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|-----------------------|---|---------------|-------------------------|
| AWARD/CONTRACT | 1. THIS CONTRACT IS RATED ORDER UNDER DPAS (15 CFR 350) | RATING N/A | PAGE OF PAGES 1 37 |
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|---|-------------------------------------|---|
| 2. CONTRACT NO. (Proc. Inst. Ident.) NRC-04-07-059 | 3. EFFECTIVE DATE see block 19c. | 4. REQUISITION/PURCHASE REQUEST/PROJECT NO. RES-07-059 |
|---|-------------------------------------|---|

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|---|--------------|---|--------------|
| 5. ISSUED BY U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Mr. Michael Mills Mail Stop T-7-I-2 Washington, DC 20555 | CODE 3100 | 6. ADMINISTERED BY. (If other than Item 5) U.S. Nuclear Regulatory Commission Div. of Contracts Mail Stop T-7-I-2 Attn: Michael Mills, 301-415-6550 Washington, DC 20555 | CODE 3100 |
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| 7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code) PURDUE UNIVERSITY 401 S GRANT ST WEST LAFAYETTE IN 479072024 | 8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input type="checkbox"/> OTHER (See below) |
| 9. DISCOUNT FOR PROMPT PAYMENT | |
| 10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN | |

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|------------------|---------------|---|------|--|--------------|
| CODE 07-205-1394 | FACILITY CODE | 11. SHIP TO/MARK FOR U.S. Nuclear Regulatory Commission Washington DC 20555 | CODE | 12. PAYMENT WILL BE MADE BY U.S. Nuclear Regulatory Commission Payment Team, Mail Stop T-9-H-4 Attn: (NRC-04-07-059) Washington DC 20555 | 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)(1) | 14. ACCOUNTING AND APPROPRIATION DATA B&R: 76015171277 Job: N6410 BOC: 252A Appr.: 31X0200.760 Obligate: \$420,000.00 FFS: RES-C07-115 |
|---|--|

| 15A. ITEM NO. | 15B. SUPPLIES/SERVICES | 15C. QUANTITY | 15D. UNIT | 15E. UNIT PRICE | 15F. AMOUNT |
|--------------------------------------|---|---------------|-----------|-----------------|--------------|
| | Title: Purdue University Multi-Dimensional Test Assembly (PUMA) ESBWR Tests Contract Type: Cost Reimbursement Total Obligated Amount: \$420,000.00 Total Contract Ceiling: \$446,761.00 Period of Performance: 13 months from date of award (block 19c) | | | | |
| 15G. TOTAL AMOUNT OF CONTRACT | | | | | \$420,000.00 |

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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

| | |
|---|--|
| 17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ 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"/> AWARD (Contractor is not required to sign this document.) Your offer 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 items listed above and on any condition sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary. |
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| 19A. NAME AND TITLE OF SIGNER (Type or print) <i>James Almond VP. Business Services and Adm. Services</i> | 20A. NAME OF CONTRACTING OFFICER Heriberto Colon, Jr. Contracting Officer |
| 19B. NAME OF CONTRACTOR BY <i>[Signature]</i> (Signature of person authorized to sign) | 20B. UNITED STATES OF AMERICA BY <i>[Signature]</i> (Signature of Contracting Officer) |
| 19C. DATE SIGNED <i>6/20/07</i> | 20C. DATE SIGNED <i>6/8/07</i> |

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PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B.1 PROJECT TITLE

The title of this project is as follows:

Purdue University Multi-Dimensional Test Assembly (PUMA) ESBWR TESTS

B.2 BRIEF DESCRIPTION OF WORK (MAR 1987)

The Contractor shall conduct integral LOCA tests in the upgraded PUMA-E facility and document test results, maintain PUMA-E facility and documentation; and assess code against data.

