

TECHNICAL ASSISTANCE PROJECT  
Identification and Evaluation of Seismo-Tectonic Issues  
Related to Repository Site Characterization Plans

(NRC FIN No. A-0297)

QUARTERLY PROGRAM REPORT  
No. 1

1. Introduction

The purpose of this QUARTERLY PROGRAM REPORT is to summarize on a quarterly basis our progress of work under the FIN A-0297 program.

The objective of this program is to provide the U.S. Nuclear Regulatory Commission (NRC) with an independent evaluation of the U.S. Department of Energy's (DOE) seismo-tectonic assessments and plans for future investigations to assure that there is adequate information to complete performance assessments in licensing. To achieve this objective, we focus our work on:

- a. Existing data base and adequacy of methods used to collect and interpret the data;
- b. Site-specific seismo-tectonic issues (in basalt at Hanford, Washington, in tuff at Yucca Mountain, Nevada, and in salt at sites designated by the DOE's Salt Repository Projects Office (SRPO));
- c. Identification of additional information needed to perform quantitative assessments to determine if there is reasonable assurance that the site in question will meet the performance objectives of 10 CFR Part 60;

- d. DOE responses leading to resolution of open seismo-tectonic items either prior to, or within the site characterization plans (SCP);
- e. Review and comment on SCP updates and prepare sections of NRC analyses; and
- f. Review public comments on DSCA and prepare final SCA.

## 2. Progress in the First Quarter (August - October 1986)

The program under NRC FIN No. A-0297 was initiated with the first program initiation and coordination meeting held in Livermore, CA on 15 August 1986.

In accordance with Task II of the A-0297 program, a task which entailed our development of a volcanic hazards assessment for the Yucca Mountain, Nevada vicinity, was initiated. A topical report on this task is to be submitted to the NRC by 31 January 1987.

The subject of in-situ stress in basalt in the BWIP site is of significant factor in our future evaluation of a SCP for the BWIP site and its update. In accordance with Task II of the A-0297 program, we initiated our review and evaluation of several DOE reports summarizing hydraulic fracturing tests designed to characterize the state of in-situ stress in four deep boreholes within the BWIP site.