

**ORDER FOR SUPPLIES OR SERVICES**

PAGE OF PAGES


1 5

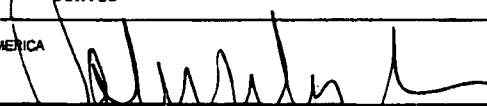
IMPORTANT: Mark all packages and papers with contract and/or order numbers.

BPA NO.

1. DATE OF ORDER <b>9/27/12</b>		2. CONTRACT NO. (if any) NRC-HQ-12-C-02-0089		6. SHIP TO:	
3. ORDER NO. T005		4. REQUISITION/REFERENCE NO.		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission	
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Valerie Whipple Mail Stop: TWB-01-B10M Washington, DC 20555				b. STREET ADDRESS Wendy Reed Mail Stop CSB/ C2 A7M	
7. TO:		c. CITY Washington		d. STATE DC	e. ZIP CODE 20555
a. NAME OF CONTRACTOR SOUTHWEST RESEARCH INSTITUTE S W R I		DUNS: 007936842		f. SHIP VIA	
b. COMPANY NAME		c. STREET ADDRESS 6220 CULEBRA RD		8. TYPE OF ORDER	
d. CITY SAN ANTONIO		e. STATE TX	f. ZIP CODE 782385166	<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
9. ACCOUNTING AND APPROPRIATION DATA RFPA: NMS-12-074; FAIMIS: 123204 B&R: 2012-60-38-6-205; Job Code: V6374; BOC: 252A ApprOp. No.: 31X0200; Obligation: \$40,000; DUNS: 007936842				10. REQUISITIONING OFFICE NMS	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))				12. F.O.B. POINT N/A	
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) <input type="checkbox"/> h. EDWOSB <input type="checkbox"/> i. VETERAN-OWNED ELIGIBLE UNDER THE WOSB PROGRAM					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
a. INSPECTION		b. ACCEPTANCE		16. DISCOUNT TERMS	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	The Contractor shall provide services in accordance with the attached Statement of Work, entitled: "Analysis of Electrochemical Reprocessing"  Total CPAF Amount: \$89,619 Total Obligated Amount: \$40,000 Period of Performance: 10-1-2012 through 3-31-2013  NRC COR: Deborah DeMarco 301-492-3143 NRC Task Order COR: Wendy Reed 301-251-7965  DUNS: 007936842 NAICS: 562211 PSC: R499  ACCEPTED: Signature:  Print Name/Title: 9/25/2012 R.B. Kalmbach Executive Director, Contracts					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.	
	21. MAIL INVOICE TO:					
	a. NAME Department of Interior / NBC NRCPayments NBCDenver@NBC.gov				17(h) TOTAL (Cont. pages)	
	b. STREET ADDRESS (or P.O. Box) Attn: Fiscal Services Branch - D2770 7301 W. Mansfield Avenue				17(i) GRAND TOTAL	
c. CITY Denver		d. STATE CO	e. ZIP CODE 80235-2230		\$89,619	
22. UNITED STATES OF AMERICA BY (Signature) 				23. NAME (Typed) Valerie Whipple Contracting Officer, MSA TITLE: CONTRACTING/ORDERING OFFICER		

AUTHORIZED FOR LOCAL REPRODUCTION PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (REV. 2/2012) PRESCRIBED BY GSA/FAR 48 CFR 53.213(f)

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

OCT 09 2012

ADM002

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**NRC-HQ-12-C-02-0089, TASK ORDER 5**  
**DELIVERY ORDER TERMS AND CONDITIONS NOT SPECIFIED IN THE CONTRACT**

**A.1 BRIEF PROJECT TITLE AND WORK DESCRIPTION (AUG 2011)**

- (a) The title of this project is: ANALYSIS OF ELECTROCHEMICAL REPROCESSING
- (b) Summary work description:

A detailed analysis of the advanced reprocessing technology is desired, including an identification of the issues that would need to be addressed to regulate such a facility, providing adequate assurances of safety. This study will attempt to identify all safety and regulatory issues associated with the separation of the fuel and subsequent waste management, the latter to include possible transportation and storage of waste. The products of this proposed study will be used as a basis on which to develop further research programs to resolve technical issues that could prove a hindrance to developing an effective regulatory framework.

