

2. AMENDMENT/MODIFICATION NO. **W001** 3. EFFECTIVE DATE **See Block 16C** 4. REQUISITION/PURCHASE REQ. NO. **NRC-11-09-430**
03/22/2010 5. PROJECT NO. (If applicable)

6. ISSUED BY **U.S. Nuclear Regulatory Commission** CODE **3100** 7. ADMINISTERED BY (If other than Item 6) **U.S. Nuclear Regulatory Commission** CODE **3100**
Div. of Contracts, CNB1 **Div. of Contracts**
Attn: Manon Butt, 301-492-3629 **Mail Stop: TWB-01-B10M**
Mail Stop: TWB-01-B10M **Washington, DC 20555**
Washington, DC 20555

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) (X) 9A. AMENDMENT OF SOLICITATION NO.
REEVES & ASSOCIATES CONSULTING AND TRAINING INC 9B. DATED (SEE ITEM 11)
2296 HENDERSON HILL RD NE STE 206 10A. MODIFICATION OF CONTRACT/ORDER NO. **NRC-11-09-430**
ATLANTA GA 303452739 10B. DATED (SEE ITEM 13) **09-01-2009**
CODE **114937878** 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 on 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) **N/A No Funding**

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 data, 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 D. OTHER (Specify type of modification and authority) **Bilateral Modification, FAR 52.212-4(c) Contract Terms and Conditions - Commercial Items - Changes**

E. IMPORTANT: Contractor is not, is required to sign this document and return **1** copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCP section headings, including solicitation/contract subject matter where feasible.)
Reference Contract NRC-11-09-430 to procure engineering and scientific services to support ACRS.
The purpose of this modification is to clarify the ordering procedures by incorporating the two task ordering clauses and revising the Statement of Work, as described on the following pages.

Reeves & Associates Contact: Carl McKinney, Operations Manager, 770-414-7975, carl@reevesandassociates.com
NRC Project Officer: Cayetano Santos, 301-415-7270, Cayetano.Santos@nrc.gov

Except as provided herein, all terms and conditions of the document referenced in Item 6A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Rebecca K Reeves, President	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Donald A. King Contracting Officer
16B. CONTRACTING OFFICER Rebecca K. Reeves (Signature of person authorized to sign)	15C. DATE SIGNED 3/27/10
16B. CONTRACTING OFFICER Donald A. King (Signature of Contracting Officer)	16C. DATE SIGNED 3/24/2010

TEMPLATE - ADM001 **SUNSI REVIEW COMPLETE** **MAR 30 2010** **ADM002**

The purpose of this modification is to clarify the ordering procedures by (1) incorporating the following two NRC Acquisition Regulation task ordering clauses, and (2) revising the Statement of Work (revision attached).

1. The following two clauses regarding task ordering procedures are incorporated into the contract in order to clarify the procedures for arranging work under the contract:

2052.216-72 TASK ORDER PROCEDURES (OCT 1999)

(a) Task order request for proposal. When a requirement within the scope of work for this contract is identified, the contracting officer shall transmit to the contractor a Task Order Request for Proposal (TORFP) which may include the following, as appropriate:

- (1) Scope of work/meetings/travel and deliverables;
- (2) Reporting requirements;
- (3) Period of performance - place of performance;
- (4) Applicable special provisions;
- (5) Technical skills required; and
- (6) Estimated level of effort.

(b) Task order technical proposal. By the date specified in the TORFP, the contractor shall deliver to the contracting officer a written or verbal (as specified in the TORFP technical proposal submittal instructions) technical proposal that provides the technical information required by the TORFP.

(c) Cost proposal. The contractor's cost proposal for each task order must be fully supported by cost and pricing data adequate to establish the reasonableness of the proposed amounts. When the contractor's estimated cost for the proposed task order exceeds \$100,000 and the period of performance exceeds six months, the contractor may be required to submit a Contractor Spending Plan (CSP) as part of its cost proposal. The TORP indicates if a CSP is required.

(d) Task order award. The contractor shall perform all work described in definitized task orders issued by the contracting officer. Definitized task orders include the following:

- (1) Statement of work/meetings/travel and deliverables;
- (2) Reporting requirements;
- (3) Period of performance;

- (4) Key personnel;
- (5) Applicable special provisions; and
- (6) Total task order amount including any fixed fee.