B.3 CONSIDERATION AND OBLIGATION--COST REIMBURSEMENT (JUN 1988)

- (a) The total estimated cost to the Government for full performance under this contract is \$446,761.00.
- (b) The amount obligated by the Government with respect to this contract is \$420,000.00.
- (c) It is estimated that the amount currently allotted will cover performance for the first 12 months of the contract.

SECTION C - STATEMENT OF WORK

Title: PUMA ESBWR Tests

I. BACKGROUND

The Purdue University Multi-Dimensional Integral Test Assembly (PUMA) was originally designed and scaled to produce integral test data relevant to the GE-designed, 2000-MWth Simplified Boiling Water Reactor (SBWR). Three kinds of loss-of-coolant accidents (LOCAs) were conducted at PUMA in the late 90's – main steam line break (MSLB), Gravity-Driven Cooling System (GDCS) line break (GDLB), and bottom drain line break (BDLB). Currently, test data have been collected and stored in the NRC databank and are being used to assess the TRACE and MELCOR code.

In 2002, GE requested pre-application review of a similar, but larger reactor design – the 4000-MWth Economic Simplified Boiling Water Reactor (ESBWR). Compared to the SBWR design, upon which PUMA was designed, the ESBWR design had a core power increase of 200% and significantly reduced coolant volumes (~30%) of the reactor pressure vessel (RPV), drywell (DW), and wetwell (WW) on a per MW basis. In addition, the 4000-MWth ESBWR design implemented the following piping configuration changes: (1) gas space of the GDCS pools was open to the WW (instead of the DW as in the SBWR design), (2) a loop seal was installed at each GDCS drain line, and (3) condensed water from the Passive Containment Cooling System (PCCS) was collected in drain tanks (instead of the GDCS pools as in the SBWR design) connected to the RPV.

To make PUMA relevant to the 4000-MWth ESBWR design, piping configurations at PUMA were modified accordingly in 2005 under a previous contract (NRC-04-03-55, Task Order No. 1). The modified piping configurations were designated as Phase 1 modifications. In addition, a scaling analysis was performed for PUMA with Phase 1 modifications to ensure proper scaling of the 4000-MW ESBWR phenomena (scaling distortions were also identified). Three kinds of LOCA tests were planned at PUMA in 2004 and 2005 with Phase 1 modifications – MSLB, GDLB, and BDLB. Only a portion of these tests were completed, since GE changed their ESBWR design, which created scaling distortions in the PUMA facility. This is discussed more below.

In addition to those integral LOCA tests mentioned above, PUMA was also used to conduct a number of separate-effects tests to obtain data on the performance of the Passive Containment Cooling System (PCCS) and on steam condensation in the suppression pool. Data from the integral LOCA tests and the separate-effects PCCS and suppression pool tests provided a data base for assessing the TRACE code, as well as provide a measure of margin to core uncover with respect to design-basis accidents.

However in August 2005, the ESBWR design was modified by GE to a power level of 4500-MWth, as referenced in the ESBWR design control document (DCD) submitted for NRC design certification. In addition to a 12.5% power increase from 4000 MWth to 4500 MWth, the new design removed the Phase 1 design modifications that were installed in PUMA. More specifically, in the 4500-MWth ESBWR design, the gas space of GDCS pools is open to the drywell (instead of the wetwell as in the 4000-MWth design) and condensed water from the PCCS drains into the GDCS pools (instead of drain tanks). As a result, Phase 1 modifications were subsequently removed from PUMA under a previous contract (NRC-04-03-55, Task Order No. 2) in late 2005 to conform with the 4500-MWth ESBWR design.

Meanwhile, the PUMA facility is more than 10 years old. A number of the original electronic and mechanical components have either failed (e.g., oxygen concentration sensors) or became unreliable (e.g., data acquisition system (DAS)). Funding was provided to Purdue University under contract NRC-04-03-55 to refurbish the PUMA facility by replacing those failed or unreliable components.

