



April 7, 1988

Ms. Pauline Brooks  
Division of Waste Management  
MS 62355  
US Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Contract No. NRC-02-81-026, FIN B-6985

Dear Pauline:

As we discussed in our last telephone conversation, I have prepared a summary of the work to date on the subject contract and our requirements to complete this project and provide the deliverable reports to the USNRC in a timely fashion. Enclosure 1 summarizes the work performed from the inception of this project to the present time, as discussed in our proposal of November 4, 1986. We also present our recommendations for completion. Enclosure 2 describes our current situation regarding unfunded expenses which have been incurred and which are required to complete the recommended effort.

I trust this letter provides you with sufficient information to allow us to proceed with a satisfactory project completion. You may contact me with any questions you might have.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Charles", written in a cursive style.

Charles J. Rosselle  
Vice President

CJR:mab

Enclosures

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**Enclosure 1**  
**Summary of Work Performed**

The present phase of work on this project included the items shown in Table 1, less the lessons learned task described as a portion of Task 6. The status of each of these items is as listed in the column entitled, "Current Status". In order to complete the tasks noted in this table, Teknekron Transportation Systems (TTS) assigned the tasks to various individuals as indicated in the column entitled, "Work Assignment". Mr. Richard Chapman, at the time of inception of this phase of the project, was a full-time TTS employee, who had previous experience working on this project under the direction of Mr. Doug Vogt, the previous project manager. Because of the extensive nature of work remaining to benchmark the various codes, Mr. Doug Dooley and Mr. Ron Mahini, PhD candidate students in the Nuclear Engineering project at UC Berkeley, were employed on a part-time basis to facilitate the work effort. These individuals were well qualified technically for this effort due to their backgrounds and academic training. Work proceeded on these tasks, essentially on schedule, through February 1987. At this time, Mr. Chapman left the employ of TTS to seek other business opportunities. He had completed his assigned work. The project seemed to be proceeding smoothly, although running slightly over budget. This situation seemed due to the need for significant management support and review necessitated by the lack of experience of any of the remaining personnel regarding the history of the project. Significant effort was required to support the ongoing work, due to the need to review the previous work and associated reference documentation on a frequent basis. All phases of the project suffered significant delays in project completion, work being performed by GEO-TRANS, Acres, TTS and Kris Waki experienced due to a lack of continuity and expertise. Additionally, due to incomplete accounting records, it appeared that the project was proceeding reasonably on budget, when in fact it was considerably over budget. In October of 1987, the project deliverables had proceeded to a point where final review could take place. Due in large part to the problems noted above, and due to the general level of inexperience with this project of all the parties who had completed the work during this phase, TTS felt that the services of an experienced QC team would be beneficial. Accordingly, the services of Mr. Amitava Ghose and Mr. Yusef Bozorgnia of Tenera were engaged by TTS to complete the QC review. These individuals were requested to extensively review all the supporting documentation for the project and perform a detailed review of the work performed to date. This QC effort proceeded through November and December of 1987 and was finished in early February of 1988.

These gentlemen were highly qualified for this effort, having been extensively involved in the nuclear licensing support efforts of TENERA.

As has been documented, TTS noted in early December of 1987 that it had not been accurately tracking the project expenditures. In fact, the total project authorized budget had been expended in October of 1987. TTS requested additional funding in December, 1987 to allow completion of the project. At this time we also made the decision to complete the QC effort, knowing full well that we were continuing to incur a liability which was essentially unfunded. TTS felt that the project needed to retain the individuals performing the QC effort to avoid the type of discontinuity which had plagued the project from its inception. We feel that the high quality of the final review justified this decision.

At the present time TTS recommends that the work performed to date be incorporated into a suitable report format, along with the QC review comments, and forwarded to the USNRC so that this project can be closed out.

We believe that the information contained therein will be suitable for your use as a licensing support tool, realizing that some services will be required to incorporate the QC comments. Since TTS no longer possesses the requisite talent to efficiently provide these services, it is probably cost effective for the USNRC to perform this effort themselves, or perhaps contract directly with TENERA. The individuals who performed the QC review are quite experienced with this material. TTS is prepared to facilitate and support any transfer of this effort.