2052.216-73 ACCELERATED TASK ORDER PROCEDURES (JAN 1993)

(a) The NRC may require the contractor to begin work before receiving a definitized task order from the contracting officer. Accordingly, when the contracting officer verbally authorizes the work, the contractor shall proceed with performance of the task order subject to the monetary limitation established for the task order by the contracting officer.

(b) When this accelerated procedure is employed by the NRC, the contractor agrees to begin promptly negotiating with the contracting officer the terms of the definitive task order and agrees to submit a cost proposal with supporting cost or pricing data. If agreement on a definitized task order is not reached by the target date mutually agreed upon by the contractor and contracting officer, the contracting officer may determine a reasonable price and/or fee in accordance with Subpart 15.8 and Part 31 of the FAR, subject to contractor appeal as provided in 52.233-1, Disputes. In any event, the contractor shall proceed with completion of the task order, subject only to the monetary limitation established by the contracting officer and the terms and conditions of the basic contract.

2. The Statement of Work is revised as follows, to state that task orders will be placed under this contract for the work required:

Delete the following under Section 1, Objective, on the first page:

The Project Officer shall make specific assignments. The contractor shall arrange and procure the services of the technical experts. Final selection of the use of a technical expert is subject to the approval of the Project Officer.

Add the following under Section 2, Mandatory Performance Requirements, on the second page:

Contract Type

This is an indefinite delivery/ indefinite quantity contract which includes provisions for award of fixed price and time and materials task orders.

This modification does not add any funding.

All other terms and conditions remain the same.

**ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
TECHNICAL ENGINEERING SERVICES
STATEMENT OF WORK**

BACKGROUND

The Advisory Committee on Reactor Safeguards (ACRS) provides the Nuclear Regulatory Commission (NRC) with independent reviews of, and advice on, the safety of proposed or existing reactor facilities and the adequacy of proposed safety standards. The ACRS reviews power reactor requests for license renewals and power uprates; fuel cycle facility license applications; and the safety-related NRC regulations and guidance relating to these facilities. The ACRS may also conduct reviews of specific generic matters or nuclear facility safety-related items.

The ACRS advises the Commission on standard reactor design applications and industry initiatives directed at establishing design standards, as well as the test and analysis programs to support certification of those designs. The ACRS gives advice to the Commission with regard to the safety of operating facilities, prioritization and resolution of generic safety issues, and implementation of the requirements resulting from their resolution. The ACRS provides advice and support to the Commission in developing risk-informed regulations. The ACRS also prepares a biennial report describing the results of studies on NRC-sponsored reactor safety research.

1. OBJECTIVE

The Contractor shall provide timely, high quality professional engineering and scientific services in the areas of nuclear power plants and nuclear materials to support activities of the Advisory Committee on Reactor Safeguards (ACRS). The contractor shall provide these services by securing engineering and scientific experts in areas including, but not limited to:

Seismic Engineering, Probabilistic Risk Assessment, Human Factors, Human Reliability, Digital Instrumentation and Control Systems, Reactor Fuel, Facility Reliability and Design, Margins Assessments, Materials Performance, Accident Consequence Analysis, Thermal/Hydraulic Analysis, Neutronic Analysis, Structural Analysis, and Decommissioning.

The contractor shall also provide logistic and administrative support in the ACRS' participation in the Quadripartite Meetings, as well as, the Subcommittee meetings. The Quadripartite Meetings occur once every 4 years with the next one being October 2010. The meetings provide a Technical forum for the international counterparts to the ACRS to share technical safety concern and issues of mutual interest.

The contractor shall be required to coordinate with international counterparts on technical agendas and other logistics.

2. MANDATORY PERFORMANCE REQUIREMENTS

The Contractor shall perform the requirements listed herein during the period of this contract, or

any option period. During the 12-month period approximately 545 hours of contractor-based personnel support shall be necessary to accommodate the assigned tasks.

Contract Type

This is an indefinite delivery/ indefinite quantity contract which includes provisions for award of fixed price and time and materials task orders.

Contractor Responsibilities and Scope of Work

The services performed under this order by the contractor's personnel, technical experts, or subcontractors are provided by the contractor as an independent contractor in performing the requirements set forth herein. The contractor is responsible for the management, supervision, benefits, employment, termination, oversight, and assignment of the contractor's personnel. The contractor is responsible for its personnel's proper conduct and performance under this Statement of Work. Contractor's assigned personnel shall be required to attend ACRS Committee meetings and shall, at times, be directed by the government's Technical Contract Representative to attend other meetings or to work at the site of ACRS office.

