

CMBIRF



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

JUN 12 2000

Information Systems Laboratory, Inc.  
Attn: Nancy Aguinaldo  
11140 Rockville Pike, Suite 500  
Rockville, MD 20852

Dear Ms. Aguinaldo:

SUBJECT: MODIFICATION NO. 1 TO TASK ORDER NO. 3 UNDER CONTRACT NO.  
NRC-04-97-039

In accordance with Section G.5, Task Order Procedures, of the subject contract, this letter definitizes Task Order No. 3. This effort shall be performed in accordance with the enclosed Statement of Work.

The period of performance for Task Order No. 3 will run from March 24, 2000 through March 31, 2001. The total cost plus fixed fee for full performance of this task order is increased by \$16,176 from \$295,341 to \$311,517. The total estimated cost for this task order is increased by \$15,118 from \$276,020 to \$291,138. The total fixed fee for this task order is increased by \$1,058 from 19,321 to \$20,379. Funds in the amount of \$15,000 are hereby allotted to this task order. This raises the total allotment of funds from \$295,341 to \$310,341.

Accounting data for Task Order No. 3 mod 1 is as follows:

B&R No.: 06015110125  
Job Code: W6706  
BOC Code: 252A  
RES ID: RES-C00-444  
Appropriation No.: 31X0200  
Obligated Amount This Action: \$15,000  
Total FY 2000 Obligation \$310,341.

The following individuals are considered by the Government to be essential to the successful performance of the work issued under this task order modification:

[REDACTED]

The contractor agrees that such personnel shall not be removed from the effort under this task order without compliance with Contract Clause H.4-Key Personnel



Statement of Work NRC-04-97-039  
Task order NO. 3 Mod 1

Task Order #3

Add Subtask 6.4.1 - Steam Generator Tube Leak Jet Impingement Calculation.

This task is to consider the possible adverse effects of the impingement of an escaping jet of steam from a leaking steam generator tube on adjacent tubes during severe accidents. Parameters of the escaping jet (velocity, distribution of particle sizes and particle loading) are to be considered, as well as the behavior of the crack through which the jet is escaping (crack opening rate, crack extension rate, and associated flow rate through the opening). The objective of the calculations are to provide input to a planned experimental program in this area.

The contractor shall set up a calculation including a grid-refinement study and calculations of flow in a case of interest. The NRC will provide flow and configuration parameters. The contractor shall perform calculations including particle motion for varying pressure ratio and jet widths with configuration parameters provided by the NRC. The contractor shall provide a report on this work. Upon review and approval of the report the contractor shall perform additional calculations, varying the parameters of interest, including the pressure ration, jet width, etc., and develop a calculation of particle impact velocity. This work shall also be documented by a report. The first report shall be provided by May 31, 2000 and the second report, July 31, 2000.

Estimated Level of Effort: 1.5 staff-months  
Estimated Completion Date: 7-31-2000

Key Personnel

