

AWARD/CONTRACT		1. THIS CONTRACT IS RATED ORDER UNDER DPAS (15 CFR 700)	RATING N/A	PAGE OF PAGES 1 42
2. CONTRACT NO. (Proc. Inat. Ident.) NRC-HQ-12-C-04-0086		3. EFFECTIVE DATE See Block 20c.	4. REQUISITION/PURCHASE REQUEST/PROJECT NO. RES-12-169; RZS-C12-169	
5. ISSUED BY U.S. Nuclear Regulatory Commission Mail Stop: TWB-01-B10M Attn: Jeffrey R. Mitchell, 301-492-3639 11555 Rockville Pike Rockville MD 20852	CODE 3100	6. ADMINISTERED BY (If other than Item 5) U.S. Nuclear Regulatory Commission Div. of Contracts Mail Stop: TWB-01-B10M Washington, DC 20555		CODE 3100

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code) PENNSYLVANIA STATE UNIVERSITY, THE PENN STATE ATTN: DANELLE KISSELL 101 HAMMOND BUILDING UNIVERSITY PARK PA 168021505		8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below)
9. DISCOUNT FOR PROMPT PAYMENT		10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN

CODE 003403953	FACILITY CODE	11. SHIP TO/MARK FOR U.S. Nuclear Regulatory Commission Attn: Kirk Tien Mail Stop: CSB-3A07M 11555 Rockville Pike Rockville DC 20852	12. PAYMENT WILL BE MADE BY Department of Interior / NBC NBCPayments_NBCDenver@NBC.gov Attn: Fiscal Services Branch - D2770 7301 W. Mansfield Avenue Denver CO 80235-2230 PHONE: FAX:	CODE 3100
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13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c)() <input checked="" type="checkbox"/> 41 U.S.C. 253(c)(4) ()	14. ACCOUNTING AND APPROPRIATION DATA No Funds Obligated DUNS: 003403953 NAICS 541990 PSC AG55
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15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	The Contractor shall provide the U.S. Nuclear Regulatory Commission services described in the Statement of Work and in accordance with the terms and conditions of this contract.				

15G. TOTAL AMOUNT OF CONTRACT **\$2,980,847.00**

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	B	SUPPLIES OR SERVICES AND PRICES/COSTS			J	LIST OF ATTACHMENTS	
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	D	PACKAGING AND MARKING					
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CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE

17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 2 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)	18. <input type="checkbox"/> SEALED-BID AWARD (Contractor is not required to sign this document.) Your bid on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the terms listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.)
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19A. NAME AND TITLE OF SIGNER (Type or print) Susan J. Wiedemer Assistant Treasurer	20A. NAME OF CONTRACTING OFFICER Jeffrey Mitchell
19B. NAME OF CONTRACTOR BY _____ (Signature of person authorized to sign)	20B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)
19C. DATE SIGNED 09/17/2012	20C. DATE SIGNED 8/21/2012

AUTHORIZED FOR LOCAL REPRODUCTION Previous edition is usable **STANDARD FORM 26** (REV. 5/2011) Prescribed by GSA - FAR (48 CFR) 63.214(a)

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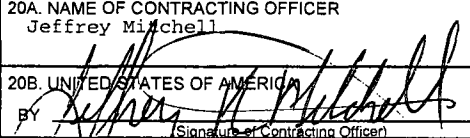
19A. NAME AND TITLE OF SIGNER (Type or print) BY _____	19B. NAME OF CONTRACTOR BY _____ (Signature of person authorized to sign)	19C. DATE SIGNED BY _____	20A. NAME OF CONTRACTING OFFICER Jeffrey Mitchell 	20B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	20C. DATE SIGNED 8/21/2012
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B.1 PRICE/COST SCHEDULE

Period of Performance:		Date of award through September 1, 2017
CLIN NO.	DESCRIPTION OF SUPPLIES/SERVICES	ESTIMATED COST (CEILING) FOR ISSUING TASK ORDER
001	To obtain experimental data for use in the development of more accurate spacer grid thermal-hydraulic models.	\$2,990,847.00

B.2 BRIEF DESCRIPTION OF WORK (AUG 2011) ALTERNATE I (AUG 2011)

(a) The title of this project is: "SPACER GRID THERMAL-HYDRAULICS PROGRAM"

(b) Summary work description:

In a brief summary the work required is to obtain experimental data for use in the development of more accurate spacer grid thermal-hydraulic models.

(c) Orders will be issued for work in accordance with 52.216-18 - ORDERING.

B.3 CONSIDERATION AND OBLIGATION-INDEFINITE-QUANTITY CONTRACT (AUG 2011)

(a) The estimated total quantity of this contract for the products/services under this contract is \$2,990,847.00

(b) The Contracting Officer will obligate funds on each task order issued.

(c) The minimum guarantee under this contract is \$100,000.00, which will be satisfied by the issuance of Task Order No. 1.

(d) A total estimated cost and fee, if any, will be negotiated for each task order and will be incorporated as a ceiling in the resultant task order. The Contractor shall comply with the provisions of 52.232-20 - Limitation of Cost for fully-funded task orders and 52.232-22 - Limitation of Funds for incrementally-funded task orders, issued hereunder.

SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK**TITLE: Spacer Grid Thermal-Hydraulics Program****BACKGROUND**

The U.S. Nuclear Regulatory Commission (NRC) system thermal-hydraulic code TRACE (TRACE RELAP Advanced Computational Engine) is being developed to provide a best-estimate accident analysis capability for operating pressurized- and boiling-water reactors as well as the next generation of evolutionary light-water reactor designs. NRC has sponsored many experiments to obtain high-quality data to assess the TRACE code. Among all the sponsored experiments, the Rod Bundle Heat Transfer (RBHT) test facility at the Pennsylvania State University is especially pertinent to the post loss-of-coolant-accident (LOCA) conditions in a reactor. Results from the RBHT facility confirm a first-order effect of spacer grids on rod bundle heat transfer, and advanced instrumentation provides unique data on the effect of spacer grids on local thermal-hydraulics. These data are expected to improve models for steam cooling, dispersed flow film boiling, inverted annular flow film boiling, grid rewet, droplet break up at spacer grids, and convective enhancement downstream of spacer grids.

Industry is continuously improving both fuel designs and their analytical tools. Advanced fuel designs incorporate more spacer grids than they did previously. Some new reactor designs utilize different Emergency Core Cooling Systems (ECCS) that recover the core at a range of thermal-hydraulic conditions where the experimental database is weak. Reflood thermal-hydraulics investigate phenomena that are important during the entire period of LOCA. Heat transfer is low during this period and the maximum cladding temperatures are reached during this time. Accurate reflood models are critical in order to have reliable LOCA simulations and support NRR and NRO in on-going licensing activities. Currently, TRACE assessment cases show discrepancies between predicted and measured cladding temperatures, which can complicate the review process. These discrepancies imply that there are deficiencies in the reflood heat transfer models. In particular, the lack of models to account for spacer grid effects have been identified as the likely cause of this deficiency. Data taken at the RBHT test facility shall be used to validate these models.

Some new reactors are designed so that core uncover is not expected for a Design Basis accident. An important consideration during the licensing review process is margin to core uncover and how the core behaves when cooled by a two-phase mixture of steam and water. Existing models for two-phase flow have high uncertainty, not only in TRACE but in similar codes as well. To improve these two-phase flow models, a more fundamentally based approach is suggested, in which the code dynamically tracks the evolution of interfacial area as well as the coalescence and disintegration process of the bubbles. The current version of TRACE uses flow regime based closure relations and static regime transition criteria for interfacial heat and mass transfer calculations. A test version of TRACE has been developed, with an additional dispersed-gas field equation to model the interfacial area transport (IAT) process. Test data from the RBHT experiments shall be used to help validate the source/ sink terms used in the IAT transport equations. Recent and ongoing NRC-sponsored research into IAT has produced data for a number of important phenomena and conditions. For example, interfacial area transport experiments in large diameter pipes have been conducted to simulate the void formation in the chimney region of the advanced Economic Simplified Boiling-Water Reactor (ESBWR). Additional tests have been performed to simulate void fraction characteristics within rod bundles and the interfacial area transport within channels undergoing boiling and condensation.

These tests were carried out in response to code-modeling limitations discovered from the TRACE assessment. However, although a large IAT database now exists; little progress has been made to incorporate IAT models into the TRACE code. This work shall support the development of models and correlations suitable for incorporation into TRACE. An interfacial area transport equation (IATE) shall be implemented in a version of TRACE and assessed with a broad variety of cases.

CONTRACT OBJECTIVES

The objectives of this contract are to accomplish the following:

The first portion of the objectives is related to use of the RBHT Test Facility:

- Continue to support and maintain the RBHT test facility so new tests can be conducted. Because the test facility is over 10 years old, the test section requires cleaning and reassembly. The RBHT represents a multi-million dollar investment by NRC.
- Conduct a series of tests to increase the database for spacer grid thermal-hydraulics data under reflood and steam-cooling conditions.
- Construct a bench-top test apparatus to quickly characterize different grid designs. The bench-top test is expected to be a cost-effective way to examine the effect of mixing vanes.

The following objectives are related to model development:

- Develop improved models for the interaction of spacer grids with entrained droplets. The models are to account for droplet breakup on dry grids, droplet generation from films on wet grids, and for prediction of conditions at which the grid may rewet.
- Develop improved models to account for enhancement of heat transfer downstream of a spacer grid. The models are to account not only for the enhancement to convective heat transfer of single-phase steam but also the enhancement when flow downstream of the spacer grid contains droplets.
- Perform sufficient assessment to demonstrate the effects of the new models on results using a version of TRACE with improved spacer grid models.
- Continue the development and assessment of an interfacial area transport equation in TRACE as a means of improving the accuracy and reliability of TRACE.

SCOPE OF WORK

This contract covers two major areas of the RBHT test facility. The original construction of the RBHT test facility started in 2002. Over the years, the facility has provided tests that generated 39 reflood tests, over 45 interfacial drag tests, 20 steam cooling heat transfer tests, and over 25 steam cooling with liquid droplet injection tests. Stresses caused by thermal cycling over this large number of tests have caused some damage to some thermocouples. In addition, the data acquisition system needs to be modernized so that accurate and reliable data collection and storage can be achieved more effectively. Before embarking on the next major test series, it is necessary to inspect and perform some maintenance work on the test facility. The other factor influencing the design of the test facility is that industry has developed new fuel designs and different strategies for placing the spacer grids.

The second part of this contract calls for the construction of a small rod bundle test section that shall enable the staff to examine several different types of spacer grid designs. This new test section would allow easier placement of the spacer grids. This feature would encourage industry to submit their prototype grid design to be tested in a more realistic post-LOCA environment. The new test section also would expand the test envelope to enable testing at higher temperatures than have been achieved at previous RBHT tests.

The third aspect of this contract is the development of models and correlations of multiphase film boiling in the rod bundles during reflood stage. The interfacial drag and heat transfer, especially under multiphase flow in the rod bundle channels, presents a challenging task for modeling and validating. Substantial effort shall be required to develop the collected data into correlations that can be implemented into TRACE code and a simulation of the tests performed.

As the model develops and more insights are obtained, a new range of test parameters will likely be realized and this can actually help scoping of future experimental work.

All functions of this contract shall be accomplished through the issuance of task orders. Each task order shall provide specific levels of effort, deliverables, and a schedule.

