UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001
MAY 0 5 2004

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

SUBJECT: MODIFICATION NO. 10 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. 10 in accordance with the attached Statement of Work. The period of performance for Task Order No. 4 will run from May 13, 2002 through July 31, 2004. The task order estimated cost and fixed fee are increased as follows:

	From:	By:	To:
Estimated Costs	$507,404	$87,279	$594,683
Fixed Fee	$39,882	6,954	$46,836
CPFF Total	$547,285	$94,234	$641,519

$94,234 is hereby allotted to this task order. $641,519 is the total funds currently obligated. Accounting data for this mod is as follows:31X0200; 46015115103; Y6662 ; 252A $94,234.

Please indicate your acceptance of Task Order No. 4 Mod 10 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	TITLE	DATE
	VP	5/10/04

TEMPLATE - ADM001

ADM002

Attachment

STATEMENT OF WORK
TASK ORDER NO. 4, MOD 10
AP1000 ANALYSIS

WORK REQUIREMENTS

1. Stop work on Task 10, "Simulate AP1000 Reflood Period Using COBRA-TF."

2. Replace Task 13, "TRAC-M Assessment Using APEX-AP1000 Tests" with:

Task 13: TRAC-M/TRACE Assessment Using APEX-AP1000 Tests

The input deck developed in Task 12 is to be used to simulate the following experiments in APEX-AP1000:

(A) Double-ended guillotine break of DVI line #1 with 3/4 ADS-4 valves available. One ADS-4 valve on non-pressurizer side failed closed (Test DBA-02)

(B) Double-ended guillotine break of DVI line #1 with 3/4 ADS-4 valves available. One ADS-4 valve on non-pressurizer side failed closed (Test DBA-03)

(C) Double-ended guillotine break of DVI line #1 with 2/4 ADS-4 valves available. Both ADS4 valves on non-pressurizer side (HL-1) failed closed (Test NRC-AP1000-05)

(D) PRA Verification Test (Test NRC-AP1000-10)

Deliverables include a report and TRAC-M/TRACE files. The report will document the input decks used, modifications made to them and/or code changes, and a description of transients performed including a comparison of TRAC-M/TRACE predictions to the experimental data.

All TRAC-M/TRACE input and output files that should be retained as determined by the NRC Project Officer will be archived in the NRC data bank.

Estimated Level of Effort: 5.0 staff-months
Estimated Completion Date: 7/31/04

3. Add the following new task:

Task 15: AP1000 Re-analysis

Using existing input decks, repeat simulations of the 1.0 C_D DEG large break LOCA and the DEDVI break with failure of an ADS-4 valve on the non-pressurizer side of the plant using a version of TRACE that includes the interim reflood model. Verify that the simulations execute to intended completion point. Compare the new simulation results with the previous results, and prepare a

letter report. TRACE input and output files are to be retained for archiving in the NRC data bank.

Estimated Level of Effort: 2 staff-months
Estimated Completion Date: 7/31/2004