Under Task Order No. 2 of NRC-04-03-55, a PUMA scaling analysis for LOCAs was performed by Purdue University using the 4500-MWth ESBWR design as the reference plant. This scaling analysis was peer reviewed by external consultants and revised accordingly. In order to significantly reduce scaling distortions in the existing PUMA facility, Purdue proposed facility modifications. The proposed modifications to the PUMA facility under Task Order No. 2, Modification 1, of NRC-04-03-55 are currently being carried out by Purdue in a step-by-step fashion as results of an independent scaling distortion analysis are received. It is assumed that most, if not all, of the necessary facility modifications will be completed before the initiation of the work described in this SOW. The tasks in this new SOW are focused on conducting PUMA tests, while the previous Task Order No. 2, Modification 1, of NRC-04-03-55 focused on modifying the facility.

To distinguish from the existing PUMA facility, the upgraded PUMA facility after Phase 2 modifications is designated as **PUMA-E** facility, with letter "E" referring to 4500-MWth ESBWR design submitted by GE for design certification.

II. OBJECTIVES

1. Conduct integral LOCA tests in the upgraded PUMA-E facility and document test results.
2. Maintain PUMA-E facility and documentation.
3. Assess code against data.

III. SCOPE OF WORK

This SOW describes new work to produce the necessary data scaled to the 4500-MWth ESBWR design in the PUMA-E facility to support code development and assessment, and confirm the beyond-design bases passive safety system response of the ESBWR design. Previous work (Task Order No. 2, Modification 1, of NRC-04-03-55) has been carried out to modify the PUMA facility to better match the expected prototypic conditions of the 4500-MWth ESBWR design.

GENERAL REQUIREMENTS FOR DEVELOPMENTAL ASSESSMENT

Developmental assessment (also known as validation testing) is a part of code quality assurance procedures outlined in "Software Quality Assurance Procedures for NRC Thermal Hydraulic Codes", NUREG-1737. In the developmental assessment process, code-calculated results are compared either to analytical results, or experimental results, or other acceptable code calculation. In this SOW, TRACE code calculations are compared to experimental data from experimental test facilities and a report describing the results of the developmental assessment is produced. Developmental assessment shall contain the following activities:

1. Identification of the phenomena occurring in the test facility. This requires careful study of the test facility, experimental procedure, and experimental data. The report shall include a description of the facility, experimental procedure, and discussion of the measurement uncertainty, interpretation of the data, and the effect of the uncertainty on the data and their interpretation.
2. Development of the input deck. This requires familiarity with the TRACE User Guide and an understanding of the phenomena (see item above) in order to capture important phenomena governing the process. The report shall include nodalization diagrams, as needed, a listing of the input deck, and discussion and justification of options used to construct the input deck.
3. Development of the acceptance criteria. Acceptance criteria permit acceptance of results calculated by the code when compared to experimental data. It requires careful study of the experimental data to distinguish measurement uncertainty from random behavior of the data, especially during two-phase flow. As explained in NUREG-1737, the acceptance criteria can be qualitative or quantitative.

Appendix C of NUREG-1737 presents a sample acceptance criteria. The report shall include a discussion of the development of the acceptance criteria used for this project.

4. Comparison of Code Calculations with the Test Data. This requires running the code with a selected version of the code and comparing the results with test data. If comparisons indicate that the acceptance criteria are met, then the code results are acceptable. If they do not meet the acceptance criteria, sensitivity calculations may be required. Sensitivity calculations may be needed in order to capture phenomena more accurately. These calculations are performed using different nodalization schemes or choosing more appropriate options. Changes to the input deck to perform sensitivity calculations should be discussed and justified. If sensitivity calculations indicate a better agreement with the test data and that acceptance criteria are met, new user guidelines better capturing the phenomena should be prepared. The report shall include discussions of comparisons of code calculations with the test data, including whether or not acceptance criteria are met. If the criteria are not met, the report shall also include discussion of the need for sensitivity calculations, and if sensitivity calculations are performed, the report shall also include a description of the calculated results and new user guidelines, if applicable.
5. Identification of Code Deficiencies. This requires knowledge of the TRACE code, itself. If the comparison of the results are poor (i.e. results do not meet the acceptance criteria) and sensitivity calculations cannot improve predictions, then there may be a bug in the code or deficiencies in the code physical models, themselves. The report shall identify potential deficiencies to the extent possible and make recommendations for code improvements.