NRC may issue task orders for work in some, or all, of the following areas:

1. Cleaning and Refurbishment of RBHT

Perform inspection and maintenance work such as cleaning and reassembling of the present RBHT test section. Repair and replace damaged heater rods and broken thermocouple junctions. Install additional pitot tubes for better local steam velocity measurements. Explore with conductivity probes so the local void history data can be collected. Calibrate the upgraded laser/mirror/camera system. Ensure the new components fit in the existing data acquisition system. Research and develop a nonabrasive method to remove the scale on the remaining heater rods. Check seals around the observation windows. Perform shakedown tests to confirm the system is restored to original conditions.

2. Design and Construction of Bench-Top Bundles

Design a new rod bundle test apparatus. The new test section may be shorter than the current one such that the spacer can be quickly replaced. The goal is to have an instrumented rod bundle that could accommodate many grid designs; therefore, its effect on the droplet could be studied. Because this new test section would be less expensive, NRC may request certain runs at higher rod temperature to gain more knowledge of fluid and fuel rod interactions at temperatures closer to calculated conditions for accident analysis.

3. Perform Additional Spacer Grid Design Tests

Design a series of tests that shall include various types of spacer grid designs for prospective new and advanced light-water reactors. This task shall examine the effect of mixing vanes and the influence of spacer grid blockage ratio on heat transfer and local thermal-hydraulics. Perform additional oscillatory reflood tests with frequencies and reflood rates not covered in the previous phase of test. Perform some additional steaming cooling with droplet injection tests with higher rod temperatures and different injection locations than previous tests.

4. Development of Thermal-Hydraulics (T/H) Models

Continue improve models and correlations for spacer grid heat transfer, two-phase friction losses, as well as the interfacial area transport. With emphasis on subjects such as droplet breakup by dry grid, entrainment of droplet by wet grid, and heat transfer enhancement by spacer grid with single-phase steam or with droplets are planned to be studied. It is anticipated that all the test data generated since 2003 at RBHT facility shall require additional effort to be examined and assessed against other reflood and blowdown separate-effect test results. For the IATE model development, a pilot program was initiated to test a one-group source and sink formulation in a multifield version of TRACE. The contractor shall consolidate and debug the IATE model and recommend the selection of model to be implemented so the pilot code can be compared against a broader range of test cases including transients. The contractor shall also devise a set of test problems to exercise the revised TRACE code. The objective of this task is to produce an update that can incorporate the IATE into one of the latest versions of TRACE.

RESEARCH QUALITY

The Advisory Committee on Reactor Safeguards (ACRS) assesses the quality of NRC research programs each year. Within the context of its reviews of the NRC's Office of Nuclear Regulatory Research (RES) programs, the definition of quality research is based on several major characteristics:

- Results meet the objectives (75 percent of overall score).
 - Justification of major assumptions (12 percent).
 - Soundness of technical approach and results (52 percent).
 - Uncertainties and sensitivities addressed (11 percent).

- Documentation of research results and methods is adequate (25 percent of overall score).
 - Clarity of presentation (16 percent).
 - Identification of major assumptions (9 percent).

The contractor is responsible for ensuring that these quality criteria are adequately addressed throughout the course of the research that is performed. The NRC Contracting Officer Representative (COR) and technical monitor will review all research products with these criteria in mind.

TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

This contract requires a densely instrumented, full height (12 ft.) rod bundle test section with pressurized steam supply and data acquisition system. To be able to heat the test rods to realistic temperatures, the power supply for this facility is required to have a capacity of 14,000 Amp DC and higher. The test section is to simulate the thermal-hydraulic conditions in a reactor core and downcomer during the reflood stage of the LOCA scenario. In addition, the contract requires computer capabilities to perform model development and code validation. Finally, experience and knowledge of multiphase flow and experimental techniques are essential to the performance of this type of work.

The contractor is responsible for assigning technical staff, employees, subcontractors, or specialists who have the required educational background, experience, or combination thereof to meet the technical objectives of the work specified in this statement of work. NRC will rely on the contractor to verify the qualifications of the personnel assigned to this contract including assurance that all information contained in the technical and cost proposals (including resumes) is accurate and truthful.

PLACE OF PERFORMANCE

The research activities will be carried out at the University Park Campus of the Pennsylvania State University.

REPORTING REQUIREMENTS

Monthly Letter Status Report

For each Task Order, a Monthly Letter Status Report (MLSR) is to be submitted to the NRC COR and respective NRC Technical Monitor by the 15th of the month following the month to be reported with copies provided to the following:

Resource Name: RESDSAMLSR.Resource@nrc.gov

The MLSR will identify the title of the contract, task order, the job code, the Principal Investigator, the period of performance, the reporting period, summarize each month's technical progress, list monthly spending, total spending to date, and the remaining funds and will contain information as directed in NRC Management Directive 11.1. Any administrative or technical difficulties which may affect the schedule or costs of the project shall be immediately brought to the attention of the NRC COR.

For additional guidance see:

- Section F.2 2052.211-70 PREPARATION OF TECHNICAL REPORTS (JAN 1993)
- Section F.3 2052.211-71 TECHNICAL PROGRESS REPORT (JAN 1993)
- Section F.4 2052.211-72 FINANCIAL STATUS REPORT (OCT 1999)

Additional Reports

Any additional reporting requirements will be described in the Statement of Work for each task order issued.

PUBLICATIONS NOTE

RES encourages the publication of the scientific results from RES sponsored programs in refereed scientific and engineering journals as appropriate. If the contractor proposes to publish in the open literature or present the information at meeting in addition to submitting the required technical reports, approval of the proposed article or presentation should be obtained from the NRC COR. The RES Project Manager shall either approve the material as submitted, approve it subject to NRC suggested revisions, or disapprove it. In any event, the RES Project Manager may disapprove or delay presentation or publication of papers on information that is subject to Commission approval that has not been ruled upon or which has been disapproved. Additional information regarding the publication of NRC sponsored research is contained in NRC Management Directives 3.7, "NUREG Series Publications," and 3.9, "NRC Staff and Contractor Speeches, Papers, and Journal Articles on Regulatory and Technical Subjects."

If the presentation or paper is in addition to the required technical reports and the RES Project Manager determines that it will benefit the RES project, the COR may authorize payment of travel and publishing costs, if any, from the project funds. If the COR determines that the article or presentation would not benefit the RES project, the costs associated with the preparation, presentation, or publication will be borne by the contractor. For any publication or presentations falling into this category, the NRC reserves the right to require that such presentation or publication will not identify the NRC's sponsorship of the work.

For additional guidance see:

H.3 2052.235-70 PUBLICATION OF RESEARCH RESULTS (OCT 1999)

H.9 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORT(S) OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND GRANTS (AUG 2011)

NEW STANDARDS FOR CONTRACTORS WHO PREPARE NUREG-SERIES MANUSCRIPTS

The NRC began to capture most of its official records electronically on January 1, 2000. The NRC will capture each final NUREG-series publication in its native application. Therefore, please submit your final manuscript that has been approved by your NRC COR in both electronic and camera-ready copy.

All format guidance, as specified in NUREG-0650, Revision 2, will remain the same with one exception. You will no longer be required to include the NUREG-series designator on the bottom of each page of the manuscript. The NRC will assign this designator when we send the camera-ready copy to the printer and will place the designator on the cover, title page, and spine. The designator for each report will no longer be assigned when the decision to prepare a publication is made. The NRC's Publishing Services Branch will inform the NRC Project Manager for the publication of the assigned designator when the final manuscript is sent to the printer.

For the electronic manuscript, the Contractor shall prepare the text in Microsoft Word, and use any of the following file types for charts, spreadsheets, and the like.

File Types to be Used for NUREG-Series Publications	
File Type	File Extension
Microsoft® Word®	.doc
Microsoft® PowerPoint®	.ppt
Microsoft® Excel	.xls
Microsoft® Access	.mdb
Portable Document Format	.pdf

This list is subject to change if new software packages come into common use at NRC or by our licensees or other stakeholders that participate in the electronic submission process. If a portion of your manuscript is from another source and you cannot obtain an acceptable electronic file type for this portion (e.g., an appendix from an old publication), the NRC can, if necessary, create a tagged image file format (file extension.tif) for that portion of your report. Note that you should continue to submit original photographs, which will be scanned, since digitized photographs do not print well.

If you choose to publish a compact disk (CD) of your publication, place on the CD copies of the manuscript in both (1) a portable document format (PDF); (2) a Microsoft Word file format, and (3) an Adobe Acrobat Reader, or, alternatively, print instructions for obtaining a free copy of Adobe Acrobat Reader on the back cover insert of the jewel box.

DELIVERABLES/SCHEDULES AND/OR MILESTONES

All deliverables/schedules and/or milestones will be specified in the Task Orders issued under this contract.

MEETINGS AND TRAVEL

Meetings and travel requirements shall be determined and specified in individual task orders. It is anticipated that most or all the meetings will be held at the vendors site, of which the NRC will occur the travel expenses.

NRC-FURNISHED MATERIAL

None.

LICENSE FEE RECOVERY

N/A

CLASSIFICATION OR SENSITIVITY, IF APPLICABLE

N/A

SECTION D - PACKAGING AND MARKING**D.1 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:

D.2 BRANDING (AUG 2011)

The Contractor is required to use the official NRC branding logo or seal on any publications, presentations, products, or materials funded under this contract, to the extent practical, in order to provide NRC recognition for its involvement in and contribution to the project. If the work performed is funded entirely with NRC funds, then the contractor must acknowledge that information in its documentation/presentation.

Access the following websites for branding information and specifications:

<http://www.internal.nrc.gov/ADM/branding/> and Management Directive and Handbook 3.13 -

(internal NRC website): <http://www.internal.nrc.gov/policy/directives/toc/md3.13.htm>

(external public website): <http://pbadupws.nrc.gov/docs/ML1122/ML112280190.pdf>

SECTION E - INSPECTION AND ACCEPTANCE**E.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR 52.252-2. "CLAUSES INCORPORATED BY REFERENCE." in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR 1984

SECTION F - DELIVERIES OR PERFORMANCE**F.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR 52.252-2. "CLAUSES INCORPORATED BY REFERENCE." in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
52.242-15	STOP-WORK ORDER ALTERNATE I (APR 1984)	AUG 1989
52.247-34	F.O.B. DESTINATION	NOV 1991
52.247-48	F.O.B. DESTINATION--EVIDENCE OF SHIPMENT	FEB 1999

F.2 2052.211-70 PREPARATION OF TECHNICAL REPORTS (JAN 1993)

All technical reports required by Section C and all Technical Progress Reports required by Section F are to be prepared in accordance with the attached Management Directive 3.8, "Unclassified Contractor and Grantee Publications in the NUREG Series." Management Directive 3.8 is not applicable to any Contractor Spending Plan (CSP) and any Financial Status Report that may be included in this contract. (See List of Attachments).

F.3 2052.211-71 TECHNICAL PROGRESS REPORT (JAN 1993)

The contractor shall provide a monthly Technical Progress Report to the contracting officers representative and the contracting officer. The report is due within 15 calendar days after the end of the report period and must identify the title of the project, the contract number, appropriate financial tracking code specified by the NRC Contracting officers representative, project manager and/or principal investigator, the contract period of performance, and the period covered by the report. Each report must include the following for each discrete task/task order:

- (a) A listing of the efforts completed during the period, and milestones reached or, if missed, an explanation provided;
- (b) Any problems or delays encountered or anticipated and recommendations for resolution. If the recommended resolution involves a contract modification, e.g., change in work requirements, level of effort (cost) or schedule delay, the contractor shall submit a separate letter to the contracting officer identifying the required change and estimated cost impact.
- (c) A summary of progress to date; and
- (d) Plans for the next reporting period.