The contractor shall provide a Monthly Status Report to the NRC Project Officer and the Contracting Officer by the 15th of each month. Each monthly report shall include the task order number and task name, the period covered by the report; a summary of the work performed during the reporting period by each individual assigned to work on the project along with the number of hours worked; and a status of expenditures under the order for the reporting period, cumulative expenditures to date, funds obligated to date and balance of funds required to complete the order.

Place of Performance

US Nuclear Regulatory Commission
Advisory Committee on Reactor Safeguards
11545 Rockville Pike
Rockville, MD 20852

Scope and Task Areas

The contractor shall provide high quality engineering/scientific experts who shall in turn provide to the ACRS with the following range of technical support:

1. Perform independent analyses of technical and safety issues in support of ACRS review activities, as assigned. Specific assignments shall be made to suit the needs of the ACRS during the time for which this contract is in effect. Experts shall make recommendations to the Project Officer about the resources (technical expertise, analysis tools, etc.) required for support of emerging technical and safety issues requiring ACRS review. Detailed reports describing these independent analyses shall be prepared and submitted to the lead ACRS and staff. Examples of these tasks include:

- a. Research and recommendation for review by the Committee on proactive initiatives such as safety management, safety goals, international activities, etc.
 - b. Research on international safety issues of mutual interest
 - c. Coordination of international meetings including topics for the agenda
 - d. Identification and analysis of technical and safety issues associated with licensing of proposed new facilities, new reactor designs, power uprates, license renewals, and applications of risk-informed and performance-based regulation
 - e. Identification and evaluation of emerging technical or safety issues associated with operating experience, the introduction of new technology, or other initiatives (e.g. research)
 - f. Evaluation of technical and safety issues associated with proposed decommissioning initiatives
 - g. Analysis of plant aging and design margins issues
 - h. Analysis of plant operating experience as part of the evaluation of a particular safety issue
 - i. Evaluation of proposed regulatory initiatives
2. Provide technical staff support to ACRS member activities associated with the ACRS meetings. This shall include identification and analysis of technical or safety issues relevant to the review and working closely with the lead member, NRC staff, and other involved stakeholders in the coordination of this activity.
 3. Attend technical meetings as assigned, analyze the insights obtained from the discussions, and provide reports to the lead ACRS members and staff.
 4. Arrange and provide technical support for conferences, symposia, and working groups sponsored by the ACRS.

Experience, Skills, and Standards of Performance

The desired experience and skills and expected standards of performance for technical expertise are as follows:

1. Thorough knowledge of general engineering principles, theory, and practices in the general field of engineering and sciences, with an advanced knowledge of nuclear power plants and nuclear materials. These skills are comparable to those achieved by graduate level training coupled with extensive work experience in specialized areas of nuclear power plant or nuclear materials technology.
2. Recognized expertise and extensive work experience in the area of nuclear power plant or nuclear materials technology with particular relevance to high priority issues currently under review by the ACRS. Other expertise that may be required on a case-by-case basis includes:
 - (a) Seismic Engineering
 - (b) Probabilistic Risk Assessment

- (c) Human Factors
- (d) Human Reliability
- (e) Digital Instrumentation and Control Systems
- (f) Reactor Fuel
- (g) Facility Reliability and Design Margins Assessments
- (h) Materials Performance
- (i) Accident Consequence Analysis
- (j) Thermal/Hydraulic Analysis
- (k) Neutronic Analysis
- (l) Structural Analysis, and
- (m) Decommissioning.

3. Thorough knowledge of design features and operating characteristics of NRC-licensed nuclear reactors.
4. Working knowledge of NRC regulations, criteria, standards, guides, and policies.
5. Working knowledge of evolutionary and advanced reactor designs currently under consideration in the United States and foreign countries.
6. Working knowledge of the designs of existing and proposed waste storage facility sites in the United States and foreign countries and a general knowledge of waste management practices utilized in the United States
7. Working knowledge of research and development work in the field of nuclear power reactor development and nuclear waste management conducted by NRC and other government and industry organizations.
8. Demonstrated ability to effectively communicate complex technical information to engineers and scientists employed in the nuclear energy field through written and oral reports.
9. Ability to participate in discussions with ACRS members and consultants, the NRC, Department of Energy, and members of various other government and nongovernment organizations to develop and evaluate information needed in ACRS reviews.
10. Demonstrated ability to perform independent analysis of technical and safety issues and effectively communicate the results to qualified professionals.
11. Work performed must be of high quality, completed with minimal supervision, and effectively coordinated with the involved individuals, to meet all necessary deadlines.
12. Skills and ability to perform at the expected level can be demonstrated by the successful completion of the requirements for advanced degrees in relevant fields, relevant work experience, publications, or successful completion of complex work assignments.