Task 1. Perform Integral LOCA Tests at PUMA or PUMA-E Facility

Upon the facility technical adequacy determination of the NRC Project Manager, the contractor shall conduct the tests listed in Table 1 below.

| Test ID | Test Name* | Conditions | Completion Date** |
|------------------|--------------------------------------|----------------------------------|-------------------|
| BDLB-4500-DBA-1 | BDLB Design Bases Test 1 | Normal | 8/07 |
| BDLB-4500-BDBA-1 | BDLB Beyond-Design Bases Test 1 | 1 PCCS failure | 9/07 |
| BDLB-4500-BDBA-2 | BDLB Beyond-Design Bases Test 2 | TBD | 9/07 |
| GDLB-4500-DBA-1 | GDLB Design Bases Sensitivity Test 1 | Normal | 10/07 |
| GDLB-4500-DBA-2 | GDLB Design Bases Sensitivity Test 2 | Repeat of test GDLB-4500-DBA-1 | 11/07 |
| GDLB-4500-DBA-3 | GDLB Design Bases Sensitivity Test 3 | Vary initial RPV downcomer level | 11/07 |
| GDLB-4500-BDBA-1 | GDLB Beyond-Design Bases Test 1 | 1 PCCS failure | 12/07 |

| Test ID | Test Name* | Conditions | Completion Date** |
|--|---|-----------------|-------------------|
| GDLB-4500-BDBA-2 | GDLB Beyond-Design Bases Test 2 | 1 GDCCS failure | 1/08 |
| FWLB-4500-DBA-1 | FWLB Design Bases Test 1 | Normal | 1/07 |
| FWLB-4500-BDBA-1 | FWLB Beyond-Design Bases Test 1 | 1 PCCS failure | 2/08 |
| MSLB-4500-DBA-1 | MSLB Design Bases Test 1 | Normal | 3/08 |
| MSLB-4500-BDBA-1 | MSLB Beyond-Design Bases Test 1 | 1 PCCS failure | 3/08 |
| PUMA-4500-ISP42 | PUMA-E counterpart tests to ISP-42 PANDA tests, including Phase A (PCC startup), Phase B (GDCCS injection), Phase C (long-term cooling), and Phase D (PCC overload) | Same as ISP-42 | 4/08 |
| Draft NUREG/CR test report for all tests | | | 5/08 |

A Tentative list, FWLB = feed water line break, GDLB = GDCCS line break, BDLB = bottom drain line break, MSLB = main steam line break, SP = suppression pool, VB = vacuum breaker.

Completion date in months after initiation of this contract.

Quick look test reports shall be prepared by the contractor following each test that describe the test objectives, conditions, procedures (including an instrument checklist), corrective actions (if appropriate to ensure quality of test data), plots of critical instrument channels, and an electronic copy of the raw data on a CD-ROM(s).

The contractor shall prepare a draft NUREG/CR report in both hard copy and electronic format. This report shall be a comprehensive, stand-alone report, which contains: (1) a list of all instruments used in the tests, including identification number, location (e.g., in the DW), and measurement uncertainty of each instrument; (2) isometric drawings showing each instrument location; (3) initial test conditions (including a comparison of the desired values vs. actual values of key parameters such as pressure, temperature, and water level); (4) test results (showing data and instrument ID in a figure) including but not limited to the key parameters (e.g., RPV water level, RPV/drywell/wetwell pressures and temperatures, PCCS condensate flow rate, etc.); (5) a summary of test results for each test; and (6) conclusions. Before publication, the NRC project manager shall arrange for peer-review of the data report by a code user to ensure sufficient information is provided for code assessment.