F.4 2052.211-72 FINANCIAL STATUS REPORT (OCT 1999)

The contractor shall provide a monthly Financial Status Report (FSR) to the contracting officers representative and the contracting officer. The FSR shall include the acquisition of, or changes in the status of, contractor-held property acquired with government funds valued at the time of purchase at \$50,000 or more. Whenever these types of property

changes occur, the contractor shall send a copy of the report to the Chief, Property and Acquisition Oversight Branch, Office of Administration. The report is due within 15 calendar days after the end of the report period and must identify the title of the project, the contract number, the appropriate financial tracking code (e.g., Job Code Number or JCN) specified by the NRC Contracting officers representative, project manager and/or principal investigator, the contract period of performance, and the period covered by the report. Each report must include the following for each discrete task:

- (a) Total estimated contract amount.
- (b) Total funds obligated to date.
- (c) Total costs incurred this reporting period.
- (d) Total costs incurred to date.
- (e) Detail of all direct and indirect costs incurred during the reporting period for the entire contract or each task, if it is a task ordering contract.
- (f) Balance of obligations remaining.
- (g) Balance of funds required to complete contract/task order.
- (h) Contractor Spending Plan (CSP) status: A revised CSP is required with the Financial Status Report whenever the contractor or the contracting officer has reason to believe that the total cost for performance of this contract will be either greater or substantially less than what had been previously estimated.
 - (1) Projected percentage of completion cumulative through the report period for the project/task order as reflected in the current CSP.
 - (2) Indicate significant changes in the original CSP projection in either dollars or percentage of completion. Identify the change, the reasons for the change, whether there is any projected overrun, and when additional funds would be required. If there have been no changes to the original NRC-approved CSP projections, a written statement to that effect is sufficient in lieu of submitting a detailed response to item "h".
- (i) Property status:
 - (1) List property acquired for the project during the month with an acquisition cost between \$5,000 and \$49,999. Give the item number for the specific piece of equipment.
 - (2) Provide a separate list of property acquired for the project during the month with an acquisition cost of \$50,000 or more. Provide the following information for each item of property: item description or nomenclature, manufacturer, model number, serial number, acquisition cost, and receipt date. If no property was acquired during the month, include a statement to that effect. The same information must be provided for any component or peripheral equipment which is part of a "system or system unit."
 - (3) For multi-year projects, in the September monthly financial status report provide a cumulative listing of property with an acquisition cost of \$50,000 or more showing the information specified in paragraph (i)(2) of this clause.
 - (4) In the final financial status report provide a closeout property report containing the same elements as described above for the monthly financial status reports, for all property purchased with NRC funds regardless of value unless title has been vested in the contractor. If no property was acquired under the contract, provide a statement to that effect. The report should note any property requiring special handling for security, health, safety, or other reasons as part of the report.

(j) Travel status: List the starting and ending dates for each trip, the starting point and destination, and the traveler(s) for each trip.

(k) If the data in this report indicates a need for additional funding beyond that already obligated, this information may only be used as support to the official request for funding required in accordance with the Limitation of Cost (LOC) Clause (FAR 52.232-20) or the Limitation of Funds (LOF) Clause FAR 52.232-22.

F.5 PLACE OF DELIVERY--REPORTS (AUG 2011)

The items to be furnished hereunder shall be delivered, with all charges paid by the Contractor, to:

- a. Name: Kirk Tien (1 hard copy)
- b. Contracting Officer's Representative (COR)
- c. U.S. Nuclear Regulatory Commission
- d. Address:

U.S. Nuclear Regulatory Commission
Attn: Kirk Tien
Mail Stop: CSB-3A07M
11555 Rockville Pike
Rockville, DC 20852

- e. Electronic copies to:
- f. (List names and email addresses)

- g. Name: Jeffrey Mitchell (1 hard copy)
- h. Contracting Officer (CO)
- i. U.S. Nuclear Regulatory Commission
- j. Address:

U.S. Nuclear Regulatory Commission
Mail Stop: TWB-01-B10M
11555 Rockville Pike
Rockville, MD 20852

F.6 PERIOD OF PERFORMANCE (AUG 2011) ALTERNATE I (AUG 2011)

The ordering period for this contract shall commence on the effective date of the contract award and will expire on September 1, 2017. Any orders issued during this period shall be completed within the time specified in the order, unless otherwise specified herein. (See FAR 52.216-18 - Ordering).

SECTION G - CONTRACT ADMINISTRATION DATA**G.1 2052.215-71 CONTRACTING OFFICER'S REPRESENTATIVE (COR) AUTHORITY (NOVEMBER 2006)**

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

Name: Kirk Tien

Address: U.S. Nuclear Regulatory Commission
Mail Stop: CSB-3A07M
11555 Rockville Pike
Rockville, MD 20852

Telephone Number: 301-251-7536

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

(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 contracting officers representative 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 contracting officers representative or must be confirmed by the contracting officers representative 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 contracting officers representative in the manner prescribed by this clause and within the contracting officers representative's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the contracting officers representative 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 contracting officers representative 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 contracting officers representative 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.

(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.

G.2 2052.215-77 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999)

(a) 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 before beginning travel.

(b) The contractor must receive written approval from the NRC Contracting officers representative before taking travel that was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work, or changes to specific travel identified in the Statement of Work).

(c) The contractor will be reimbursed only for those travel costs incurred that are directly related to this contract and 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 Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the estimated costs specified in the Schedule.

(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.

G.3 2052.216-71 INDIRECT COST RATES (JAN 1993)

(a) Pending the establishment of final indirect rates which must be negotiated based on audit of actual costs, the contractor shall be reimbursed for allowable indirect costs as follows:

PENNSYLVANIA STATE UNIVERSITY				
TYPE	CATEGORY	RATE	COST BASE	APPLICABLE PERIOD
Fixed	Fringe Benefits Category I Salaries		Salaries, excluding graduate assistants, fixed term II and visiting faculty appointments not receiving full benefits.	July 1, 2012 to June 30, 2013. Provision from July 1, 2013 until amended
Fixed	Fringe Benefits Category II Graduate Assistants		Graduate assistant salaries	July 1, 2012 to June 30, 2013. Provision from July 1, 2013 until amended
Fixed	Fringe Benefits Category III Salaries and Wages		Wages and those salaries not receiving full benefits, exclusive of graduate assistants and student wages.	July 1, 2012 to June 30, 2013. Provision from July 1, 2013 until amended
Fixed	Fringe Benefits Category IV Student Wages		Student Wages	July 1, 2012 to June 30, 2013. Provision from July 1, 2013 until amended
Fixed	Facilities & Administration		Modified total direct cost	July 1, 2012 to June 30, 2013. Provision from July 1, 2013 until amended

PENNSYLVANIA STATE UNIVERSITY APPLIED RESEARCH LABORATORY (ARL)				
TYPE	CATEGORY	RATE	COST BASE	APPLICABLE PERIOD
Fixed	(ARL) Fringe Benefits Category I Salaries		Salaries, excluding graduate assistants, fixed term II and visiting faculty appointments not receiving full benefits.	July 1, 2012 to June 30, 2013. Provision from July 1, 2013 until amended
Provisional	(ARL) Authorized Absences		ARL salaries, excluding graduate assistants, fixed term II and visiting faculty appointments not receiving full benefits and authorized absences	July 1, 2012 until amended
Provisional	(ARL) Internal Overhead		(ARL) Modified Total Direct Cost	July 1, 2012 until amended
Provisional	Facilities and Administration (UNIV)		(ARL) Modified Total Direct Cost	July 1, 2012 until amended

(b) The contracting officer may adjust these rates as appropriate during the term of the contract upon acceptance of any revisions proposed by the contractor. It is the contractor's responsibility to notify the contracting officer in accordance with FAR 52.232-20, Limitation of Cost, or FAR 52.232-22, Limitation of Funds, as applicable, if these changes affect performance of work within the established cost or funding limitations.

G.4 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 (if applicable).

(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 (if applicable).

G.5 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.

G.6 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 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

SECTION H - SPECIAL CONTRACT REQUIREMENTS**H.1 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST (JAN 1993)**

(a) Purpose. The primary purpose of this clause is to aid in ensuring that the contractor:

(1) Is not placed in a conflicting role because of current or planned interests (financial, contractual, organizational, or otherwise) which relate to the work under this contract; and

(2) Does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described apply to performance or participation by the contractor, as defined in 48 CFR 2009.570-2 in the activities covered by this clause.

(c) Work for others.

(1) Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe, with respect to itself or any employee, that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.

(2) The contractor may not represent, assist, or otherwise support an NRC licensee or applicant undergoing an NRC audit, inspection, or review where the activities that are the subject of the audit, inspection, or review are the same as or substantially similar to the services within the scope of this contract (or task order as appropriate) except where the NRC licensee or applicant requires the contractor's support to explain or defend the contractor's prior work for the utility or other entity which NRC questions.

(3) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site, the contractor shall neither solicit nor perform work in the same or similar technical area for that licensee or applicant organization for a period commencing with the award of the task order or beginning of work on the site (if not a task order contract) and ending one year after completion of all work under the associated task order, or last time at the site (if not a task order contract).

(4) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site,

(i) The contractor may not solicit work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate.

(ii) The contractor may not perform work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate, and for one year thereafter.

(iii) Notwithstanding the foregoing, the contracting officer may authorize the contractor to solicit or perform this type of work (except work in the same or similar technical area) if the contracting officer determines that the situation will not pose a potential for technical bias or unfair competitive advantage.

(d) Disclosure after award.

(1) The contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in this contract, that it does not have any organizational conflicts of interest as defined in 48 CFR 2009.570-2.

(2) The contractor agrees that if, after award, it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the contracting officer. This statement must include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract if termination is in the best interest of the Government.

(3) It is recognized that the scope of work of a task-order-type contract necessarily encompasses a broad spectrum of activities. Consequently, if this is a task-order-type contract, the contractor agrees that it will disclose all proposed new work involving NRC licensees or applicants which comes within the scope of work of the underlying contract. Further, if this contract involves work at a licensee or applicant site, the contractor agrees to exercise diligence to discover and disclose any new work at that licensee or applicant site. This disclosure must be made before the submission of a bid or proposal to the utility or other regulated entity and must be received by the NRC at least 15 days before the proposed award date in any event, unless a written justification demonstrating urgency and due diligence to discover and disclose is provided by the contractor and approved by the contracting officer. The disclosure must include the statement of work, the dollar value of the proposed contract, and any other documents that are needed to fully describe the proposed work for the regulated utility or other regulated entity. NRC may deny approval of the disclosed work only when the NRC has issued a task order which includes the technical area and, if site-specific, the site, or has plans to issue a task order which includes the technical area and, if site-specific, the site, or when the work violates paragraphs (c)(2), (c)(3) or (c)(4) of this section.

(e) Access to and use of information.

(1) If in the performance of this contract, the contractor obtains access to information, such as NRC plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), the contractor agrees not to:

(i) Use this information for any private purpose until the information has been released to the public;

(ii) Compete for work for the Commission based on the information for a period of six months after either the completion of this contract or the release of the information to the public, whichever is first;

(iii) Submit an unsolicited proposal to the Government based on the information until one year after the release of the information to the public; or

(iv) Release the information without prior written approval by the contracting officer unless the information has previously been released to the public by the NRC.

(2) In addition, the contractor agrees that, to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), or other confidential or privileged technical, business, or financial information under this contract, the contractor shall treat the information in accordance with restrictions placed on use of the information.

(3) Subject to patent and security provisions of this contract, the contractor shall have the right to use technical data it produces under this contract for private purposes provided that all requirements of this contract have been met.

(f) Subcontracts. Except as provided in 48 CFR 2009.570-2, the contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms contract, contractor, and contracting officer, must be appropriately modified to preserve the Government's rights.