**A.2 CONSIDERATION AND OBLIGATION--COST-PLUS-AWARD-FEE (AUG 2011)**

- (a) The total estimated cost to the Government for full performance of this task order is **\$89,619**, of which the sum of \$            represents the estimated reimbursable costs, and of which \$            represents the base fee.
- (b) An award fee pool of \$            is hereby established for this task order. Evaluation of award fee earned will be accomplished in accordance with the Award Fee Plan (AFP) attached as Attachment 8 to the Contract. The Government reserves the right to unilaterally change the content of the AFP at any time during the life of this contract. Any changes to the plan will be furnished to the Contractor prior to the date they become effective. The amount of award fee available for each period of evaluation and the amount of time for each period will be set forth in the AFP. The final evaluation and determination as to the amount of award fee earned during an evaluation period shall be made unilaterally by the Fee Determination Official (FDO). The Contractor shall be advised of the award fee decision by letter which shall include the rationale for reaching the decision.

- (c) The amount obligated by the Government with respect to this task order is **\$40,000**.
- (d) This is a fully-funded contract and FAR 52.232-20 - "Limitation of Cost" applies.

**A.3 PACKAGING AND MARKING (AUG 2011)**

- (a) The Contractor shall package material for shipment to the NRC in such a manner that will ensure acceptance by common carrier and safe delivery at destination. Containers and closures shall comply with the Surface Transportation Board, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.
- (b) On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.
- (c) Additional packaging and/or marking requirements are as follows: N/A

**A.4 PLACE OF DELIVERY--REPORTS (AUG 2011)**

The items to be furnished electronically to:

[Deborah.DeMarco@nrc.gov](mailto:Deborah.DeMarco@nrc.gov)  
[Wendy.Reed@nrc.gov](mailto:Wendy.Reed@nrc.gov)  
[William.Ott@nrc.gov](mailto:William.Ott@nrc.gov)

**NRC-HQ-12-C-02-0089, TASK ORDER 5**

Valerie.whipple@nrc.gov

**A.5 TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (AUG 2011)**

This order shall commence on October 1, 2012 and will expire on March 31, 2013.

**A.6 2052.215-70 KEY PERSONNEL (JAN 1993)**

(a) The following individuals are considered to be essential to the successful performance of the work hereunder:

Dr. Yi-Ming Pan	Project Manager
Dr. Simon Hsiung	Principal Investigator
Dr. Pavan Shukla	Senior Research Engineer

The contractor agrees that personnel may not be removed from the contract work or replaced without compliance with paragraphs (b) and (c) of this section.

(b) If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding 30 work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, the contractor shall immediately notify the contracting officer and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

(c) 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.

(d) If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

**A.7 A.8 2052.215-71 CONTRACTING OFFICER'S REPRESENTATIVE AUTHORITY (NOVEMBER 2006)**

(a) The contracting officer's authorized representative (hereinafter referred to as the COR) for this contract is:

Name: Wendy Reed

Address: Mail Stop CSB C2 A7M  
Washington, DC 20555

Telephone Number: 301-251-7965

(b) Performance of the work under this contract is subject to the technical direction of the NRC COR. The term "technical direction" is defined to include the following:

## NRC-HQ-12-C-02-0089, TASK ORDER 5

(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.

(2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.

(3) Review and, where required by the contract, approval of technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

(c) Technical direction must be within the general statement of work stated in the contract. The COR does not have the authority to and may not issue any technical direction which:

(1) Constitutes an assignment of work outside the general scope of the contract.

(2) Constitutes a change as defined in the "Changes" clause of this contract.

(3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions, or specifications of the contract.

(5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

(d) All technical directions must be issued in writing by the COR or must be confirmed by the COR in writing within ten (10) working days after verbal issuance. A copy of the written direction must be furnished to the contracting officer. A copy of NRC Form 445, Request for Approval of Official Foreign Travel, which has received final approval from the NRC must be furnished to the contracting officer.

(e) The contractor shall proceed promptly with the performance of technical directions duly issued by the COR in the manner prescribed by this clause and within the COR's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the COR is within one of the categories as defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working days after the receipt of any instruction or direction and shall request the contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

(g) Any unauthorized commitment or direction issued by the COR may result in an unnecessary delay in the contractor's performance and may even result in the contractor expending funds for unallowable costs under the contract.