Estimated Completion Date: Draft report 1 month after completion of tests in Table 1 and final report 1 month after receipt of peer-review comments.

Task 2. Document Lessons Learned and Problems Encountered in PUMA Testing

The contractor shall prepare a letter report to describe lessons learned and problems encountered in conducting PUMA-E tests, including (1) abnormal and unexpected behavior observed in the tests, (2) problems encountered in establishing initial test conditions and the subsequent fixes to resolve the problems, (3) problems encountered in PUMA instrumentation and subsequent fixes if applicable, and (4) improvements made to the test initiation procedure and operator training.

Estimated Completion Date: 1 month after completing final test under Task 1

Task 3. Maintain Facility and Documents

The contractor shall maintain the PUMA facility in operational condition as designed and keep the design drawings and other documents (including instrumentation calibration) up-to-date. The contractor shall: (1) test facility instrumentation periodically to ensure operation as calibrated, (2) perform facility repairs and replace broken components in a timely manner after obtaining an approval from the NRC Project Manager, and (3) report to the NRC Project Manager any problems regarding the facility.

Estimated Completion Date: throughout the contract

Task 4. Provide Technical Support to NRC

The contractor shall provide technical support to NRC, including attending meetings, making presentations, reviewing documents, preparing topical reports (in addition to the reporting requirements listed below), and performing additional PUMA-E tests and code calculations (using TRACE and MELCOR) as requested by the NRC Technical Monitor:

Estimated Completion Date: throughout the contract

Task 5. Assess TRACE against Data

The contractor shall conduct code-to-data assessments using TRACE and SNAP for APEX steam generator condensation and PUMA stability tests, including preparation of a developmental assessment report and calculation notebook for each analysis, respectively.

The report shall 1) contain short descriptions of the relevant parameters of the test facility and all the test runs, 2) describe the phenomena occurring in each individual test run, 3) discuss why the input deck with selected nodalization and options should capture the phenomena, 4) discuss comparisons of the TRACE calculations with the test data, 5) provide details of the TRACE calculations and discuss the acceptability of these calculations, 6) identify any code related problems and new user guidelines, if applicable, 7) include an appendix with the calculation notebook in electronic format, 8) describe the quality of the test documentation and data acquisition adequacy; and 9) list and describe the principal and subsidiary figures of merit. If the code does not run or some errors are discovered, these problems shall be communicated to the NRC. The NRC staff will resolve these problems within a period of time which will be negotiated. If the correction of these errors causes some delays in delivery of final products the NRC project manager will initiate appropriate modifications as necessary. The report will be prepared first in a draft form for review by NRC. It will be issued in a final form after the contractor resolves the comments. This combined report should be compiled and delivered in Framemaker format and use templates provided by NRC sufficient for insertion into the TRACE Development Assessment Manual.

The contractor is permitted to purchase 3 copies of Framemaker 7.0 (or newer) for purposes of this project.

Estimated Completion Date: TBD

IV. REPORTING REQUIREMENTS

In addition to the letter reports required for the above tasks, the contractor shall provide the monthly letter status reports described below.

Monthly Letter Status Report

An MLSR is to be submitted to the NRC Project Manager by the 20th of the month following the month to be reported with copies provided to the following:
Division Management Analyst, (Janine Dehn, Mail Stop T-10E32)

The MLSR will identify the title of the project, the job code, the Principal Investigator, and the period of performance, summarize each month's technical progress, and list monthly spending, total spending to date, and the remaining funds. 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 project manager.

V. DELIVERABLES AND DELIVERY SCHEDULE

- Task 1: a quick look report 2 weeks after each completed test, a draft NUREG/CR report 1 month after completing the final test, and a final NUREG/CR report 1 month after receiving peer-review comments on the draft.
- Task 2: a letter report 3 months after completing the final test under Task 1.
- Task 5: a draft developmental assessment report 1 month after completion of each TRACE assessment, followed by a final report 1 month after receiving comments from the NRC Project Manager.