(g) Remedies. For breach of any of the above restrictions, or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract or for such erroneous representations that

necessarily imply bad faith, the Government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies permitted by law or this contract.

(h) Waiver. A request for waiver under this clause must be directed in writing to the contracting officer in accordance with the procedures outlined in 48 CFR 2009.570-9.

(i) Follow-on effort. The contractor shall be ineligible to participate in NRC contracts, subcontracts, or proposals therefor (solicited or unsolicited), which stem directly from the contractor's performance of work under this contract. Furthermore, unless so directed in writing by the contracting officer, the contractor may not perform any technical consulting or management support services work or evaluation activities under this contract on any of its products or services or the products or services of another firm if the contractor has been substantially involved in the development or marketing of the products or services.

(1) If the contractor, under this contract, prepares a complete or essentially complete statement of work or specifications, the contractor is not eligible to perform or participate in the initial contractual effort which is based on the statement of work or specifications. The contractor may not incorporate its products or services in the statement of work or specifications unless so directed in writing by the contracting officer, in which case the restrictions in this paragraph do not apply.

(2) Nothing in this paragraph precludes the contractor from offering or selling its standard commercial items to the Government.

H.2 2052.215-70 KEY PERSONNEL (JAN 1993)

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

Fan-Bill Cheung (Principal Investigator)
Seungjin Kim (Co-Principal Investigator)

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 contracting officers representative 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.

H.3 2052.235-70 PUBLICATION OF RESEARCH RESULTS (OCT 1999)

(a) The principal investigator(s)/contractor shall comply with the provisions of NRC Management Directive 3.7 "NUREG – Series Publications" regarding publication in refereed scientific and engineering journals or dissemination to the public of any information, oral or written, concerning the work performed under this contract. Failure to comply with this clause shall be grounds for termination of this contract.

(b) The principal investigator(s)/contractor may publish the results of this work in refereed scientific and engineering journals or in open literature and present papers at public or association meetings at interim stages of work, in addition to submitting to NRC the final reports and other deliverables required under this contract. However, such publication and papers shall focus on advances in science and technology and minimize conclusions and/or recommendations which may have regulatory implications.

(c) The principal investigator(s) shall coordinate all such publications with, and transmit a copy of the proposed article or paper to, the NRC Contracting Officer or Contracting officers representative, prior to publication. The NRC agrees to review and provide comments within thirty (30) days after receipt of a proposed publication. However, in those cases where the information to be published is (1) subject to Commission approval, (2) has not been ruled upon, or (3) disapproved by the Commission, the NRC reserves the right to disapprove or delay the publication. Further, if the NRC disagrees with the proposed publication for any reason, it reserves the right to require that any publication not identify the NRC's sponsorship of the work and that any associated publication costs shall be borne by the contractor.

H.4 2052.235-71 SAFETY, HEALTH, AND FIRE PROTECTION (JAN 1993)

The contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of its employees and of members of the public, including NRC employees and contractor personnel, and to minimize danger from all hazards to life and property. The contractor shall comply with all applicable health, safety, and fire protection regulations and requirements (including reporting requirements) of the Commission and the Department of Labor. If the contractor fails to comply with these regulations or requirements, the contracting office may, without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work. Thereafter, a start work order for resumption of work may be issued at the discretion of the contracting officer. The contractor may not make a claim for an extension of time or for compensation or damages by reason of, or in connection with, this type of work stoppage.

H.5 CONTRACTOR ACQUIRED GOVERNMENT EQUIPMENT/PROPERTY (AUG 2011)

(a) The Contractor is authorized to acquire and/or fabricate the equipment/ property listed below for use in the performance of this contract, as identified in each definitized Task Order.

1. RBHT Heater Rods (Custom Made)
2. New Housing (Custom Made at PSU)
3. Quartz Windows
4. Oxford Laser

(b) In the event that, during contract performance, the contractor determines that the acquisition cost for the above item(s) is expected to exceed the amount(s) contained in the contractor's proposal, the contractor shall refer to the Limitation of Cost or Funds Clause when either is included in the contract.

(c) Only the equipment/property listed above, in the quantities shown, will be acquired by the contractor unless the contractor receives written authorization and approval from the contracting officer for the purchase of additional equipment/property. The above listed items are subject to FAR 52.245-1 - "Government Property" (AUG 2010).

H.6 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS (AUG 2011)

Annual and final evaluations of contractor performance under this contract will be prepared in accordance with FAR Subpart 42.15, "Contractor Performance Information," normally at or near the time the contractor is notified of the NRC's intent to exercise the contract option. If the multi-year contract does not have option years, then an annual evaluation will be prepared annually (state time for annual evaluation). Final evaluations of contractor performance will be prepared at the expiration of the contract during the contract closeout process.

The Contracting Officer will transmit the NRC Contracting Officer's Representative's (COR) annual and final contractor performance evaluations to the contractor's Project Manager, unless otherwise instructed by the contractor. The contractor will be permitted thirty days to review the document and submit comments, rebutting statements, or additional information.

Where a contractor concurs with, or takes no exception to an annual performance evaluation, the Contracting Officer will consider such evaluation final and releasable for source selection purposes. Disagreements between the parties regarding a performance evaluation will be referred to an individual one level above the Contracting Officer, whose decision will be final.

The Contracting Officer will send a copy of the completed evaluation report, marked "Source Selection Information", to the contractor's Project Manager for their records as soon as practicable after it has been finalized. The completed evaluation report also will be used as a tool to improve communications between the NRC and the contractor and to improve contract performance.

The completed annual performance evaluation will be used to support future award decisions in accordance with FAR 42.1502 and 42.1503. During the period the information is being used to provide source selection information, the completed annual performance evaluation will be released to only two parties - the Federal government personnel performing the source selection evaluation and the contractor under evaluation if the contractor does not have a copy of the report already.

H.7 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORT(S) OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND GRANTS (AUG 2011)

Review and Approval of Reports

(a) Reporting Requirements. The contractor/grantee shall comply with the terms and conditions of the contract/grant regarding the contents of the draft and final report, summaries, data, and related documents, to include correcting, deleting, editing, revising, modifying, formatting, and supplementing any of the information contained therein, at no additional cost to the NRC. Performance under the contract/grant will not be deemed accepted or completed until it complies with the NRC's directions. The reports, summaries, data, and related documents will be considered draft until approved by the NRC. The contractor/ grantee agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data, and related documents created under this contract/grant remain solely within the discretion of the NRC.

(b) Publication of Results. Prior to any dissemination, display, publication, or release of articles, reports, summaries, data, or related documents developed under the contract/grant, the contractor/grantee shall submit them to the NRC for review and approval. The contractor/ grantee shall not release, disseminate, display or publish articles, reports, summaries, data, and related documents, or the contents therein, that have not been reviewed and approved by the NRC for release, display, dissemination or publication. The contractor/grantee agrees to conspicuously place any disclaimers, markings or notices, directed by the NRC, on any articles, reports, summaries, data, and related

documents that the contractor/grantee intends to release, display, disseminate or publish to other persons, the public, or any other entities. The contractor/grantee agrees, and grants, a royalty-free, nonexclusive, irrevocable worldwide license to the government, to use, reproduce, modify, distribute, prepare derivative works, release, display or disclose the articles, reports, summaries, data, and related documents developed under the contract/grant, for any governmental purpose and to have or authorize others to do so.

(c) Identification/Marking of Sensitive Unclassified Non-Safeguards Information (SUNSI) and Safeguards Information (SGI). The decision, determination, or direction by the NRC that information possessed, formulated or produced by the contractor/grantee constitutes SUNSI or SGI is solely within the authority and discretion of the NRC. In performing the contract/grant, the contractor/grantee shall clearly mark SUNSI and SGI, to include for example, OOU-Allegation Information or OOU-Security Related Information on any reports, documents, designs, data, materials, and written information, as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet (e.g., NRC Form 461 Safeguards Information) in maintaining these records and documents. The contractor/grantee shall ensure that SUNSI and SGI is handled, maintained and protected from unauthorized disclosure, consistent with NRC policies and directions. The contractor/grantee shall comply with the requirements to mark, maintain, and protect all information, including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954 as amended, its implementing regulations (10 CFR 73.21), Sensitive Unclassified Non-Safeguards and Safeguards Information policies, and NRC Management Directives and Handbooks 12.5, 12.6 and 12.7.

(d) Remedies. In addition to any civil, criminal, and contractual remedies available under the applicable laws and regulations, failure to comply with the above provisions, and/or NRC directions, may result in suspension, withholding, or offsetting of any payments invoiced or claimed by the contractor/grantee.

(e) Flowdown. If the contractor/grantee intends to enter into any subcontracts or other agreements to perform this contract/grant, the contractor/grantee shall include all of the above provisions in any subcontracts or agreements.

H.8 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.

H.9 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.

H.10 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS (AUG 2011)

(a) All offerors will receive preaward and postaward notices in accordance with FAR 15.503.

(b) It is also brought to your attention that the contracting officer is the only individual who can legally obligate funds or commit the NRC to the expenditure of public funds in connection with this procurement. This means that unless provided in a contract document or specifically authorized by the contracting officer, NRC technical personnel may not issue contract modifications, give formal contractual commitments, or otherwise bind, commit, or obligate the NRC contractually. Informal unauthorized commitments, which do not obligate the NRC and do not entitle the contractor to payment, may include:

(1) Encouraging a potential contractor to incur costs prior to receiving a contract;

(2) Requesting or requiring a contractor to make changes under a contract without formal contract modifications;

(3) Encouraging a contractor to incur costs under a cost-reimbursable contract in excess of those costs contractually allowable; and

(4) Committing the Government to a course of action with regard to a potential contract, contract change, claim, or dispute.

H.11 2052.242-70 RESOLVING NRC CONTRACTOR DIFFERING PROFESSIONAL OPINIONS (AUG 2007)

(a) The Nuclear Regulatory Commission's (NRC) policy is to support the contractor's expression of professional health and safety related concerns associated with the contractor's work for NRC that may differ from a prevailing NRC staff view, disagree with an NRC decision or policy position, or take issue with proposed or established agency practices. An occasion may arise when an NRC contractor, contractor's personnel, or subcontractor personnel believes that a conscientious expression of a competent judgement is required to document such concerns on matters directly associated with its performance of the contract. The NRC's policy is to support these instances as Differing Professional Opinions (DPOs).

(b) The procedure that will be used provides for the expression and resolution of differing professional opinions (DPOs) of health and safety-related concerns associated with the mission of the agency by NRC contractors, contractor personnel or subcontractor personnel on matters directly associated with its performance of the contract. This procedure is found in Clause 2052.242 71 of this document. The contractor shall provide a copy of the NRC DPO procedure to all of its employees performing under this contract and to all subcontractors who shall, in turn, provide a copy of the procedure to its employees. The prime contractor or subcontractor shall submit all DPOs received but need not endorse them.

H.12 2052.242-71 PROCEDURES FOR RESOLVING NRC CONTRACTOR DIFFERING PROFESSIONAL OPINIONS (OCT 1999)

(a) The following procedure provides for the expression and resolution of differing professional opinions (DPOs) of health and safety-related concerns of NRC contractors and contractor personnel on matters connected to the subject

of the contract. Subcontractor DPOs must be submitted through the prime contractor. The prime contractor or subcontractor shall submit all DPOs received but need not endorse them.

(b) The NRC may authorize up to ten reimbursable hours for the contractor to document, in writing, and discuss, with the DPO panel, a DPO by the contractor, the contractor's personnel, or subcontractor personnel. The contractor shall not be entitled to any compensation for effort on a DPO which exceeds the specified ten hour limit.