(h) A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto is subject to 52.233-1 -Disputes.

(i) In addition to providing technical direction as defined in paragraph (b) of the section, the COR shall:

(1) Monitor the contractor's technical progress, including surveillance and assessment of performance, and recommend to the contracting officer changes in requirements.

(2) Assist the contractor in the resolution of technical problems encountered during performance.

## **NRC-HQ-12-C-02-0089, TASK ORDER 5**

(3) Review all costs requested for reimbursement by the contractor and submit to the contracting officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

(4) Assist the contractor in obtaining the badges for the contractor personnel.

(5) Immediately notify the Security Branch, Division of Facilities and Security (SB/DFS) (via e-mail) when a contractor employee no longer requires access authorization and return of any NRC issued badge to SB/DFS within three days after their termination.

(6) Ensure that all contractor employees that require access to classified Restricted Data or National Security Information or matter, access to sensitive unclassified information (Safeguards, Official Use Only, and Proprietary information) access to sensitive IT systems or data, unescorted access to NRC controlled buildings/space, or unescorted access to protected and vital areas of nuclear power plants receive approval of SB/DFS prior to access in accordance with Management Directive and Handbook 12.3.

(7) For contracts for the design, development, maintenance or operation of Privacy Act Systems of Records, obtain from the contractor as part of closeout procedures, written certification that the contractor has returned to NRC, transferred to the successor contractor, or destroyed at the end of the contract in accordance with instructions provided by the NRC Systems Manager for Privacy Act Systems of Records, all records (electronic or paper) which were created, compiled, obtained or maintained under the contract.

### **A.8 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT -ALTERNATE 1 (OCT 1999)**

(a) Total expenditure for travel may not exceed \$0 without the prior approval of the contracting officer.

(b) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days prior to the commencement of travel.

(c) The contractor will be reimbursed only for those travel costs incurred that are directly related to this contract and which are allowable subject to the limitations prescribed in FAR 31.205-46.

(d) It is the responsibility of the contractor to notify the contracting officer in accordance with the FAR Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the travel ceiling amount identified in paragraph (a) of this clause.

(e) Reasonable travel costs for research and related activities performed at State and nonprofit institutions, in accordance with Section 12 of Pub. L. 100-679, shall be charged in accordance with the contractor's institutional policy to the degree that the limitations of Office of Management and Budget (OMB) guidance are not exceeded. Applicable guidance documents include OMB Circular A-87, Cost Principles for State and Local Governments; OMB Circular A-122, Cost Principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

### **A.9 ELECTRONIC PAYMENT (AUG 2011)**

The Debt Collection Improvement Act of 1996 requires that all payments except IRS tax refunds be made by Electronic Funds Transfer. Payment shall be made in accordance with FAR 52.232-33, entitled "Payment by Electronic Funds- Central Contractor Registration".

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted on the payee's letterhead, invoice, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal - Continuation Sheet." The preferred method of submitting invoices is electronically to the Department of the

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Interior at NRCPayments\_NBCDenver@nbc.gov. If the contractor submits a hard copy of the invoice, it shall be submitted to the following address:

Department of the Interior  
National Business Center  
Attn: Fiscal Services Branch - D2770  
7301 West Mansfield Avenue  
Denver, CO 80235-2230

**A.10 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES (AUG 2011)**

(a) The U.S. Nuclear Regulatory Commission (NRC) contractor and its subcontractor are subject to the Whistleblower Employee Protection public law provisions as codified at 42 U.S.C. 5851. NRC contractor(s) and subcontractor(s) shall comply with the requirements of this Whistleblower Employee Protection law, and the implementing regulations of the NRC and the Department of Labor (DOL). See, for example, DOL Procedures on Handling Complaints at 29 C.F.R. Part 24 concerning the employer obligations, prohibited acts, DOL procedures and the requirement for prominent posting of notice of Employee Rights at Appendix A to Part 24 entitled: "Your Rights Under the Energy Reorganization Act".

