

AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) RATING

2. CONTRACT NO. 3. EFFECTIVE DATE 4. REQUISITION/PROJECT NO.  
 NRC-04-94-053 8/5/94 RES-94-053

5. ISSUED BY Code: U.S. Nuclear Regulatory Commission Division of Contracts and Property Mgmt. Contract Negotiation Br. No. 1: P-1020 Washington, D.C. 20555	6. ADMINISTERED BY Code: U.S. Nuclear Regulatory Commission Division of Contracts and Property Mgmt. Contract Administration Br. No. 2; P-920 Washington, DC 20555
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7. NAME AND ADDRESS OF CONTRACTOR Science Applications International Corporation Research and Development (Company 1) 10260 Campus Point Drive San Diego, CA 92121 Principal Investigator/Technical Contact: Brenda Young Telephone No: (615) 482-9031	8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below) <hr/> 9. DISCOUNT FOR PROMPT PAYMENT N/A
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10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN ITEM: 6

11. SHIP TO/MARK FOR <span style="margin-left: 100px;">CODE</span> N/A	12. PAYMENT WILL BE MADE BY <span style="margin-left: 100px;">CODE</span> U.S. Nuclear Regulatory Commission Div. of Accounting & Finance GOV/COM Accounting Section Washington, D.C. 20555
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13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION  
 10 U.S.C. 2304(c)   41 U.S.C. 253(c)

14. ACCOUNTING AND APPROPRIATION DATA  
 B & R 46019202400 \$300,000 FIN W6089  
 APPN No. 31X0200.460 BOC 252A

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
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See Schedule

15G. TOTAL AMOUNT OF CONTRACT \$555,683.00

EXCEPTION TO STANDARD FORM SF26 (REV. 4-85)  
 FAR(48 CFR) 53.214(a)

Prescribed by GSA

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X SEC	DESCRIPTION	PAGE(S)
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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17.  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.  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 continuation 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.

19A. NAME AND TITLE OF SIGNER (Type or print) Brenda J. Young Contracts Manager, Oak Ridge	20A. NAME OF CONTRACTING OFFICER  Elois J. Wiggins
19B. NAME OF CONTRACTOR by <u>Brenda J. Young</u> (Signature of person authorized to sign)	20B. UNITED STATES OF AMERICA by <u>Elois J. Wiggins</u> (Signature of Contracting Officer)
19C. DATE SIGNED March 29, 1994	20C. DATE SIGNED 4/14/94

EXCEPTION TO STANDARD FORM 26 (REV.4-85)

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## PART I - THE SCHEDULE

## SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

## B.1 PROJECT TITLE

The title of this project is as follows:

Operation and Maintenance of the Radiation Exposure  
Information Reporting System (REIRS) Database

[End of Clause]

## B.2 BRIEF DESCRIPTION OF WORK (MAR 1987)

The contractor shall be responsible for all aspects of the activities related to the collection and analysis of exposure data to be maintained in the NRC's REIRS database.

[End of Clause]

## B.3 ITEMS AND PRICES

Item No.	Supplies/Services	Quantity	Unit	Extended Price
1.	Year 1 (Base Year 1)	1	Year	\$276,865.00
2.	Year 2 (Base Year 2)	1	Year	\$278,818.00
3.	Year 3 (Option Year 1)	1	Year	\$282,830.00
4.	Year 4 (Option Year 2)	1	Year	\$287,526.00
5.	Year 5 (Option Year 3)	1	Year	\$292,134.00

GRAND TOTAL: \$1,418,173.00

[End of Clause]

B.4 CONSIDERATION AND OBLIGATION--COST PLUS FIXED FEE  
(JUN 1988) ALTERNATE I (JUN 1991)

- (a) The total estimated cost to the Government for full performance of this contract is \$555,683.00, of which the sum of \$529,222.00 represents the estimated reimbursable costs, and of which \$26,461.00 represents the fixed fee.
- (b) There shall be no adjustment in the amount of the Contractor's fixed fee by reason of differences between any estimate of cost for performance of the work under this contract and the actual cost for performance of that work.
- (c) The amount currently obligated by the Government with respect to this contract is \$300,000.00, of which the sum of \$285,714.00 represents the estimated reimbursable costs, and of which \$14,286.00 represents the fixed fee.
- (d) It is estimated that the amount currently allotted will cover performance through 10/1/95.