(c) The contractor shall notify the contracting officer before incurring costs to document a DPO. The contractor shall not begin any work on the DPO before receiving a modification to the contract from the NRC contracting officer.

The contractor shall first determine whether there are sufficient funds obligated under the contract which are available to cover the costs of writing a DPO. If there are insufficient obligated funds under the contract, the contractor shall request additional funding from the NRC contracting officer to cover the costs of preparing the DPO. If there are sufficient obligated funds under the contract, the contractor shall notify the contracting officer so that a modification can be issued that specifies the amount of funding required for the DPO.

(d) Contract funds shall not be authorized to document a differing perspective in the following examples where the use of this NRC contractor DPO process is inappropriate:

(1) Issues involving allegations of wrongdoing that should be appropriately addressed directly to the NRC Office of the Inspector General (OIG);

(2) Issues submitted anonymously. However, safety significant issues that are submitted anonymously should be addressed under NRC's Allegation Program which can be found at:
<http://www.nrc.gov/about-nrc/regulatory/allegations-resp.html>

(3) Issues that are deemed to be frivolous or otherwise not in accordance with the guidance included in NRC Management Directive (MD) 10.159, "The NRC Differing Professional Opinions Program," which can be found at:
<http://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-10.html>

(4) Issues that have already been considered, addressed, or rejected by the NRC under these procedures, absent significant new information;

(5) Issues that are considered premature because they are still under staff review by the NRC.

(e) This procedure does not provide anonymity, nor does it provide for confidential submittal (as addressed in MD 10.159). Individuals desiring anonymity or confidentiality should contact the NRC OIG or submit the information under NRC's Allegation Program, as appropriate.

(f) Prior to submitting a DPO, the contractor or the contractor's employees are encouraged to engage in informal discussions with appropriate NRC personnel (which may include NRC staff directly involved with the issues that are the subject of concerns and the NRC Contracting officers representative.) The contractor hereby agrees that the contractor authorizes its employees to engage in informal discussions with the appropriate NRC personnel for purposes of this clause. If the informal discussions do not resolve the contractor or the contractor's employees' concerns, the contractor shall notify the contracting officer so that a modification to the contract can be issued that authorizes the expenditure of funds for the DPO.

The contractor may initiate the DPO process by submitting a written statement directly to the NRC Differing Professional Opinions Program Manager (DPOPM), Office of Enforcement, with a copy to the Contracting Officer, Division of Contracts, Office of Administration. Each DPO submitted will be evaluated on its own merits. (Refer to (c) above before incurring any costs to initiate the DPO process.)

(g) The DPO, while being brief, must contain the following as it relates to the subject matter of the contract:

- (1) A summary of the prevailing NRC view, existing NRC decision or stated position, or the proposed or established NRC practice.
 - (2) A description of the submitter's views and how they differ from any of the above items.
 - (3) The rationale for the submitter's views, including an assessment of the consequences should the submitter's position not be adopted by NRC.
 - (4) References to, or copies of, relevant documents.
- (h) The DPOPM will screen the DPO and notify the submitter and the contractor if the DPO is accepted. Returned DPOs will identify the reason for return.
 - (i) The DPOPM will forward the DPO to the Office Director or Regional Administrator responsible for the contract for disposition.
 - (j) The Office Director or Regional Administrator will establish an ad hoc panel of NRC employees to review the DPO.
 - (k) The panel will interview the submitter to ensure that the panel understands the issues and to define the scope of the review. The panel will gather information, review documents, and conduct interviews to support a thorough review. The panel will provide a written report of its findings to the Office Director or Regional Administrator and to the Contracting Officer, which includes a recommended course of action.
 - (l) The Office Director or Regional Administrator will consider the DPO panel's report, make a decision on the DPO and provide a written decision to the contractor and the Contracting Officer. The DPO is considered final and closed when the DPO Decision is issued.
 - (m) A summary of the issue and its disposition will be included in the NRC Weekly Information Report.
 - (n) DPOs will be dispositioned in accordance with the time frames identified in MD 10.159.
 - (o) The DPOPM will track follow up actions and notify the contractor of any schedule revisions.
 - (p) The availability of DPO records will reflect the submitter's wishes (e.g., whether the records should or should not be made public and whether the submitter's identity is redacted) and be consistent with NRC practices for making records available to the public.
 - (q) For purposes of the contract, the DPO shall be considered a deliverable under the contract.

PART II - CONTRACT CLAUSES**SECTION I - CONTRACT CLAUSES****I.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR 52.252-2. "CLAUSES INCORPORATED BY REFERENCE." in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
52.202-1	DEFINITIONS	JAN 2012
52.203-3	GRATUITIES	APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	APR 1984
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP 2006
52.203-7	ANTI-KICKBACK PROCEDURES	OCT 2010
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	OCT 2010
52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER	MAY 2011
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS	FEB 2012
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	DEC 2010
52.215-2	AUDIT AND RECORDS--NEGOTIATION ALTERNATE II (APR 1998)	OCT 2010
52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT 1997
52.215-10	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA	AUG 2011
52.215-12	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA	OCT 2010
52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS	OCT 2010
52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS OTHER THAN PENSIONS (PRB)	JUL 2005
52.216-11	COST CONTRACT--NO FEE (ALTERNATE 1)	APR 1984
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	JAN 2011
52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN ALTERNATE II (OCT 2001)	JAN 2011

52.219-16	LIQUIDATED DAMAGES--SUBCONTRACTING PLAN	JAN 1999
52.222-3	CONVICT LABOR	JUN 2003
52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB 1999
52.222-26	EQUAL OPPORTUNITY	MAR 2007
52.222-35	EQUAL OPPORTUNITY FOR VETERANS	SEP 2010
52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	OCT 2010
52.222-37	EMPLOYMENT REPORTS ON VETERANS	SEP 2010
52.222-50	COMBATING TRAFFICKING IN PERSONS	FEB 2009
52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION	JAN 2009
52.223-6	DRUG-FREE WORKPLACE	MAY 2001
52.223-18	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING	AUG 2011
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN 2008
52.227-1	AUTHORIZATION AND CONSENT ALTERNATE I (APR 1984)	DEC 2007
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	DEC 2007
52.227-11	PATENT RIGHTS--OWNERSHIP BY THE CONTRACTOR	DEC 2007
52.227-14	RIGHTS IN DATA--GENERAL ALTERNATE IV (DEC 2007)	DEC 2007
52.228-7	INSURANCE--LIABILITY TO THIRD PERSONS	MAR 1996
52.230-5	COST ACCOUNTING STANDARDS--EDUCATIONAL INSTITUTION	MAY 2012
52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS	JUN 2010
52.232-20	LIMITATION OF COST	APR 1984
52.232-22	LIMITATION OF FUNDS	APR 1984
52.232-23	ASSIGNMENT OF CLAIMS	JAN 1986
52.232-25	PROMPT PAYMENT	OCT 2008
52.232-34	PAYMENT BY ELECTRONIC FUNDS TRANSFER-- OTHER THAN CENTRAL CONTRACTOR REGISTRATION	MAY 1999
52.233-1	DISPUTES	JUL 2002
52.233-3	PROTEST AFTER AWARD ALTERNATE I (JUN 1985)	AUG 1996
52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT 2004
52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR 1984
52.242-3	PENALTIES FOR UNALLOWABLE COSTS	MAY 2001
52.242-13	BANKRUPTCY	JUL 1995
52.243-2	CHANGES--COST REIMBURSEMENT ALTERNATE V (APR 1984)	AUG 1987
52.244-2	SUBCONTRACTS ALTERNATE I (JUNE 2007)	OCT 2010
52.244-5	COMPETITION IN SUBCONTRACTING	DEC 1996
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS	DEC 2010
52.245-1	GOVERNMENT PROPERTY ALTERNATE II (APR 2012)	APR 2012
52.245-9	USE AND CHARGES	APR 2012
52.246-23	LIMITATION OF LIABILITY	FEB 1997
52.246-25	LIMITATION OF LIABILITY--SERVICES	FEB 1997

52.248-1	VALUE ENGINEERING	OCT 2010
52.249-5	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS)	SEP 1996
52.253-1	COMPUTER GENERATED FORMS	JAN 1991

I.2 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (FEB 2012)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the Central Contractor Registration database via <https://www.acquisition.gov>.

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIS consists of two segments--

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by--

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIS is automatically transferred after a waiting period of 14 calendar days, except for--

(i) Past performance reviews required by subpart 42.15;

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the nonpublic segment of FAPIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

I.3 52.215-23 LIMITATIONS ON PASS-THROUGH CHARGES (OCT 2009)

(a) Definitions. As used in this clause--

"Added value" means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

"Excessive pass-through charge," with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

"No or negligible value means" the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

"Subcontract" means any contract, as defined in FAR 2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor," as defined in FAR 44.101, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) General. The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) Reporting. Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if--

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) Recovery of excessive pass-through charges. If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR subpart 31.2; and

(2) For applicable DoD fixed-price contracts, as identified in 15.408(n)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) Access to records.

(1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) Flowdown. The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that exceed the simplified acquisition threshold, except if the contract is with DoD, then insert in all cost-reimbursement subcontracts and fixed-price subcontracts, except those identified in 15.408(n)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in accordance with FAR 15.403-4.

I.4 52.216-7 ALLOWABLE COST AND PAYMENT (JUN 2011)

(a) Invoicing.

(1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) Subpart 31.3 in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30TH day after the designated billing office receives a proper payment request.

In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) Reimbursing costs.

(1) For the purpose of reimbursing allowable costs (except as provided in paragraph (b)(2) of this clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term "costs" includes only--

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for--

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made-

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government;

(B) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

(F) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check, or other forms of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) of this clause, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) of this clause.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) Small business concerns. A small business concern may receive more frequent payments than every 2 weeks.

(d) Final indirect cost rates.

(1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2)(i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

- (A) Summary of all claimed indirect expense rates, including pool, base, and calculated indirect rate.
- (B) General and Administrative expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts).
- (C) Overhead expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) for each final indirect cost pool.
- (D) Occupancy expenses (intermediate indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) and expense reallocation to final indirect cost pools.
- (E) Claimed allocation bases, by element of cost, used to distribute indirect costs.
- (F) Facilities capital cost of money factors computation.
- (G) Reconciliation of books of account (i.e., General Ledger) and claimed direct costs by major cost element.
- (H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.
- (I) Schedule of cumulative direct and indirect costs claimed and billed by contract and subcontract.
- (J) Subcontract information. Listing of subcontracts awarded to companies for which the contractor is the prime or upper-tier contractor (include prime and subcontract numbers; subcontract value and award type; amount claimed during the fiscal year; and the subcontractor name, address, and point of contact information).
- (K) Summary of each time-and-materials and labor-hour contract information, including labor categories, labor rates, hours, and amounts; direct materials; other direct costs; and, indirect expense applied at claimed rates.
- (L) Reconciliation of total payroll per IRS form 941 to total labor costs distribution.
- (M) Listing of decisions/agreements/approvals and description of accounting/organizational changes.
- (N) Certificate of final indirect costs (see 52.242-4, Certification of Final Indirect Costs).
- (O) Contract closing information for contracts physically completed in this fiscal year (include contract number, period of performance, contract ceiling amounts, contract fee computations, level of effort, and indicate if the contract is ready to close).

(iv) The following supplemental information is not required to determine if a proposal is adequate, but may be required during the audit process:

- (A) Comparative analysis of indirect expense pools detailed by account to prior fiscal year and budgetary data.
- (B) General Organizational information and Executive compensation for the five most highly compensated executives. See 31.205-6(p). Additional salary reference information is available at http://www.whitehouse.gov/omb/procurement_index_exec_comp/.
- (C) Identification of prime contracts under which the contractor performs as a subcontractor.

