

# **SUPPORT FOR CONSULTANT REQUEST**

April 27, 1998

**CONSULTANT:** Scott Malone

## **RATIONALE FOR USING AND PROGRAMMATIC IMPACT OF NOT USING CONSULTANT:**

This consultancy is established to support the Unsaturated and Saturated Flow under Isothermal Conditions KTI (20-1402-861) conducting geophysical surveys at Yucca Mountain.

## **STATEMENT OF WORK:**

Mr. Malone will support geophysical surveys at Yucca Mountain being conducted as part of field work for the Unsaturated and Saturated Flow under Isothermal Conditions KTI. These surveys will use electromagnetic methods to define changes in electrical conductivity in geologic formations of interest. Mr. Malone is experienced in the use of a wide range of such techniques in the basin and range physiographic province of the southwestern U.S. He will provide advice on the most effective equipment and approaches for the surveys. He will help set up the equipment and will help conduct the surveys.

## **LIST OF ELIGIBLE CONSULTANTS CONSIDERED:**

None.

## **RATIONALE FOR SOLE/SINGLE SOURCE SELECTION:**

Mr. Malone has formal training in geology and geophysics. He has substantial experience conducting electrical, electromagnetic, and other geophysical surveys. His work has been mainly in Nevada, Arizona, New Mexico, and Chihuahua. He is familiar with the operation and application of many types of geophysical survey instruments. This background is particularly well suited to the focused work anticipated for Mr. Malone. We are not aware of another consultant with this combination of experience.

## **RATIONALE FOR NOT USING SwRI RESOURCES:**

No resources exist at SwRI for conducting this scope of work.

## **PROGRAMMATIC IMPACT ON CNWRA WORK:**

This consultancy will support Major Milestone (1402-861-815) NRC High-Level Radioactive Waste Program Periodic Progress Report: Section on Unsaturated and Saturated Flow Under Isothermal Conditions KTI - Joint NRC/CNWRA Report.

## **RATIONALE FOR RATE:**