[End of Clause]

## SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

## C.1.0 BACKGROUND

The provisions of 10 C.F.R. 20.2203, 20.2204 and 20.2206 require seven categories of NRC licensees to submit several types of occupational radiation exposure reports to the U.S. Nuclear Regulatory Commission. The seven categories are as follows: commercial nuclear power reactors; industrial radiographers; fuel processors, fabricators, and reprocessors; manufacturers and distributors of by-product material; independent spent fuel storage installations; facilities for land disposal of low-level waste; and geologic repositories for high-level waste. Each of these approximately 500 licensees submits an annual exposure report for each of its monitored employees. About 250,000 of these reports are received between February and April of each year. Reports of any Planned Special Exposures are submitted by licensees that have authorized the use of the provision. There are generally less than 100 of these reports filed annually. Up to 100 reports of overexposures are reported annually. Each of these three types of reports are submitted on an NRC form 5 or its electronic equivalent as described in Regulatory Guide 8.7, Revision 1, entitled "Instructions for Recording and Reporting Occupational Radiation Exposure Data" which was published in June of 1992. In addition, about 100 nuclear power reactors provide a statistical summary of occupational exposures annually. This report is filed by April of each year in the format given in Appendix A of Regulatory Guide 1.16, entitled "Reporting of Operating Information-Appendix A-Technical Specifications".

The occupational radiation exposure information contained in these reports is collated and processed by a computer based information management system. This system has been in operation since 1968 and is known as the Radiation Exposure Information Reporting System (REIRS). Data from this system form the basis for several NRC documents, primarily NUREG-0713, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities" which is published in annual volumes. In addition, these data constitute the NRC's repository of occupational exposure data, and as such, may serve as a resource for related analytical activities by other agencies.

The REIRS database is maintained on an NRC owned MicroVax 3100 computer with 2 gigabytes of storage capacity. It is managed using ORACLE and SQL. Additional software has been developed for loading the data into the MicroVax. The data is entered into a PC, verified, and then converted to an ASCII file for transfer to the MicroVax. The NRC Project Officer has ready access to the

database by modem and downloads information directly.

#### C.2.0 CONTRACT OBJECTIVES

The objective of this contract is to provide NRC with data for evaluating licensee performance and to provide for health effects research. In addition, the reports produced from the data provide licensees with current information on occupational radiation exposure so that they can determine their ALARA performance relative to other licensees. The data is presented in a variety of ways to allow licensees to compare their collective doses with licensees operating similar facilities, not only in terms of type, but also in terms of operating history, age, maintenance performed, power output, etc. The data is further analyzed to identify high dose jobs and facilities to alert licensees of ALARA procedures which have been successfully used by other licensees to perform tasks they might be considering now or in the future.

#### C.3.0 SYSTEM OPERATIONS

NRC receives approximately 250,000 exposure reports in the mail. The documents are packaged into lots of exposure reports, reactor statistical analyses, and miscellaneous correspondence. These lots will be numbered, logged and mailed to the contractor.

The contractor shall be responsible for all aspects of the activities related to the collection and analysis of exposure data to be maintained in the NRC's REIRS database. This includes assisting NRC in the receipt, processing and management of radiation exposure reports as previously described. The contractor shall provide the necessary qualified personnel for data entry, quality control and assurance, health physics, statistical analysis, database management, hardware maintenance, software maintenance, technical writing, and other personnel as necessary to perform the system operations. The contractor shall designate a Project Manager (Lead Analyst) who will be the NRC's primary contact for all activities associated with this contract.