(D) Description of accounting system (excludes contractors required to submit a CAS Disclosure Statement or contractors where the description of the accounting system has not changed from the previous year's submission).

(E) Procedures for identifying and excluding unallowable costs from the costs claimed and billed (excludes contractors where the procedures have not changed from the previous year's submission).

(F) Certified financial statements and other financial data (e.g., trial balance, compilation, review, etc.).

(G) Management letter from outside CPAs concerning any internal control weaknesses.

(H) Actions that have been and/or will be implemented to correct the weaknesses described in the management letter from subparagraph (G) of this section.

(I) List of all internal audit reports issued since the last disclosure of internal audit reports to the Government.

(J) Annual internal audit plan of scheduled audits to be performed in the fiscal year when the final indirect cost rate submission is made.

(K) Federal and State income tax returns.

(L) Securities and Exchange Commission 10-K annual report.

(M) Minutes from board of directors meetings.

(N) Listing of delay claims and termination claims submitted which contain costs relating to the subject fiscal year.

(O) Contract briefings, which generally include a synopsis of all pertinent contract provisions, such as: Contract type, contract amount, product or service(s) to be provided, contract performance period, rate ceilings, advance approval requirements, pre-contract cost allowability limitations, and billing limitations.

(v) The Contractor shall update the billings on all contracts to reflect the final settled rates and update the schedule of cumulative direct and indirect costs claimed and billed, as required in paragraph (d)(2)(iii)(I) of this section, within 60 days after settlement of final indirect cost rates.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify (i) the agreed-upon final annual indirect cost rates, (ii) the bases to which the rates apply, (iii) the periods for which the rates apply, (iv) any specific indirect cost items treated as direct costs in the settlement, and (v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates. The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, the Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates. The completion invoice or voucher shall include settled subcontract amounts and rates. The prime contractor is responsible for settling subcontractor amounts and rates included in the completion invoice or voucher and providing status of subcontractor audits to the contracting officer upon request.

(6)(i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may--

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) Billing rates. Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates--

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) Quick-closeout procedures. Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) Audit. At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be (1) reduced by amounts found by the Contracting Officer not to constitute allowable costs or (2) adjusted for prior overpayments or underpayments.

(h) Final payment. (1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver--

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except--

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

I.5 52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the effective date of the contract through September 1, 2017.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

I.6 52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than \$10,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of \$2,990,847.00 (ceiling amount);

(2) Any order for a combination of items in excess of \$2,990,847.00 (ceiling amount); or

(3) A series of orders from the same ordering office within 0 days that together call for quantities exceeding the limitation in paragraph (b)(1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within five days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

I.7 52.216-22 INDEFINITE QUANTITY (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after six (6) months from contract expiration.

I.8 52.222-40 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)

(a) During the term of this contract, the Contractor shall post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2(d) and (f).

(1) Physical posting of the employee notice shall be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor shall also post the required notice electronically by displaying prominently, on any Web site that is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required employee notice, printed by the Department of Labor, may be-

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-Management Standards Web site at <http://www.dol.gov/olms/regs/compliance/EO13496.htm>; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor shall comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (f), in every subcontract that exceeds \$10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor shall take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

1.9 52.249-14 EXCUSABLE DELAYS (APR 1984)

(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default, unless--

(1) The subcontracted supplies or services were obtainable from other sources;

(2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and

(3) The Contractor failed to comply reasonably with this order.

(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract.

1.10 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<https://www.acquisition.gov/far/>

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

ATTACHMENT NUMBER	TITLE	DATE	NO. PAGES
1	Cost Reimbursement Billing Instructions (Sample) NOTE: PSU's Standard Invoice is acceptable.		
2	Contractor Spending Plan		
3	Organizational Conflict of Interest.		

**BILLING INSTRUCTIONS FOR
COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)**

General: During performance and through final payment of this contract, the contractor is responsible for the accuracy and completeness of data within the Central Contractor Registration (CCR) database and for any liability resulting from the Government's reliance on inaccurate or incomplete CCR data.

The contractor shall prepare vouchers/invoices for reimbursement of costs in the manner and format described herein. FAILURE TO SUBMIT VOUCHERS/INVOICES IN ACCORDANCE WITH THESE INSTRUCTIONS WILL RESULT IN REJECTION OF THE VOUCHER/INVOICE AS IMPROPER.

Number of Copies: A signed original and supporting documentation shall be submitted. If the voucher/invoice includes the purchase of any property with an initial acquisition cost of \$50,000 or more, a copy of the signed original is also required.

Designated Agency Billing Office: The preferred method of submitting vouchers/invoices is electronically to the Department of the Interior at NRCPayments@nbc.gov

If the voucher/invoice includes the purchase of capital property with an initial acquisition cost of \$50,000 or more, a copy of the signed original shall be electronically sent to: Property@nrc.gov

However, if you submit a hard-copy of the voucher/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

If you submit a hard-copy of the voucher/invoice and it includes the purchase of capital property with an initial acquisition cost of \$50,000 or more, a copy of the signed original shall be mailed to the following address:

U.S. Nuclear Regulatory Commission
NRC Property Management Officer
Mail Stop: O-4D15
Washington, DC 20555-0001

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED

Agency Payment Office: Payment will continue to be made by the office designated in the contract in Block 12 of the Standard Form 26, or Block 25 of the Standard Form 33, whichever is applicable.

**BILLING INSTRUCTIONS FOR
COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)**

Frequency: The contractor shall submit claims for reimbursement once each month, unless otherwise authorized by the Contracting Officer.

Format: Claims shall be submitted in the format depicted on the attached sample form entitled "Voucher/Invoice for Purchases and Services Other than Personal" (see Attachment 1). The sample format is provided for guidance only. The format is not required for submission of a voucher/invoice. Alternate formats are permissible provided all requirements of the billing instructions are addressed. The instructions for preparation and itemization of the voucher/invoice are included with the sample form.

Task Ordering Contracts: If the contractor bills for more than one task order under a voucher/invoice, detailed cost information for each individual task order shall be submitted, together with a cumulative summary of all charges billed on the voucher/invoice. This includes all applicable cost elements discussed in paragraphs (a) through (n) of the attached instructions.

Fee Recovery Billings: Pursuant to the provisions of 10 CFR Part 170 and 171 on license fees, the NRC must recover the cost of work performed. Accordingly, the contractor must provide the total amount of funds billed during the period, fiscal year to date and the cumulative total for each task or task assignment by facility or report. The fee recovery billing reports shall be on a separate page, and shall be in the format provided (see Attachment 1). The billing period for fee recovery costs should be from the first day of each calendar month to the last day of the same month. Each separate fee billing report must be attached to the monthly invoice and cover the same period as the invoice.

Each report will contain a docket number or other unique identifier. The NRC will provide a unique identifier for all work performed. Costs should be reported as whole number to the nearest cent. For work that involves more than one facility at the same site, each facility should be listed separately and the costs should be split appropriately between the facilities. Common costs, as defined below, shall be identified as a separate line item in the fee recovery billing report each month.

Common costs are those costs that are not licensee unique and associated with the performance of an overall program that benefit all similar licensees covered under that program or that are required to satisfactorily carry out the program. Common costs include costs associated with the following: preparatory or start-up efforts to interpret and reach agreement on methodology, approach, acceptance criteria, regulatory position, or technical reporting requirements; efforts associated with the "lead plant" concept that might be involved during the first one or two plant reviews; meetings and discussions involving the above efforts to provide orientation, background knowledge or guidance during the course of a program; any technical effort applied to a docket or other unique identifier; and project management. Common costs must be reporting monthly for each docket or unique identifier. Common costs must be

**BILLING INSTRUCTIONS FOR
COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)**

computed based on the proportion of direct costs incurred against each docket or unique identifier for the billing period.

Billing of Cost after Expiration of Contract: If costs are incurred during the contract period and claimed after the contract has expired, you must cite the period during which these costs were incurred. To be considered a proper expiration voucher/invoice, the contractor shall clearly mark it "EXPIRATION VOUCHER" or "EXPIRATION INVOICE".

Final vouchers/invoices shall be marked "FINAL VOUCHER" or "FINAL INVOICE".

Currency: Billings may be expressed in the currency normally used by the contractor in maintaining his accounting records and payments will be made in that currency. However, the U.S. dollar equivalent for all vouchers/invoices paid under the contract may not exceed the total U.S. dollars authorized in the contract.

Supersession: These instructions supersede any previous billing instructions.

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(SAMPLE FORMAT)

**COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)
INVOICE/ VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL**

1. Official Agency Billing Office

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

2. Voucher Information

a. Payee's DUNS Number or DUNS+4. The Payee shall include the Payee's Data Universal Number (DUNS) or DUNS+4 number that identifies the Payee's name and address. The DUNS+4 number is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the Payee to identify alternative Electronic Funds Transfer (EFT) accounts for the same parent concern.

b. Payee's Name and Address. Show the name of the Payee as it appears in the contract and its correct address. If the Payee assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Payee shall require as a condition of any such assignment, that the assignee shall register separately in the Central Contractor Registration (CCR) database at <http://www.ccr.gov> and shall be paid by EFT in accordance with the terms of this contract. See Federal Acquisition Regulation 52.232-33(g) Payment by Electronic Funds Transfer - Central Contractor Registration (October 2003).

c. Contract Number. Insert the NRC contract number.
Task Order No. Insert the task order number (If Applicable).

d. Voucher/Invoice. The appropriate sequential number of the voucher/invoice, beginning with 001 should be designated. Contractors may also include an individual internal accounting number, if desired, in addition to the 3-digit sequential number.

e. Date of Voucher/Invoice. Insert the date the voucher/invoice is prepared.

f. Billing period. Insert the beginning and ending dates (day, month, year) of the period during which costs were incurred and for which reimbursement is claimed.

(SAMPLE FORMAT)

COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)
INVOICE/ VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

g. Direct Costs - Insert the amount billed for the following cost elements, adjustments, suspensions, and total amounts, for both the current billing period and for the cumulative period (from contract inception to end date of this billing period).

- (1) Direct Labor. This consists of salaries and wages paid (or accrued) for direct performance of the contract itemized as follows:

<u>Labor</u> <u>Category</u>	<u>Hrs.</u> <u>Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative</u> <u>Hrs.Billed</u>
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- (2) Fringe Benefits. This represents fringe benefits applicable to direct labor and billed as a direct cost. Where a rate is used indicate the rate. Fringe benefits included in direct labor or in other indirect cost pools should not be identified here.

- (3) Capitalized Non Expendable Equipment. List each item costing \$50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) the item number for the specific piece of equipment listed in the property schedule of the contract; or (b) the Contracting Officer's approval letter if the equipment is not covered by the property schedule.

- (4) Non-capitalized Equipment, Materials, and Supplies. These are equipment other than that described in (3) above, plus consumable materials, supplies. List by category. List items valued at \$1,000 or more separately. Provide the item number for each piece of equipment valued at \$1,000 or more.

- (5) Premium Pay. This enumeration in excess of the basic hourly rate. (Requires written approval of the Contracting Officer.)

- (6) Consultants. The supporting information must include the name, hourly or daily rate of the consultant, and reference the NRC approval (if not specifically approved in the original contract).

- (7) Travel. Total costs associated with each trip must be shown in the following format:

<u>Start Date</u>	<u>Destination</u>	<u>Costs</u>
From To	From To	\$

- (8) Subcontracts. Include separate detailed breakdown of all costs paid to approved subcontractors during the billing period.

- (9) Other Costs. List all other direct costs by cost element and dollar amount separately.

