

7/20/20

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1 CONTRACT ID CODE NRC-04-99-040 PAGE 1 OF PAGE 2

2 AMENDMENT/MODIFICATION NO M002

3 EFFECTIVE DATE DEC 29 1999

4 REQUISITION/PURCHASE REQ NO RES-99-040

5 PROJECT NO (If applicable) RES-C00-310

6 ISSUED BY U.S. Nuclear Regulatory Commission Division of Contracts and Property Mgt. Attn: T-7-1-2 Contract Management Branch 1 Washington DC 20555

7 ADMINISTERED BY (If other than item 6)

8 NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code)

Oregon State University Contract Administration Attn: Mr. Clem LaCava, Asst Con Mgr 306 Kerr Administration Building Corvallis OR 97331-2147

(X) 9A AMENDMENT OF SOLICITATION NO. 9B DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO Con# NRC-04-99-040 10B DATED (SEE ITEM 13) X 02-01-1999

CODE FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment of each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12 ACCOUNTING AND APPROPRIATION DATA (If required)

B&R No.: 06015110135; Job Code: W6699; BOC No.: 252A; Appn. No.: 31XO200.060; Amount Obligated: \$250,000.00

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b) C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: X By mutual agreement of the parties. D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, (X) is required to sign this document and return 2 copies to the issuing office.

14 DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Please see the attached page.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A NAME AND TITLE OF SIGNER (Type or print) CLEM LaCAVA Asst Contract Administrator

15A NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mary H. Mace Contracting Officer

15B CONTRACTOR/OFFEROR (Signature of person authorized to sign) Clem LaCava

15C DATE SIGNED 12/29/99

15B UNITED STATES OF AMERICA BY (Signature of Contracting Officer) Mary H. Mace

15C DATE SIGNED DEC 28 1999

PDR CONTR NRC-04-99-040

DFC 2

This modification is issued to (1) modify Section C - Description/Specifications/Statement of Work - in accordance with the attached page describing Test Series 2 and 3; (2) increase the ceiling by \$50,000 from \$558,636 to \$608,636 and (3) increase obligated amount by \$250,000 from \$325,000 to \$575,000. The contract is therefore modified as follows:

- 1) Under Subsection B.3, Consideration and Obligation--Cost Reimbursement (JUN 1988) Alternate I (JUN 1988), paragraphs (a) and (f) 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 \$608,636.

(f) The amount presently obligated by the Government with respect to this contract is \$575,000."

- 2) Under Section C - Description/Specifications/Statement of Work - Subsections C.4.3, Test Series 2, and C.4.4, Test Series 3, are deleted in their entirety and are replaced by the paragraph on the attached page describing the subject modifications to these test series.

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

Total FY99 Obligations:	\$ 325,000
Total FY00 Obligations:	\$ 250,000
Total NRC Obligations:	\$ 575,000

This modification obligates \$250,000 in FY00 funds.

**All other terms and conditions remain the same.**

**MODIFICATION TO NRC-0499-040  
Oregon State University**

**Contractor shall complete Test Series 2, Fluid-Fluid Mixing and Thermal Stratification, and test Series 3, Experiment Scenarios to Provide PTS data, under the first option year. The installation of a pump and a flow control valve in the passive residual heat removal (PRHR) system which was included in the original work scope should be removed. However, additional instrumentation shall be provided for these test series to map the fluid temperature profile in the downcomer and to measure countercurrent flow velocities in the four cold legs. In addition, fluid velocities should be measured in the downcomer. About 50 additional regular thermocouples and two heated thermocouples in the downcomer and eight heated thermocouples in the cold legs would be acceptable. If a different type of instruments or a different number of heated thermocouples is needed, an alternate instrumentation plan should be proposed.**

**Estimated Level or Effort: 36 man-months**