Sandberg Stuart
~~Rogers, Noel~~

Statement of Work
Geophysical Solutions BOA
March 25, 2002 – 2003

Geophysical Solutions will assist or undertake data acquisition, processing, and inversion modeling of geophysical data collected at various sites. These geophysical surveys may include self-potential, magnetic, resistivity, and transient electromagnetic measurements.

Data processing will include construction of profiles of these data sets showing variation in geophysical anomalies and contour maps showing these anomalies. Inversion of TEM data will result in profiles of the electrical conductivity as a function of horizontal distance and depth across the sites and a brief explanation of the inversion and results.

Rick Klar - 2003

Raba-Kistner

STATEMENT OF WORK: Staff from Raba-Kistner Consultants, Inc. may be asked
to participate in a variety of activities. These may include (1) water sampling in Nye Co. EWDP wells. If asked to participate it is anticipated that Raba-Kistner personnel will assist CNWRA staff in the collection of water samples, in the performance of subsequent field analyses, and in the packaging and labeling of samples for additional laboratory analyses. In the absence of CNWRA staff, Raba-Kistner personnel will conduct the sampling activities independently. Raba-Kistner staff are expected to follow generally accepted and established procedures for collection of environmental water samples. (2) The second task may include assisting CNWRA
hydrologists in the measurement of saturated hydraulic conductivity with a Guelph permeameter (3) A third task for Raba-Kistner Consultants, Inc. may be to participate with CNWRA staff in multidisciplinary teams to review and prepare environmental documents related to NRC implementation of National Environmental Policy Act (NEPA) requirements. Particular focus will be on those areas in biology and ecology where CNWRA does not have staff expertise. (4) A forth task will be to assist CNWRA staff field geophysical surveys Other tasks that Raba-Kistner may be asked to do will be defined at that time.

Supporting Analysis for Procuring Subcontractor Services

SUBCONTRACTOR: Stewart Sandberg, Noel Rogers, Geophysical Solutions, Inc.

RATE (Dollars/hour for both Stewart Sandberg and Noel Rogers

PERIOD OF PERFORMANCE: July 15, 2003 through July 15, 2004

STATEMENT OF WORK: Provide professional geophysical services for approximately 45 days to support water quality and hydrostratigraphic mapping across coastal karst aquifers systems on the Caribbean islands of Antigua and Jamaica. Fifteen days (approximately 120 hours) will be spent performing geophysical surveys, preliminary data assessments, and training seminars on the island of Jamaica. Seventeen days (approximately 136 hours) will be spent performing similar services on the island of Antigua. This work will require familiarity with time-domain electromagnetic methods, Schlumberger D.C. electrical resistivity methods, induced polarization methods, and shallow electrical ground-conductivity methods, and dipole-dipole measurements to support high-resolution tomographic imaging. Familiarity with methods for interpreting these data is required. On both islands, the duration of the training seminar will be approximately two days. In addition, Dr. Sandberg will spend approximately 8.5 days on data interpretation following the field component of this work and an extra two days to support report preparation activities related to the project.

ESTIMATED UTILIZATION (Hours): 350 hours

CONFLICT OF INTEREST EVALUATION OF WORK:

Past: Dr. Sandberg as president of Geophysical Solutions, Inc., has previously worked for the CNWRA, supporting geophysical surveys in Nevada and at Cerro Negro Volcano. Dr. Sandberg, Mr. Rogers, and Geophysical Solutions Inc., provided similar consulting services for a range of private and government agencies. These include Lockheed Martin and Roy F. Weston, Inc., (contract work to the United States Environmental Protection Agency) and the New Jersey Geological Survey. In addition, Dr. Sandberg and Mr. Rogers, either through Geophysical Solutions, Inc., or as faculty at the University of Southern Maine, or the University of South Florida has received funding from the Department of Energy, Department of Defense, and the United States Geological Survey.

Because some of the past work of Dr. Sandberg, Dr. Rogers, and Geophysical Solutions, Inc., has come from parties to the NWPA, the potential for COI must be evaluated before the CNWRA can consider using Dr. Sandberg, Mr. Rogers, or Geophysical Solutions, Inc., for any future NRC work.