(SAMPLE FORMAT)

**COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)
INVOICE/ VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL**

- h. Indirect Costs (Overhead and General and Administrative Expense). Cite the formula (rate and base) in effect in accordance with the terms of the contract, during the time the costs were incurred and for which reimbursement is claimed.
- i. Fixed Fee. If the contract provides for a fixed fee, it must be claimed as provided for by the contract. Cite the formula or method of computation. Include this information as it applies to individual task orders as well.
The contractor may bill for fixed fee only up to 85% of total fee.
- j. Total Amount Billed. Insert the total amounts claimed for the current and cumulative periods.
- k. Adjustments. For cumulative amount, include outstanding suspensions.
- l. Grand Totals.

Further itemization of vouchers/invoices shall only be required for items having specific limitations set forth in the contract.

3. Sample Voucher Information

This voucher represents reimbursable costs for the billing period from ___ through__.

<u>Amount Billed</u>
<u>Current Period</u> <u>Cumulative</u>

- (a) Direct Costs
 - (1) Direct labor*
 - (2) Fringe benefits (% , if computed as percentage).....
 - (3) Capitalized non-expendable equipment (\$50,000 or more - see instructions)*
 - (4) Non-capitalized equipment, materials, and supplies.....
 - (5) Premium pay (NRC approved overtime).....
 - (6) Consultants*
 - (7) Travel*
 - (8) Subcontracts*
 - (9) Other costs*

Total Direct Costs

(SAMPLE FORMAT)

**COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)
INVOICE/ VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL**

- (b) Indirect Costs
 - (A) Overhead ___ % of _____(Indicate Base).....
- (c) Fixed-Fee (Cite Formula):
- (d) Total Amount Billed.....
- (e) Adjustments.....
- (f) Grand Totals.....

* (Requires Supporting Information -- See Sample below)

SAMPLE SUPPORTING INFORMATION

1) Direct Labor - \$2400

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Rate</u>	<u>Cumulative Total</u>	<u>Hrs. Billed</u>
Senior Engineer I	100	\$14.00	\$1400	975
Engineer	50	\$10.00	\$ 500	465
Computer Analyst	100	\$ 5.00	<u>\$ 500</u>	320
			\$2400	

3) Capitalized Non-Expendable Equipment

Prototype Spectrometer - item number 1000-01 \$60,000

4) Non-capitalized Equipment, Materials, and Supplies

10 Radon tubes @ \$110.00 = \$1100.00

6 Pairs Electrostatic gloves @ \$150.00 = \$900.00

\$2000.00

5) Premium Pay

Walter Murphy - 10 hours @ \$10.00 Per Hour = \$100
(This was approved by NRC in letter dated 6/1/08)

6) Consultants' Fee

Dr. Carney - 1 hour @ \$100 = \$100

ATTACHMENT 1
TO BILLING INSTRUCTIONS

(SAMPLE FORMAT)

COST REIMBURSEMENT TYPE CONTRACTS (JUNE 2008)
INVOICE/ VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

7)	<u>Travel</u>		
	<u>Start Date</u>	<u>Destination</u>	<u>Costs</u>
	6/1/08	Wash., DC	\$200

4. FEE RECOVERY BILLING REPORT

FIN:

Facility Name or Report Title:

TAC or Inspection Report Number:

(or other unique identifier)

Docket Number (if applicable):

Cost Categories	Period Amt.	Period Cost Incurred	Fiscal Year To Date Costs	Total Cumulative Costs
Labor				
Materials				
Subcontractor/ Consultant				
Travel				
Other (specify)				
Common Costs				
Total				

Remarks:

CONTRACTOR SPENDING PLAN - INSTRUCTIONS

The Contractor Spending Plan (CSP) is an important tool for projecting and tracking contract costs and progress each task under the contract.

Applicability

The Nuclear Regulatory Commission (NRC) requires that the CSP be completed for cost reimbursement contracts when the award amount is expected to exceed \$100,000 and the period of performance is expected to exceed 6 months. For task order type contracts, a CSP is required when an individual cost reimbursement task order is expected to exceed the above thresholds. When contract or task order modification increases the contract or task order amount of a cost reimbursement contract or task order to over \$100,000 and the period of performance from the effective date of the modification to the contract or task order expiration exceeds 6 months, a CSP is required for all contract work to be performed after the effective date of the modification.

Submission

1. A CSP is required:
 - a. as part of the cost proposal for a cost reimbursement contract or individual task order, or modification to a contract or task order which meets the above thresholds;
 - b. as part of the Best and Final Offer (if requested) as a result of negotiations;
2. Updated CSP information is required on a monthly basis or as approved by the CO as part of the "Financial Status Report" (Ref: Section F.(fillin) , "Financial Status Report").

Format

The attached CSP sample format may be duplicated and used by the Contractor, or modified to permit more accurate reporting or to meet other needs of the contractor. For instance, the sample format provides spaces to report projected costs for 12 months, but the contractor may wish to alter the sample format for shorter or longer contract/task order periods. The contractor may also wish to alter the sample format for ease of typing or automated production. So long as complete information is provided on actual and projected costs or accomplishments, changes to the format to improve relevance to the circumstances are encouraged.

It is up to the discretion of the offeror to determine the appropriate level of cost detail to be presented based on the complexity of the effort. This plan reflects only the minimum requirements for submission of cost details which will be considered for completeness, reasonableness, and as a measure of effective management of the effort. The Contracting Officer reserves the right to request additional cost information, if deemed necessary.

Projected
Completion

_____ %

_____ %

_____ %

_____ %

_____ %

_____ %

Subpart 2009.5 Organizational Conflicts of Interest

§2009.500 Scope of subpart.

In accordance with 42 U.S.C. 2210a., NRC acquisitions are processed in accordance with §2009.570, which takes precedence over FAR 9.5 with respect to organizational conflicts of interest. Where non-conflicting guidance appears in FAR 9.5, that guidance must be followed.

§2009.570 NRC organizational conflicts of interest.

§2009.570-1 Scope of policy.

(a) It is the policy of NRC to avoid, eliminate, or neutralize contractor organizational conflicts of interest. The NRC achieves this objective by requiring all prospective contractors to submit information describing relationships, if any, with organizations or persons (including those regulated by the NRC) which may give rise to actual or potential conflicts of interest in the event of contract award.

(b) Contractor conflict of interest determinations cannot be made automatically or routinely. The application of sound judgment on virtually a case-by-case basis is necessary if the policy is to be applied to satisfy the overall public interest. It is not possible to prescribe in advance a specific method or set of criteria which would serve to identify and resolve all of the contractor conflict of interest situations that might arise. However, examples are provided in these regulations to guide application of this policy guidance. The ultimate test is as follows: Might the contractor, if awarded the contract, be placed in a position where its judgment may be biased, or where it may have an unfair competitive advantage?

(c) The conflict of interest rule contained in this subpart applies to contractors and offerors only. Individuals or firms who have other relationships with the NRC (e.g., parties to a licensing proceeding) are not covered by this regulation. This rule does not apply to the acquisition of consulting services through the personnel appointment process, NRC agreements with other Government agencies, international organizations, or state, local, or foreign Governments. Separate procedures for avoiding conflicts of interest will be employed in these agreements, as appropriate.

§2009.570-2 Definitions.

Affiliates means business concerns which are affiliates of each other when either directly or indirectly one concern or individual controls or has the power to control another, or when a third party controls or has the power to control both.

Contract means any contractual agreement or other arrangement with the NRC except as provided in §2009.570-1(c).

Contractor means any person, firm, unincorporated association, joint venture, co-sponsor, partnership, corporation, affiliates thereof, or their successors in interest, including their chief executives, directors, key personnel (identified in the contract), proposed consultants or subcontractors, which are a party to a contract with the NRC.

Evaluation activities means any effort involving the appraisal of a technology, process, product, or policy.

Offeror or prospective contractor means any person, firm, unincorporated association, joint venture, co-sponsor, partnership, corporation, or their affiliates or successors in interest, including their chief executives, directors, key personnel, proposed consultants, or subcontractors, submitting a bid or proposal, solicited or unsolicited, to the NRC to obtain a contract.

Organizational conflicts of interest means that a relationship exists whereby a contractor or prospective contractor has present or planned interests related to the work to be performed under an NRC contract which:

(1) May diminish its capacity to give impartial, technically sound, objective assistance and advice, or may otherwise result in a biased work product; or

(2) May result in its being given an unfair competitive advantage.

Potential conflict of interest means that a factual situation exists that suggests that an actual conflict of interest may arise from award of a proposed contract. The term potential conflict of interest is used to signify those situations that

(1) Merit investigation before contract award to ascertain whether award would give rise to an actual conflict; or

(2) Must be reported to the contracting officer for investigation if they arise during contract performance.

Research means any scientific or technical work involving theoretical analysis, exploration, or experimentation.

Subcontractor means any subcontractor of any tier who performs work under a contract with the NRC except subcontracts for supplies and subcontracts in amounts not exceeding \$10,000.

Technical consulting and management support services means internal assistance to a component of the NRC in the formulation or administration of its programs, projects, or policies which normally require that the contractor be given access to proprietary information or to information that has not been made available to the public. These services typically include assistance in the preparation of program plans, preliminary designs, specifications, or statements of work.

§2009.570-3 Criteria for recognizing contractor organizational conflicts of interest.

(a) General.

(1) Two questions will be asked in determining whether actual or potential organizational conflicts of interest exist:

(i) Are there conflicting roles which might bias an offeror's or contractor's judgment in relation to its work for the NRC?

(ii) May the offeror or contractor be given an unfair competitive advantage based on the performance of the contract?

(2) NRC's ultimate determination that organizational conflicts of interest exist will be made in light of common sense and good business judgment based upon the relevant facts. While it is difficult to identify and to prescribe in advance a specific method for avoiding all of the various situations or relationships that might involve potential organizational conflicts of interest, NRC

personnel will pay particular attention to proposed contractual requirements that call for the rendering of advice, consultation or evaluation activities, or similar activities that directly lay the groundwork for the NRC's decisions on regulatory activities, future procurements, and research programs. Any work performed at an applicant or licensee site will also be closely scrutinized by the NRC staff.

(b) Situations or relationships. The following situations or relationships may give rise to organizational conflicts of interest:

(1) The offeror or contractor shall disclose information that may give rise to organizational conflicts of interest under the following circumstances. The information may include the scope of work or specification for the requirement being performed, the period of performance, and the name and telephone number for a point of contact at the organization knowledgeable about the commercial contract.

(i) Where the offeror or contractor provides advice and recommendations to the NRC in the same technical area where it is also providing consulting assistance to any organization regulated by the NRC.

(ii) Where the offeror or contractor provides advice to the NRC on the same or similar matter on which it is also providing assistance to any organization regulated by the NRC.

(iii) Where the offeror or contractor evaluates its own products or services, or has been substantially involved in the development or marketing of the products or services of another entity.

(iv) Where the award of a contract would result in placing the offeror or contractor in a conflicting role in which its judgment may be biased in relation to its work for the NRC, or would result in an unfair competitive advantage for the offeror or contractor.

(v) Where the offeror or contractor solicits or performs work at an applicant or licensee site while performing work in the same technical area for the NRC at the same site.

(2) The contracting officer may request specific information from an offeror or contractor or may require special contract clauses such as provided in §2009.570-5(b) in the following circumstances:

(i) Where the offeror or contractor prepares specifications that are to be used in competitive procurements of products or services covered by the specifications.

(ii) Where the offeror or contractor prepares plans for specific approaches or methodologies that are to be incorporated into competitive procurements using the approaches or methodologies.

(iii) Where the offeror or contractor is granted access to information not available to the public concerning NRC plans, policies, or programs that could form the basis for a later procurement action.

