



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

JUN 23 2003

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

SUBJECT: MODIFICATION NO. 6 TO TASK ORDER NO. 4 ENTITLED, "AP1000  
ANALYSIS" UNDER CONTRACT NO. NRC-04-02-054

Dear Mr. Meyer:

This letter definitizes Task Order No. 4 Modification No. 6 in accordance with the enclosed statement of work. The period of performance for Task Order No. 4 remains from May 13, 2002 through December 31, 2003. The task order estimated cost and fixed fee is increased as follows:

	From:	By:	To:
Estimated Costs	\$506,096	\$49,090	\$555,186
Fixed Fee	39,773	\$ 3,920	\$ 43,693
CPFF Total	\$545,868	\$53,010	\$598,878

No funds are allotted to this task order by this mod.

Please indicate your acceptance of Task Order No. 4 Mod 6 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 task order, please contact me on (301) 415-8168.

Sincerely,



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

ACCEPTED  
  
SIGNATURE

VP  
TITLE

6/25/03  
DATE

STATEMENT OF WORK  
TASK ORDER NO. 4, MOD 6  
AP1000 ANALYSIS

1. Stop Task 6 of Task Order 4.
2. Add the following Task:

WORK REQUIREMENTS

**Task 10:      Simulate AP1000 Reflood Period Using COBRA-TF**

Provide an independent assessment of core heatup during the reflood period of a large break LOCA by using output from TRACE (formerly known as TRAC-M) to drive a separate COBRA-TF calculation. Use the results of this calculation to provide an independent estimate of AP1000 reflood behavior and provide a means to evaluate the TRACE interim reflood model. The COBRA-TF nodalization of the AP1000 core will be determined with consultation from NRC staff. TRACE output from a CD=1.0 DEG large break calculation will be used to provide boundary conditions to the COBRA-TF model.

Perform a calculation using a version of TRACE with the interim reflood model. Compare the results of this calculation to the previous TRACE calculation, and also to the COBRA-TF results.

Deliverables will include a calculation notebook describing the COBRA-TF input and simulation results, and a comparison to TRACE interim reflood results. All TRAC-M, COBRA-TF, and TRACE input and output files are to be retained for archiving in the NRC data bank.

Estimated Level of Effort:    3 staff-months  
Estimated Completion Date: 10/30/03