



12/21- CC to James Meyer
Jim - Dan - Paul
United States
Nuclear Regulatory Commission
Paid to Shirley A.

WASHINGTON, D.C. 20555-0001

DEC 21 2001

FILE COPY

File # 5421-001-13

Date 12/21/01 Initials Jim

Information Systems Laboratories, Inc.
ATTN: James Meyer
11140 Rockville Pike, Suite 500
Rockville, MD 20852

SUBJECT: TASK ORDER NO. 1 ENTITLED, "PTS ANALYSIS" UNDER CONTRACT NO.
NRC-04-02-054

Dear Mr. Meyer:

This letter definitizes Task Order No. 1 in accordance with the enclosed statement of work. The period of performance for Task Order No. 1 is December 20, 2001 through June 30, 2002. The task order estimated cost and fixed fee is changed as follows:

Estimated Costs \$114,968
Fixed Fee \$ 9,197
CPFF \$124,165

\$100,000 in incremental funds are hereby allotted to this task order of which \$92,593 represents the funds for the reimbursable costs and \$7,407 represents funds for the fixed fee. Accounting Data for Task Order No. 1 is as follows:

Commitment No.	APPN#	B&R	JCN	BOC	Amount
RES-C02-323	31X0200	26015110191	W6706	252A	\$100,000
Total Obligated Amount -					\$100,000.00

A summary of obligations for this task order, from award date through the date of this action is given below:

Total FY02 Obligation Amount: \$100,000.00
Cumulative total of NRC obligations: \$100,000.00

Please indicate your acceptance of Modification No. 11 to Task Order No. 2 by having an official authorized to bind your organization execute three copies of this document, by signing in the space provided, and return two copies to me. You should retain the third copy for your records. All other terms and conditions of this task order remain unchanged.

Should you have any questions, regarding this modification, please contact me on (301) 415-8168.

Sincerely,



Stephen M. Pool, Contracting Officer
Division of Contracts and Property Management
Office of Administration

ACCEPTED



NAME



TITLE



DATE

TO#1 SOW PTS Analysis

BACKGROUND

There is currently underway an reevaluation of the issue of pressurized thermal shock (PTS). The purpose is to determine if and how the PTS rule, 10 CFR 50.61 can be revised. It is thought that the current rule and analysis methods, which were developed in the mid-1980s, may be conservative to a significant degree.

The potential benefits to revising the current PTS rule lie with life extension. The use of more accurate analysis methods allow the life of more susceptible reactor vessels to be extended from 40 years to 60 years. There is a very substantial economic benefit to doing so, since the capital costs of the plants were based on a 40 year life.

There are three major parts, or divisions, to the PTS analysis program: 1) fracture mechanics; 2) probabilistic risk assessment; and 3) thermal hydraulic transients. This Task is part of the latter.

The purpose is to analyze transients in four specific plants: Oconee-1, Beaver Valley-1, Palisades, and Calvert Cliffs-1. Two of these plants, Oconee-1 and Calvert Cliffs-1, were also the subject of the first PTS studies done in the mid-1980s. Beaver Valley was selected to replace the third plant for that original PTS study (HB Robinson). Both are Westinghouse 3-loop. Palisades was added as well because it is a limiting plant in terms of vessel fluence.

OBJECTIVE

Prior work was done to update and develop input decks for the four plants and to analyze a large number of transients: ~150 for Oconee and ~40 each for Beaver Valley and Palisades. It is necessary to carry this work to completion.

WORK REQUIREMENTS

Task 1: Documentation

Document all prior PTS work as a NUREG/CR.

Estimated Level of Effort: 1.5 staff-month

Estimated Completion Date: 1/31/02

Task 2: ACRS Meeting

Present Oconee results at an ACRS meeting to be held in January 2002.

Estimated Level of Effort: 1 staff-month

Estimated Completion Date: 1/31/02

Task 3: Interaction with NRC

Interact and interface as necessary with NRC PRA and Fracture Mechanics staff.

Task 4:

Estimated Level of Effort: 1 staff-month

Estimated Completion Date: 6/30/02

Interaction with University of MD

Interact with University of Maryland staff engaged in uncertainty analysis.

Estimated Level of Effort: 1 staff-month

Estimated Completion Date: 6/30/02