(b) Under this Whistleblower Employee Protection law, as implemented by regulations, NRC contractor and subcontractor employees are protected from discharge, reprisal, threats, intimidation, coercion, blacklisting or other employment discrimination practices with respect to compensation, terms, conditions or privileges of their employment because the contractor or subcontractor employee(s) has provided notice to the employer, refused to engage in unlawful practices, assisted in proceedings or testified on activities concerning alleged violations of the Atomic Energy Act of 1954 (as amended) and the Energy Reorganization Act of 1974 (as amended).

(c) The contractor shall insert this or the substance of this clause in any subcontracts involving work performed under this contract.

**A.11 GREEN PURCHASING (JUN 2011)**

(a) In furtherance of the sustainable acquisition goals of Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance" products and services provided under this contract/order shall be energy- efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives, where such products and services meet agency performance requirements. <http://www.fedcenter.gov/programs/eo13514/>

(b) The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order.

**A.12 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS (AUG 2011)**

The Debt Collection Improvement Act of 1996 requires that all Federal payments except IRS tax refunds be made by Electronic Funds Transfer. It is the policy of the Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system. Item 15C of the Standard Form 33 may be disregarded.

CONTRACT TITLE: OPERATION OF THE CENTER FOR NUCLEAR WASTE ANALYSES AS  
THE NRC'S FEDERALLY FUNDED RESEARCH AND DEVELOPMENT  
CENTER (FFRDC) – FIFTH RENEWAL

TASK TITLE: ANALYSIS OF ELECTROCHEMICAL REPROCESSING (JCN V6374)

TASK ORDER NUMBER: 005  
JOB CODE: V6374  
B&R NUMBER: 2012-60-38-6-205  
ISSUING OFFICE: RES  
NRC  
NRC CONTRACTING OFFICER  
REPRESENTATIVE (COR): Deborah DeMarco  
NRC TO COR: Wendy Reed (301) 251-7965  
FEE RECOVERABLE: No  
TAC NUMBER: n/a  
DOCKET NUMBER: n/a

## 1.0 BACKGROUND

In response to industry interest in developing commercial reprocessing capabilities for reprocessing spent nuclear fuel, the U.S. Nuclear Regulatory Commission (NRC) has developed a draft regulatory basis document, which provides a preliminary staff analysis of how such a facility could be effectively and efficiently regulated. In addition, the staff recommends that new reprocessing requirements should be technology neutral, to the extent possible, to collectively address the different reprocessing technologies that have been proposed by industry (i.e., aqueous and electrochemical separations). Electrochemical reprocessing is not as well understood as the aqueous separation method. Therefore, in order to develop appropriate regulations, staff needs to gain a deeper understanding of the electrochemical process, including its safety implications. There is some domestic experience with this technology on a small scale, but the NRC has never licensed an electrochemical separations facility. This work would identify the issues that would need to be addressed in order to develop an adequate regulatory framework for such a facility and to license it. For example, Material Control and Accounting (MC&A) could be a challenge, as the separation takes place in a molten salt matrix. Identifying the constituents in a sample of this salt could be problematic.

The purpose of this research program is to study electrochemical reprocessing and its associated waste management requirements. Electrochemical reprocessing is significantly different from the well established aqueous separation method. The fuel elements are separated under an inert, high temperature atmosphere in a molten salt matrix. These conditions for separation will pose unique criticality and material and control and accounting (MC&A) challenges. The waste forms that are produced will be significantly different from those produced in solvent extraction operations. Therefore, methods of solidification and storage would need to be investigated.



## **2.0 OBJECTIVE**

A detailed analysis of the advanced reprocessing technology is desired, including an identification of the issues that would need to be addressed to regulate such a facility, providing adequate assurances of safety. This study will attempt to identify all safety and regulatory issues associated with the separation of the fuel and subsequent waste management, the latter to include possible transportation and storage of waste. The products of this proposed study will be used as a basis on which to develop further research programs to resolve technical issues that could prove a hindrance to developing an effective regulatory framework.