(iv) Where the offeror or contractor is granted access to proprietary information of its competitors.

(v) Where the award of a contract might result in placing the offeror or contractor in a conflicting role in which its judgment may be biased in relation to its work for the NRC or might result in an unfair competitive advantage for the offeror or contractor.

(c) Policy application guidance. The following examples are illustrative only and are not intended to identify and resolve all contractor organizational conflict of interest situations.

(1)(i) Example. The ABC Corp., in response to a Request For Proposal (RFP), proposes to undertake certain analyses of a reactor component as called for in the RFP. The ABC Corp. is one of several companies considered to be technically well qualified. In response to the inquiry in the RFP, the ABC Corp. advises that it is currently performing similar analyses for the reactor manufacturer.

(ii) Guidance. An NRC contract for that particular work normally would not be awarded to the ABC Corp. because the company would be placed in a position in which its judgment could be biased in relationship to its work for the NRC. Because there are other well-qualified companies available, there would be no reason for considering a waiver of the policy.

(2)(i) Example. The ABC Corp., in response to an RFP, proposes to perform certain analyses of a reactor component that is unique to one type of advanced reactor. As is the case with other technically qualified companies responding to the RFP, the ABC Corp. is performing various projects for several different utility clients. None of the ABC Corp. projects have any relationship to the work called for in the RFP. Based on the NRC evaluation, the ABC Corp. is considered to be the best qualified company to perform the work outlined in the RFP.

(ii) Guidance. An NRC contract normally could be awarded to the ABC Corp. because no conflict of interest exists which could motivate bias with respect to the work. An appropriate clause would be included in the contract to preclude the ABC Corp. from subsequently contracting for work with the private sector that could create a conflict during the performance of the NRC contract. For example, ABC Corp. would be precluded from the performance of similar work for the company developing the advanced reactor mentioned in the example.

(3)(i) Example. The ABC Corp., in response to a competitive RFP, submits a proposal to assist the NRC in revising NRC's guidance documents on the respiratory protection requirements of 10 CFR Part 20. ABC Corp. is the only firm determined to be technically acceptable. ABC Corp. has performed substantial work for regulated utilities in the past and is expected to continue similar efforts in the future. The work has and will cover the writing, implementation, and administration of compliance respiratory protection programs for nuclear power plants.

(ii) Guidance. This situation would place the firm in a role where its judgment could be biased in relationship to its work for the NRC. Because the nature of the required work is vitally important in terms of the NRC's responsibilities and no reasonable alternative exists, a waiver of the policy, in accordance with §2009.570-9 may be warranted. Any waiver must be fully documented in accordance with the waiver provisions of this policy with particular attention to the establishment of protective mechanisms to guard against bias.

(4)(i) Example. The ABC Corp. submits a proposal for a new system to evaluate a specific reactor component's performance for the purpose of developing standards that are important to the NRC program. The ABC Corp. has advised the NRC that it intends to sell the new system to industry once its practicability has been demonstrated. Other companies in this business are using older systems for evaluation of the specific reactor component.

(ii) Guidance. A contract could be awarded to the ABC Corp. if the contract stipulates that no information produced under the contract will be used in the contractor's private activities unless this information has been reported to the NRC. Data on how the reactor component performs, which is reported to the NRC by contractors, will normally be disseminated by the NRC to others to preclude an unfair competitive advantage. When the NRC furnishes information about the reactor component to the contractor for the performance of contracted work, the information may not be used in the contractor's private activities unless the information is generally available to others. Further, the contract will stipulate that the contractor will inform the NRC contracting officer of all situations in which the information,

developed about the performance of the reactor component under the contract, is proposed to be used.

(5)(i) Example. The ABC Corp., in response to a RFP, proposes to assemble a map showing certain seismological features of the Appalachian fold belt. In accordance with the representation in the RFP and §2009.570-3(b)(1)(i), ABC Corp. informs the NRC that it is presently doing seismological studies for several utilities in the eastern United States, but none of the sites are within the geographic area contemplated by the NRC study.

(ii) Guidance. The contracting officer would normally conclude that award of a contract would not place ABC Corp. in a conflicting role where its judgment might be biased. Section 2052.209-72(c) Work for Others, would preclude ABC Corp. from accepting work which could create a conflict of interest during the term of the NRC contract.

(6)(i) Example. AD Division of ABC Corp., in response to a RFP, submits a proposal to assist the NRC in the safety and environmental review of applications for licenses for the construction, operation, and decommissioning of fuel cycle facilities. ABC Corp. is divided into two separate and distinct divisions, AD and BC. The BC Division performs the same or similar services for industry. The BC Division is currently providing the same or similar services required under the NRC's contract for an applicant or licensee.

(ii) Guidance. An NRC contract for that particular work would not be awarded to the ABC Corp. The AD Division could be placed in a position to pass judgment on work performed by the BC Division, which could bias its work for NRC. Further, the Conflict of Interest provisions apply to ABC Corp. and not to separate or distinct divisions within the company. If no reasonable alternative exists, a waiver of the policy could be sought in accordance with §2009.570-9.

(7)(i) Example. The ABC Corp. completes an analysis for NRC of steam generator tube leaks at one of a utility's six sites. Three months later, ABC Corp. is asked by this utility to perform the same analysis at another of its sites.

(ii) Guidance. Section 2052.290-72(c)(3) would prohibit the contractor from beginning this work for the utility until one year after completion of the NRC work at the first site.

(8)(i) Example. ABC Corp. is assisting NRC in a major on-site analysis of a utility's redesign of the common areas between its twin reactors. The contract is for two years with an estimated value of \$5 million. Near the completion of the NRC work, ABC Corp. requests authority to solicit for a \$100K contract with the same utility to transport spent fuel to a disposal site. ABC Corp. is performing no other work for the utility.

(ii) Guidance. The Contracting Officer would allow the contractor to proceed with the solicitation because it is not in the same technical area as the NRC work; and the potential for technical bias by the contractor because of financial ties to the utility is slight due to the relative value of the two contracts.

(9)(i) Example. The ABC Corp. is constructing a turbine building and installing new turbines at a reactor site. The contract with the utility is for five years and has a total value of \$100 million. ABC Corp. has responded to an NRC Request For Proposal requiring the contractor to participate in a major team inspection unrelated to the turbine work at the same site. The estimated value of the contract is \$75K.

(ii) Guidance. An NRC contract would not normally be awarded to ABC Corp. because these factors create the potential for financial loyalty to the utility that may bias the technical judgment of the contractor.

(d) Other considerations.

(1) The fact that the NRC can identify and later avoid, eliminate, or neutralize any potential organizational conflicts arising from the performance of a contract is not relevant to a determination of the existence of conflicts prior to the award of a contract.

(2) It is not relevant that the contractor has the professional reputation of being able to resist temptations which arise from organizational conflicts of interest, or that a follow-on procurement is not involved, or that a contract is awarded on a competitive or a sole source basis.

§2009.570-4 Representation.

(a) The following procedures are designed to assist the NRC contracting officer in determining whether situations or relationships exist which may constitute organizational conflicts of interest with respect to a particular offeror or contractor. The procedures apply to small purchases meeting the criteria stated in the following paragraph (b) of this section.

(b) The organizational conflicts of interest representation provision at §2052.209-71 must be included in solicitations and contracts resulting from unsolicited proposals. The contracting officer must also include this provision for task orders and contract modifications for new work for:

(1) Evaluation services or activities;

(2) Technical consulting and management support services;

(3) Research; and

(4) Other contractual situations where special organizational conflicts of interest provisions are noted in the solicitation and would be included in the resulting contract. This representation requirement also applies to all modifications for additional effort under the contract except those issued under the "Changes" clause. Where, however, a statement of the type required by the organizational conflicts of interest representation provisions has previously been submitted with regard to the contract being modified, only an updating of the statement is required.

(c) The offeror may, because of actual or potential organizational conflicts of interest, propose to exclude specific kinds of work contained in a RFP unless the RFP specifically prohibits the exclusion. Any such proposed exclusion by an offeror will be considered by the NRC in the evaluation of proposals. If the NRC considers the proposed excluded work to be an essential or integral part of the required work and its exclusion would be to the detriment of the competitive posture of the other offerors, the NRC shall reject the proposal as unacceptable.

(d) The offeror's failure to execute the representation required by paragraph (b) of this section with respect to an invitation for bids is considered to be a minor informality. The offeror will be permitted to correct the omission.

§2009.570-5 Contract clauses.

(a) General contract clause. All contracts and simplified acquisitions of the types set forth in §2009.570-4(b) must include the clause entitled, "Contractor Organizational Conflicts of Interest," set forth in §2052.209-72.

(b) Other special contract clauses. If it is determined from the nature of the proposed contract that an organizational conflict of interest exists, the contracting officer may determine that the conflict can be avoided, or, after obtaining a waiver in accordance with §2009.570-9,

neutralized through the use of an appropriate special contract clause. If appropriate, the offeror may negotiate the terms and conditions of these clauses, including the extent and time period of any restriction. These clauses include but are not limited to:

- (1) Hardware exclusion clauses which prohibit the acceptance of production contracts following a related non-production contract previously performed by the contractor;
- (2) Software exclusion clauses;
- (3) Clauses which require the contractor (and certain of its key personnel) to avoid certain organizational conflicts of interest; and
- (4) Clauses which provide for protection of confidential data and guard against its unauthorized use.

§2009.570-6 Evaluation, findings, and contract award.

The contracting officer shall evaluate all relevant facts submitted by an offeror and other relevant information. After evaluating this information against the criteria of §2009.570-3, the contracting officer shall make a finding of whether organizational conflicts of interest exist with respect to a particular offeror. If it has been determined that real or potential conflicts of interest exist, the contracting officer shall:

- (a) Disqualify the offeror from award;
- (b) Avoid or eliminate such conflicts by appropriate measures; or
- (c) Award the contract under the waiver provision of §2009.570-9.

§2009.570-7 Conflicts identified after award.

If potential organizational conflicts of interest are identified after award with respect to a particular contractor and the contracting officer determines that conflicts do exist and that it would not be in the best interest of the Government to terminate the contract, as provided in the clauses required by §2009.570-5, the contracting officer shall take every reasonable action to avoid, eliminate, or, after obtaining a waiver in accordance with §2009.570-9, neutralize the effects of the identified conflict.

§2009.570-8 Subcontracts.

The contracting officer shall require offerors and contractors to submit a representation statement from all subcontractors (other than a supply subcontractor) and consultants performing services in excess of \$10,000 in accordance with §2009.570-4(b). The contracting officer shall require the contractor to include contract clauses in accordance with §2009.570-5 in consultant agreements or subcontracts involving performance of work under a prime contract.

§2009.570-9 Waiver.

- (a) The contracting officer determines the need to seek a waiver for specific contract awards with the advice and concurrence of the program office director and legal counsel. Upon the recommendation of the Senior Procurement Executive, and after consultation with legal counsel, the Executive Director for Operations may waive the policy in specific cases if he determines that it is in the best interest of the United States to do so.

(b) Waiver action is strictly limited to those situations in which:

(1) The work to be performed under contract is vital to the NRC program;

(2) The work cannot be satisfactorily performed except by a contractor whose interests give rise to a question of conflict of interest.

(3) Contractual and/or technical review and surveillance methods can be employed by the NRC to neutralize the conflict.

(c) The justification and approval documents for any waivers must be placed in the NRC Public Document Room.

§2009.570-10 Remedies.

In addition to other remedies permitted by law or contract for a breach of the restrictions in this subpart or for any intentional misrepresentation or intentional nondisclosure of any relevant interest required to be provided for this section, the NRC may debar the contractor from subsequent NRC contracts.