

# **SUPPORT FOR CONSULTANT/SUBCONTRACTOR REQUEST**

Date: February 14, 1998

**CONSULTANT/SUBCONTRACTOR:** Dr. Yi-Ming Pan

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

Dr. Pan's assistance is needed so that CNWRA staff can complete the necessary activities mentioned in CNWRA Operations plan without impacting other projects. Dr. Pan had assisted CNWRA staff in the past in related activities. Without his assistance, the CNWRA staff will not be able to provide timely input to TPA code, version 3.2 and review TSPA-VA adequately.

### **STATEMENT OF WORK:**

The objectives of the container life and source term key technical issue are to (i) evaluate the models and data used by the U.S. Department of Energy in calculating the container life and source term and (ii) develop independent models and data for input to NRC Total system Performance Assessment (TPA) code. The specific objective of the work to be performed by Dr. Pan is to develop information on pit growth rate and distribution of pits on carbon steel through suitable corrosion and electrochemical experiments. The experimental plan will be developed in coordination with CNWRA staff. The experimental work will be conducted in accordance with quality assurance requirements. Data analyses will be performed in coordination with CNWRA staff. In addition to the pit growth experiments, Dr. Pan will assist the CNWRA staff in the preparation of reports and papers.

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

None

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

Dr. Pan has previous experience on investigating container corrosion issues. He is familiar with the CNWRA QA procedures and is available in a short time frame.

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

Unfamiliarity with container corrosion issues (we intend to use SwRI staff in other aspects of CLST KTI involving mechanical failure and cladding performance).

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

None

**RATIONALE FOR RATE(S):** Consistent with rates he previously charged minus the charges for the company through which he formerly contracted work with CNWRA.

## **Statement of Work For Yi-Ming Pan**

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It is planned that Dr. Pan will work 20 hours per week for a total of about 560 hours in FY98.