AMENDMENT OF SOLICITATION	MODIFICATION OF	CONTRACT	1 CONTRACT ID CODE NRC-04-94-036	PAGE 1	OF PAGES
2. AMENDMENT/MODIFICATION NO. MOOS	APR 3 0 1998	4 REQUISITION PURCHA RES-C98-051	SE REO NO RES-C98-406 5 PR	OJECT NO. (If applic	
6 ISSUED BY		7. ADMINISTERED BY IH	other than Item 6)	0000	
U.S. Nuclear Regulatory Commission Division of Contracts & Property Mgmt. Contract Management Branch 1 Mail Stop T-7-1-2 Washington DC 20555				CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, Sta	ite and ZIP Code)		(X) 9A AMENDMENT OF SO	LICITATION NO.	
Board of Regents of the University of Wisconsin System Attn: Ms. Cheryl E. Gest, Admin Officer 750 University Avenue Madison WI 53706-1490			98. DATED (SEE ITEM 1:		NO.
		Con# NRC-04-			
			108. DATED (SEE ITEM) X 04-26-1994	13)	
ruse.	FACILITY CODE	OAMENDMENT	OF SOLICITATIONS		
AND DESCRIPTION OF THE PROPERTY OF THE PROPERT			processors and the second seco	, pen	
The above numbered solicitation is amended as se					
Offers must acknowledge receipt of this amendment	t prior to the hour and dat	e specified in the soli	citation or as amended, by one	of the followin	g methods
(a) By completing Items 8 and 15, and returning offer submitted; or (c) By separate letter or telegram KNOWLEDGMENT TO BE RECEIVED AT THE PLACE RESULT IN REJECTION OF YOUR OFFER. If by virt by telegram or letter, provided each telegram or letter and date specified.	m which includes a reference DESIGNATED FOR THE tue of this amendment you	ce to the solicitation RECEIPT OF OFFERS I desire to change an	PRIOR TO THE HOUR AND DA offer already submitted, such	LURE OF YOUR TE SPECIFIED I change may be	MAY made
ACCOUNTING AND APPROPRIATION DATA IS consisted	No. 86015211025; Job	Code W6183: BOC N	o. 252A		
App	on No. 31x0200.860; Am	ount Obligated \$50	,000.00		
			F CONTRACTS/ORDER	IS,	
			SCRIBED IN ITEM 14.		
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO Specific	v authority) THE CHANGES SET	FORTH IN ITEM 14 ARE MAI	DE IN THE CONTRACT ORDER NO. IN IT	EM 10A	
B. THE ABOVE NUMBERED CONTRACT CROER IS MODIFIED T SET FORTH IN ITEM 14. PURSUANT TO THE AUTHORITY OF R	TO REFLECT THE ADMINISTRATIVE FAR 43 103(b).	E CHANGES I such as char	ges in paying office, appropriation date	etc.)	
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURS		By mutual agreemen	of the parties.		
X Comments		y martial agreemen	or the parties.		
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor is not, x is	required to sign this doci	ument and return 2	copies to the issuing of	office.	
			tter where (easible.)		
14. DESCRIPTION OF AMENDMENT MODIFICATION (Organized by U	CF section headings, including so	ecitation/contract subject me	(ter where teasible.)		
Please see the attached page.					
9.004				0	
					T
Except as provided herein, all terms and conditions of the document	reterenced in Item 9A or 10A, as	heretofore changed remain	s unchanged and in full force and effect		Dro
Cheryl E. Gest, Admin, Officer Research & Sponsored Program	ms	Mary H. Mace Contracting	OF CONTRACTING OFFICER (Type or Officer	print)	
15B CONTRACTOR/OFFEROR	15C DATE SIGNED	BY STATES O	F AMERICA //// (E)	16C D	ATE SIGNED
9805210137 980430 PDR CONTR NRC-04-94-036 PDR	***************************************	-	5	TANDARD FORM 30	(REV. 10-83

Contract No. NRC-04-94-036 Modification No. 8 Page 2 of 2

The purpose of this modification is to (1) provide within scope changes which shall be performed in accordance with the attached Statements of Work and the contractor's technical proposals dated 04/06/98 and 04/27/98. (2) increase the contract ceiling and obligated amounts by \$50.000 from \$436.940 to \$486.940. and (3) extend the period of performance through December 31. 1998.