VI. MEETINGS AND TRAVEL REQUIREMENTS

The contractor should plan to attend two NRC meetings in Rockville, Maryland. In addition, the contractor will also attend two technical meetings including ANS/ASME meetings and TRACE code workshops. For planning purpose, each meeting may be attended by up to two people. Prior approval from the NRC Project Manager is required for any travel.

VII. QUALITY ASSURANCE

The quality of NRC research programs are assessed each year by the Advisory Committee on Reactor Safeguards. Within the context of their reviews of RES programs, the definition of quality research is based upon several major characteristics:

1. Results meet the objectives (75% of overall score)
 - Justification of major assumptions (12%)
 - Soundness of technical approach and results (52%)
 - Uncertainties and sensitivities addressed (11%)
2. Documentation of research results and methods is adequate (25% of overall score)
 - Clarity of presentation (16%)
 - Identification of major assumptions (9%)

Prior to submitting deliverables to the agency, the contractor shall incorporate sufficient review and quality checks to ensure that the deliverable is technically sound, the assumptions made in the analysis are appropriate and have been adequately justified, and that the text documenting the analysis is clear and easy to follow so that the Licensee's staff will be able to complete their review in a timely manner, without the need to obtain clarifying information regarding the analysis.

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SECTION D - PACKAGING AND MARKING

D.1 PACKAGING AND MARKING (MAR 1987)

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 Interstate Commerce Commission Regulations, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation. On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

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 | FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1) INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) | APR 1984 |

E.2 PLACE OF INSPECTION AND ACCEPTANCE (MAR 1987)

Inspection and acceptance of the deliverable items to be furnished hereunder shall be made by the Project Officer at the destination.

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 | FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1) STOP-WORK ORDER ALTERNATE I (APR 1984) | AUG 1989 |

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 3.7, "NUREG-Series Publications". Management Directive 3.7 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 project officer 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 Project Officer, 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 project officer 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 Project Officer, 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 \$500 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 (JUN 1988)

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

(a) Project Officer (1 copy)

US Nuclear Regulatory Commission Office of Nuclear Regulatory Research Mail Stop: T10K8, 11545 Rockville Pike, Rockville, MD 20852 or kbw@nrc.gov.

(b) Contracting Officer (1 copy)

US Nuclear Regulatory Commission Office of Nuclear Regulatory Research Mail Stop: T7I2, 11545 Rockville Pike, Rockville, MD 20852 or smp2@nrc.gov.

F.6 DURATION OF CONTRACT PERIOD (MAR 1987)

This contract shall commence on the effective date (see block 3 of SF 26) and will expire 13 months thereafter.

SECTION G - CONTRACT ADMINISTRATION DATA**G.1 PROJECT OFFICER AUTHORITY (FEB 2004)**

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

Name: Kent B. Welter
Address: US Nuclear Regulatory Commission
Mail Stop T10K8
Washington, DC 20555
Telephone Number: 301-415-5740
Email: kbw@nrc.gov

(b) Performance of the work under this contract is subject to the technical direction of the NRC project officer. 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 project officer 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 project officer or must be confirmed by the project officer 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 project officer in the manner prescribed by this clause and within the project officer's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the project officer 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 project officer 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 project officer 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.

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 Project Officer 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:

| INDIRECT COST POOL | RATE | BASE | PERIOD |
|-------------------------------------|------------|----------------------------|--------------------|
| Facilities and Administration (F&A) | [REDACTED] | Modified Total Direct Cost | 7/31/06 to 6/30/09 |

(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.

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 therefore (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:



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

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

(c) Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the contracting officer to evaluate the

proposed substitution. The contracting officer and the project officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

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

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 Project Officer, 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 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY - NONE PROVIDED (JUN 1988)

The Government will not provide any equipment/property under this contract.

H.6 SEAT BELTS

Contractors, subcontractors, and grantees, are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.