Non-Disclosure/Confidentiality Agreement

The contractor's personnel, technical experts, and subcontractors shall handle or have access to files or information that includes internal for official use only information, scientific, technical, and proprietary information that is subject to the Trade Secrets Act and the Economic Espionage Act. Unless provided with written permission by the Project Officer, neither the contractor nor any of its personnel, technical experts, or subcontractors shall disclose or use this information or provide this information to anyone outside of the NRC. The assigned contractor's personnel, technical experts, and subcontractors shall be required to sign a non-disclosure/confidentiality agreement and have the necessary qualifications for obtaining an NRC "L-type" confidential government clearance.

Security

The Contractor shall comply with the NRC, administrative, physical and technical security controls to ensure all of the Government's security requirements are met. In addition, all Contractor personnel must adhere to the NRC's public building rules and regulations.

Non-Personal Services

The contractor and the contractor's assigned personnel, technical experts, and subcontractors shall understand and acknowledge that the services provided under this order to ACRS and/or NRC do not and shall not create an employer-employee relationship between the government and these individuals. These individuals shall not address or identify themselves as NRC employees. The contractor's assigned personnel, technical experts, and subcontractors shall be required to sign a Non-Personal Services Understanding Agreement.

Use of Government Facilities or Personnel

Unless directly related to this Contract or any task order resulting from this contract, the Contractor and any of his/her employees or technical experts are prohibited from using US Government facilities (such as space or equipment) or US Government clerical or technical personnel in the performance of the series not specified in the Task Order.

Application of ACRS Operating Procedures and applicable Laws, Regulations, Manuals, Directives, and Handbooks

In performing any and all services referred to in this document, the contractor personnel, technical experts, and subcontractors shall apply the applicable laws, NRC regulations, and ACRS and NRC operating manuals, handbooks, and directives in the performance of their work.

Travel

Travel and the performance of work shall sometimes be required outside of the normal ACRS business hours. The Contractor may use funds for travel approved by the government's Contract Technical Representative. No payment of travel expenses shall be made to Contractor for routine travel to and from Agency's location. Contractor shall provide a detailed itemization of expenses as requested by Agency.

3. PERIOD OF PERFORMANCE

This statement of work (SOW) includes a 12-month base period, and two (2) separate 12-month option periods. However, NRC reserves the right not to exercise any of the option periods.

4. KEY CONTRACTOR PERSONNEL

The proposed and assigned contractor's personnel under this order shall be deemed as key contractor personnel and the contractor shall therefore obtain review and approval by the NRC Contracting Officer or the NRC Contracting Officer's Representative prior to assigning or substituting the proposed contractor key personnel. In the event of temporary (in excess of 15 calendar days) absences (such as but not limited to contractor personnel's time off, illness, and vacation leave) the contractor shall, as requested by the Project Officer, immediately provide as interim coverage a qualified substitute contractor employee for the period of time during the key contractor employee's absence. Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the Contracting Officer to evaluate the proposed substitution. The Contracting Officer and the Project Officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing. Replacements of key contractor personnel are subject to the ACRS Executive Director's approval.

5. GOVERNMENT FURNISHED EQUIPMENT, FACILITIES, AND SERVICE

The NRC shall provide the contractor as appropriate, at the site of ACRS office, with government furnished space, work desk, office supplies, information technology IT equipment (computer equipment, printers, fax machines, copier, telephone), IT services, and IT access (e.g., Internet and E-mail) necessary to provide the required services. The contractor is responsible for providing the equipment and services necessary for work not performed at an NRC office. The contractor and the contractor's personnel, consultants, and subcontractors are prohibited from misuse, abuses, and from using the government furnished equipment, services, or access for personal use. The Government shall provide information and train the contractor personnel on NRC agencies unique features of NRC furnished equipment, facilities, and services.