our contractual obligations to the NRC.

Sincerely,



D. Schweitzer



C. Sastre



C. Pescatore

CS:ep
enc.

cc: M. J. Bell
R. E. Browning
J. T. Greeves

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December 5, 1983

Mr. Claudio Pescatore
Division Waste Management
Brookhaven National Laboratory
Associated Universities, Inc.
Building 703
Upton, New York 11973

RE: External Quality Assurance Team for NRC Benchmark Project

Dear Mr. Pescatore:

Enclosed for your review, as a member of Teknekron's External Quality Assurance Team for the NRC Benchmark Project, is a copy of the report "Parameters and Variables Appearing in Computer Codes for Waste Package Analysis." Please review the report with the following questions in mind:

- a. is the report complete in identifying all the parameters and variables of significance?;
- b. are the data susceptible to measurement in the laboratory or field?;
- c. are the definitions adequate and accurate?; and
- d. are the data values listed adequately representative of probable nuclear waste repository sites?

We would appreciate receiving your written review within two (2) weeks, if possible. We expect your review to require about 16-24 hours to prepare.

If you have any questions, please call.

Sincerely,


Norman D. Shutler

NDS:hgc
Enclosure