#### C.4.0 PROJECT TASKS

##### C.4.1 SYSTEM INSTALLATION

The contractor shall be responsible for the development, management, and integrity of the system software and hardware to assure that all exposure data collected, past, present and future, are maintained in relational databases. The system software and hardware should allow the data to be easily accessed, updated, manipulated and maintained indefinitely. The contractor shall develop data entry software and a user's guide for keying in the data received pursuant to 10 CFR Part 20, Sections 20.1 through 20.601 and 20.1001 through 20.2401, and will modify it



appropriately if the NRC requests that additional data be entered. The contractor shall evaluate the database structure and make modifications to that structure to accommodate the requirements of the revised Part 20. Data stored in the existing format shall be converted as needed to be comparable to data received under the requirements of the revised Part 20. The contractor shall process data received on NRC Form 5 or in electronic format as described in Appendix A to Regulatory Guide 8.7, Revision 1, (June 1992), entitled "Instructions for Recording and Reporting Occupational Radiation Exposure Data." The contractor shall respond to requests for routing reports and searches within three working days, and the systems shall be accessible to the NRC Project Officer via modem for the extraction of individual exposure histories and other data needs. The contractor shall be responsible for providing technical support to licensees using NRC providing REMIT software to manage radiation exposure data and to prepare electronic and hard copy reports.

All systems shall be operable and verified for use within four (4) weeks after contract award. Once the system operations are initiated, any contractor proposed system changes shall be submitted in advance to the NRC's Project Officer for review and approval. Should the NRC request that changes be made to the various databases, the contractor shall submit to the NRC Contracting Officer a change order proposal which shall include the estimated cost of such changes and a milestone schedule for completing the modification. Any changes requiring additional costs under this contract must be approved by the Contracting Officer.

#### C.4.2 EMPLOYER DATA BASE

The contractor shall maintain an employer data base containing licensee information of approximately 13,000 NRC licensees that have at one time or another been required to report to NRC. The contractor shall query the employer database at least annually to ensure that reports are received by those licensees required to report. A list of licensees from whom reports are expected but not received shall be transmitted to the Project Officer by June 1 of each year. Licensees that report for the first time shall be added to the employer database. Licensees shall be deleted from the employer database at the direction of the Project Officer if it is determined that they are no longer required to report to the NRC.

#### C.4.3 RECEIPT AND DESIGNATION OF INCOMING DATA

Approximately 250,000 individual exposure reports are expected to be received by NRC between February and April of each year. It is estimated that about half of these will be in electronic format given in Regulatory Guide 8.7, Revision 1, Appendix A. The

balance of these reports will be on NRC Form 5 or an equivalent format containing all necessary information. In addition, about 200 other miscellaneous reports are received each year. These reports will be forwarded to the contractor by NRC staff. The contractor shall maintain a log of incoming lots, transport the lots to the appropriate person for data entry or verification of electronic files. The original paper or electronic media shall be stored by the contractor for a period of not less than 2 years after inclusion of the data in the database.

#### C.4.4 DATA ENTRY OF OCCUPATIONAL EXPOSURE DATA

The contractor shall develop and maintain a user friendly data entry software package to allow efficient keying in of exposure data. The software package should have context sensitive help and built in error checking routines to minimize data entry errors. Data from nuclear power reactors and non-reactor licensees should be maintained in separate databases but, should be queriable simultaneously. The contractor should have personnel and facilities capable of keying in all data received by April of each year no later than August 1 of the same year. The data shall be identified and processed by batch number. Each batch shall contain no more than 2500 records. The contractor shall track each batch through receipt, data entry, quality control, final quality assurance, VAX loading, storage and final record destruction. As much intelligence as possible should be built into the data entry and quality control software to minimize errors and allow as much automated error catching as possible.