H.7 Annual and Final Contractor Performance Evaluations

Annual and final evaluations of contractor performance under this contract will be prepared in accordance with FAR 42.15, "Contractor Performance Information," normally at 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 (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 Project Officer's 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. The contractor may concur without comment, submit additional information, or request a meeting to discuss the performance evaluation. The Contracting Officer may request the contractor's Project Manager to attend a meeting to discuss the performance evaluation.

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 "For Official Use Only," 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(a) and 42.1503(c). 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.

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 |
|-----------|--|----------|
| | FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1) | |
| 52.202-1 | DEFINITIONS | JUL 2004 |
| 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 | JUL 1995 |
| 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 | SEP 2005 |
| 52.204-4 | PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER | AUG 2000 |
| 52.204-7 | CENTRAL CONTRACTOR REGISTRATION | JUL 2006 |
| 52.204-9 | PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL | NOV 2006 |
| 52.209-6 | PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT | SEP 2006 |
| 52.215-2 | AUDIT AND RECORDS--NEGOTIATION ALTERNATE II (APR 1998) | JUN 1999 |
| 52.215-8 | ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT | OCT 1997 |
| 52.216-11 | COST CONTRACT--NO FEE ALTERNATE I (APR 1984) | APR 1984 |
| 52.216-15 | PREDETERMINED INDIRECT COST RATES | APR 1998 |
| 52.219-8 | UTILIZATION OF SMALL BUSINESS CONCERNS | MAY 2004 |
| 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 SPECIAL DISABLED VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS | SEP 2006 |

| | | |
|-----------|---|----------|
| 52.222-36 | AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES | JUN 1998 |
| 52.222-37 | EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS; VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS | SEP 2006 |
| 52.223-6 | DRUG-FREE WORKPLACE | MAY 2001 |
| 52.225-1 | BUY AMERICAN ACT--SUPPLIES | JUN 2003 |
| 52.225-13 | RESTRICTIONS ON CERTAIN FOREIGN PURCHASES | FEB 2006 |
| 52.227-1 | AUTHORIZATION AND CONSENT ALTERNATE I (APR 1984) | JUL 1995 |
| 52.227-2 | NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT | AUG 1996 |
| 52.227-11 | PATENT RIGHTS -- RETENTION BY THE CONTRACTOR (SHORT FORM) | JUN 1997 |
| 52.227-14 | RIGHTS IN DATA--GENERAL | JUN 1987 |
| 52.228-7 | INSURANCE--LIABILITY TO THIRD PERSONS | MAR 1996 |
| 52.232-20 | LIMITATION OF COST | APR 1984 |
| 52.232-23 | ASSIGNMENT OF CLAIMS | JAN 1986 |
| 52.232-25 | PROMPT PAYMENT | OCT 2003 |
| 52.232-33 | PAYMENT BY ELECTRONIC FUNDS--CENTRAL CONTRACTOR REGISTRATION | OCT 2003 |
| 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 |
| 52.242-4 | CERTIFICATION OF FINAL INDIRECT COSTS | JAN 1997 |
| 52.242-13 | BANKRUPTCY | JUL 1995 |
| 52.243-2 | CHANGES--COST REIMBURSEMENT ALTERNATE V (APR 1984) | AUG 1987 |
| 52.244-2A | SUBCONTRACTS ALTERNATE I (JAN 2006) | JAN 2006 |
| 52.244-5 | COMPETITION IN SUBCONTRACTING | DEC 1996 |
| 52.244-6 | SUBCONTRACTS FOR COMMERCIAL ITEMS | MAR 2007 |
| 52.245-9 | USE AND CHARGES | AUG 2005 |
| 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 52.216-7 ALLOWABLE COST AND PAYMENT (DEC 2002)

(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 the 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) below, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) below.

(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.

(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.