## **3.0 STAFFING**

The contractor shall ensure that the technical staff performing under this task order possess the necessary experience and expertise in the technical areas assigned to them. The NRC reserves the right to approve the Project Manager and the individual technical staff assigned to each task from the necessary technical disciplines. The NRC considers the following technical staff to be essential for this effort:

1. Project Manager
2. Reprocessing Specialist
3. Scientist

The aforementioned staff should have expertise in the following areas:

1. Spent nuclear fuel reprocessing
2. Electrochemical separations
3. Criticality analysis
4. Material Control and Accounting (MC&A), detection and monitoring

## **4.0 SCOPE OF WORK AND DELIVERABLES**

### **TASK: IDENTIFY REGULATORY ISSUES**

Identify any unresolved issues or any parts of the process that would need further elucidation in order to effectively regulate and license electroprocessing facilities. In particular, critical safety issues (for example, fire, criticality, control of volatile materials) should be highlighted.

DELIVERABLE: Letter report.

## **5.0 PROJECT MANAGEMENT**

### **Maintain Effective Communication with NRC Staff**

The contractor shall maintain effective communication with the NRC TPM or designee. For the duration of this task order, the contractor shall participate in a bi-weekly telephone call with the NRC's TPM or designee to discuss the progress to date.

### **For All Communications**

The contractor shall coordinate all necessary NRC communication for the specific task through

the NRC's TPM or designee (as may be temporarily established via electronic or hard-copy written communication from the NRC TPM).

#### NRC Comments

The contractor shall resolve NRC comments through the NRC TPM or the TPM's designee when making revisions to any deliverable under each task in this task description.

#### Quality Assurance for the Project

The contractor shall implement and maintain quality assurance requirements for the project in accordance with Section 14.0 below.

### **6.0 ACCEPTANCE CRITERIA**

The contractor shall document the preparation of the flow sheets, providing information as to the sources of data used to develop the flow sheet and maintain appropriate records. An inventory list or copies of such records shall be provided upon request by the NRC TPM or the TPM's designee.

The issues identified in the electrochemical process that would need resolution for effective development of a regulatory framework should be accompanied by sufficient detail for the NRC TPM or the TPM's designee to understand the basis of the conclusions reached. Each deliverable provided by the contractor shall include directly or be accompanied by enough technical detail so that the NRC may confirm the contractor's methodologies and calculations.

### **7.0 LEVEL OF EFFORT**

The total level of effort for all tasks is 525 hours.

### **8.0 MEETINGS AND TRAVEL**

No requirement for travel is anticipated at this time.

### **9.0 NRC FURNISHED MATERIAL**

NRC will attempt to supply the contractor any materials that the NRC and contractor deem necessary for the completion of the tasks.

### **10.0 CONTRACTOR ACQUIRED MATERIAL**

The contractor will acquire materials necessary to complete the tasks.

### **11.0 REPORTS**

A final letter report describing results of the task will be provided to the NRC.

### **12.0 TECHNICAL/PROJECT DIRECTION**

Technical direction may be provided by the NRC TPM to the contractor during the duration of this task order. Technical direction shall not constitute new assignments of work or changes of such a nature as to justify an adjustment in cost or period of performance. Directions, if any, for changes in scope of work, cost, or period of performance will be issued by the NRC CO.

### **13.0 STANDARD WORK PRACTICES**

For all draft and final reports under this agreement, the contractor shall assure that an independent review of numerical computations, mathematical equations, and derivations is performed by qualified technical staff other than the original author(s) of the reports and other than the person who performed the original calculation. If the contractor proposes to check less than 100 percent of all computations, mathematical equations, and derivations in the report(s) (such as may be the case when there is a large number of routine, repetitive calculations), the contractor must first obtain written approval from the NRC TO COR. In addition, all reports, including those which do not contain numerical analyses must be reviewed for consistency and readability by the contractor's management and approved with two signatures. One signature must be from the contractor's Project Manager, and one signature must be from a manager at a higher level than the contractor's Project Manager. Informal submittals/deliverables must be reviewed and forwarded from at least the Project Manager level.

When revisions for reports are issued, a section must be included in the revised report to document dates of, reasons for, and scope of all changes made since the issuance of the first contractor's approved report.

NRC has the option of appointing a Peer Group to review, comment, and recommend changes to the draft and final reports. The contractor may recommend candidates for the Peer Group for approval by the NRC TPM.

In the case of dissent in the content of the final report, the dissenting party shall have the option of stating its viewpoints and findings. Such statements may appear in the report as decided by the NRC.

This section does not intend to create the development of a formal quality assurance program nor does it require formal quality assurance program documentation or review.