- 1. The attached Statements of Work are hereby incorporated as part of Section C.1 of the contract.
- 2. Under Section B.3. Consideration and Obligation--Cost Reimbursement (JUN 1988). Alternate I. (JUN 1988) paragraphs (a) and (b) are deleted in their entirety and the following paragraphs are substituted in lieu thereof:
 - "(a) The total estimated cost to the Government for full performance under this contract is \$486.940."
 - (b) The amount presently obligated by the Government with respect to this contract is \$486.940."
- 3. Section F.6. Duration of Contract Period. is deleted in its entirety and the following is substituted in lieu thereof:

"This contract shall commence on 04/26/94 and will expire on 12/31/98."

A summary of obligations for this contract. from award date through the date of this action, are given below:

Total I	FY94	Obligation	Amount:	\$136,000.00
Total	FY95	Obligation	Amount:	\$135.940.00
Total	FY96	Obligation	Amount:	\$ 75.000.00
Total	FY97	Obligation	Amount:	\$ 90,000.00
Total	FY98	Obligation	Amount:	\$ 50,000.00

Cumulative Total NRC Obligation Amount: \$486.940.00

This modification obligates FY97 funds in the amount of \$50,000.00."

All other terms and conditions of the subject contract remain unchanged.

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT MODIFICATION

C.3 SCOPE OF WORK

Task 1: WFCI Experiments

Terminate the conduct of further iron oxide FCI experiments and report the results of experiments conducted thus far (both iron oxide and tin simulants) in a NUREG/CR report. The termination is necessitated due to a budget cut.

Task 5: Technical Assistance to NRC

Present the research findings from the iron oxide FCI experiments at the CSARP meeting in May 1998.

Revise the completion dates of the existing open tasks as follows:

<u>Task</u>	Date	Revised Date
1 (WFCI Experiments) 3 (NRC Support for KROTOS and FARO) 5 (Technical Assistance to NRC)	04/30/98 04/30/98 04/30/98	10/31/98 10/31/98 10/31/98

(Tasks 2 and 4 have been completed.)

Revise the existing deliverable schedule as follows:

Deliverable	Date	Revised Date
Draft NUREG/CR report (Task 1)	02/28/98	08/31/98
Final NUREG/CR report (Task 1)	04/30/98	10/31/98

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT MODIFICATION

C.3 SCOPE OF WORK

Add the following task to the contract:

Task 6: IFCI Assessment

The recently completed peer review of the integrated fuel-coolant interaction code, IFCI, identified a number of areas in which further improvements were warranted. Sandia National Laboratories (SNL), the developer of IFCI, has since modified the code incorporating improvements in some of the identified areas. It is now necessary to perform an assessment of IFCI to determine how the overall predictive capability of IFCI has improved. The contractor shall perform an assessment of IFCI against a set of 10 experiments selected from the following matrix and approved by the NRC Project Manager:

FARO quenching experiments L-14, L-20, L-28
KROTOS steam explosion experiments K-21, K-26, K-42, K-52
WFCI steam explosion experiments WFCI-D4, WFCI-H3, WFCI-H4
ZREX chemical augmentation experiments ZREX-19, ZREX-20, ZREX-34, ZRSS-10

The set of 10 experiments shall be so selected as to allow an assessment of the major modeling features in IFCI. These include: mixing, jet and particle breakup, quenching, oxidation and hydrogen generation, and shock wave propagation. The contractor shall also prepare an assessment report documenting the work under this task.

Estimated completion date:

12/31/98

Estimated level of effort:

6.0 staff-months

Add the following deliverable in the schedule:

Deliverable

Date

IFCI assessment report (Task 6)

12/31/98