(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.3 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):

<http://www.arnet.gov/far>

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

| ATTACHMENT NO. NUMBER | TITLE | PAGES |
|--------------------------|---|-------|
| A | BILLING INSTRUCTIONS | 6 |
| B | CONTRACTOR SPENDING PLAN INSTRUCTIONS | 1 |
| C | Management Directive 3.7, "NUREG-Series Publications". Is available at http://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-3.html | |
| D | §2009.570 "NRC Organizational Conflict of Interest" can be accessed through http://www.nrc.gov/about-nrc/contracting/48cfr-ch20.html#_1_70 | |
| E | Management Directive 3.9, "NRC Staff and Contractor Speeches, Papers, and Journal Articles on Regulatory and Technical Subjects." Is available at http://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-3.html | |

Attachment A

BILLING INSTRUCTIONS FOR COST REIMBURSEMENT TYPE CONTRACTS (October 2003)

General: The contractor is responsible during performance and through final payment of this contract for the accuracy and completeness of the 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: An original and three copies, including supporting documentation shall be submitted. A copy of all supporting documents must be attached to each copy of your voucher/invoice. Failure to submit all the required copies will result in rejection of the voucher/invoice as improper.

Designated Agency Billing Office: Vouchers/invoices shall be submitted to the following address:

U.S. Nuclear Regulatory Commission
Division of Contracts - T-7-I-2
Washington, DC 20555

HAND DELIVERY OF VOUCHERS/INVOICES IS DISCOURAGED AND WILL NOT EXPEDITE PROCESSING BY NRC. However, should you choose to deliver vouchers/invoices by hand, including delivery by any express mail services or special delivery services which use a courier or other person to deliver the voucher/invoice in person to the NRC, such vouchers/invoices must be addressed to the above Designated Agency Billing Office and will only be accepted at the following location:

U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike - Mail Room
Rockville, MD 20852

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED AT OTHER THAN THE ABOVE ADDRESS.

Note that the official receipt date for hand-delivered vouchers/invoices will be the date it is received by the official agency billing office in the Division of Contracts.

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

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

Format: Claims should 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 in **Attachment 2**. 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 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, the period during which these costs were incurred must be cited. 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; 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.

INVOICE/VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

(SAMPLE FORMAT)

1. Official Agency Billing Office

U.S. Nuclear Regulatory Commission
Division of Contracts MS: T-7-I-2
Washington, DC 20555-0001

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.
- 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>Hrs.</u> | | | <u>Cumulative</u> |
|-----------------|---------------|-------------|--------------|-------------------|
| <u>Category</u> | <u>Billed</u> | <u>Rate</u> | <u>Total</u> | <u>Hrs.Billed</u> |
- (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 \$500 or more separately. Provide the item number for each piece of equipment valued at \$500 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.
- 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 for the billing period from ___ through ___.

| | <u>Amount Billed</u> | |
|---|-----------------------|-------------------|
| | <u>Current Period</u> | <u>Cumulative</u> |
| (a) <u>Direct Costs</u> | | |
| (1) Direct labor*..... | | |
| (2) Fringe benefits | | |
| (%, if computed as percentage)..... | | |
| (3) Capitalized nonexpendable 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

- (b) Indirect Costs
 (A) Overhead ___ % of _____
 (Indicate Base).....
 (B) General & Administrative Expense
 ___ % of Cost Elements Nos.
 Total Direct & Indirect Costs
- (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</u> | <u>Billed Rate</u> | <u>Cumulative</u> | |
|-----------------------|--------------|--------------------|-------------------|--------------------|
| | | | <u>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 | \$500 | 320 |
| | | | <u>\$2400</u> | |

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 3/6/95).

6) Consultants' Fee

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

7) Travel

| <u>Start Date</u> | <u>Destination</u> | <u>Costs</u> |
|-------------------|--------------------|--------------|
| 3/1/89 | Wash., DC | \$200 |

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: | | | | |

C:\temp\Billing instruct CR (October 2003).wpd

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 Final Proposal Revision (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.