#### C.4.5 QUALITY ASSURANCE

The contractor shall develop quality assurance procedures that maintain the overall error rate within the REIRS database to less than 1%. Statistical methods shall be used in these procedures. The Project Officer must approve any quality assurance procedures to be used on the REIRS database. If the error rate of a given batch is greater than 1%, the contractor shall re-key all of the data at the expense of the contractor. Re-keyed data shall be treated the same as previously un-keyed data in terms of quality control and quality assurance. Once the error rate of a batch is determined to be less than 1%, it should be appended to the REIRS database

#### C.4.6 NUREG-0713

The contractor shall, in coordination with the Project Officer, produce for publication, draft and final reports of successive volumes of NUREG 0713. The contractor's staff shall coordinate with the Project Officer in obtaining all data necessary for the report. In addition to managing the receipt of exposure reports, the contractor shall search the NRC's document control system

(NUDOCS) to ensure that all overexposure reports are found and entered into the database. The contractor shall be responsible for communicating with other NRC offices and the Regional Offices to ensure that the data published is complete and correct.

NUREG-0713 shall be based on the data received from NRC licensees and processed through the REIRS system. The report shall include the following:

1. Introduction
2. Annual whole body dose distributions of licensee type
3. Overexposures
4. High collective dose plants and jobs contributing to the high doses
5. Other analyses, as directed by the Project Officer
6. Appendix A - Annual exposure data for certain licensees
7. Appendix B - Annual whole body doses at power reactors
8. Appendix C - Personnel, dose and power generation summary (tables and graphs included)
9. Appendix D - Summary dose distributions

The contractor shall submit a camera-ready copy of NUREG-0713 that contains all text and tables and graphics, as directed by the Project Officer. NUREG-0713 is normally similar to the NUREG-0713 produced the previous year. However, when directed by the Project Officer, the contractor shall research, analyze, and include other data in the NUREG-0713. As the needs of the NRC change, the contractor shall be responsible for modifying existing software programs or developing new program necessary for conducting various other analyses.

The contractor shall designate a Health Physicist (HP) to review the overexposure reports and prepare the draft text of the chapter on overexposures for each volume of NUREG-0713.

#### C.4.7 AD-HOC REPORTS

The contractor shall modify or develop computer programs necessary for developing various other reports, as directed by the Project Officer. These ad-hoc reports are generally required within a 5-7 day turnaround period, at the direction of the Project Officer.

#### C.4.8 TECHNICAL ASSISTANCE FOR IMPLEMENTATION OF DOSIMETRY

## RECORDKEEPING AND REPORTING REQUIREMENTS OF THE REVISED 10 CFR PART 20

The contractor shall provide technical support to the NRC in the area of dosimetry records, software development, and implementation of the revised 10 CFR Part 20. It is estimated that approximately 2 technical assistance tasks shall be assigned per year. It is estimated that each task shall require approximately 500 hours of personnel effort.

### C.5.0 DELIVERABLES AND TIMETABLES

C.5.1 The contractor shall make arrangements for the transport of government-furnished hardware and software within 14 days of contract award. All databases, appropriate software, and hardware shall be operational for use within 60 calendar days of contract award.

C.5.2 A draft of NUREG-0713 for the preceding year shall be submitted to the Project Officer by August 1st of each year. NRC comments on the draft report shall be provided to the contractor within 15 calendar days of receipt.

C.5.3 A final camera-ready version of the NUREG-0713, incorporating all NRC comments, shall be submitted to the Project Officer within 15 calendar days of the receipt of NRC comments.

C.5.4 A monthly business letter report shall be submitted to the Project Officer and Contracting Officer within 15 days of the end of each month. The contents of the report shall be in accordance with Section F.3.

C.5.5 A monthly technical progress report shall be submitted to the Project Officer and Contracting Officer within 15 days of the end of the month. The contents of the report shall be in accordance with Section F.2.

C.5.6 Special analyses shall be submitted to the Project Officer on a schedule agreed upon at the time the request is made (generally within 7 days of the date of the request).

### C.6.0 REPORTING REQUIREMENTS

In addition to the reporting requirements specified in Section F.2 and F.3; the contractor shall submit a Lot Log Summary and Disk Log/QA Summary within 15 days of the end of the month. The Lot Log Summary shall include a summary of the paper reports submitted by licensees according to lot number. The Disk Log shall include a summary of the reports submitted on computer disk by licensees according to lot number. Attached to this report shall be a quality assurance report specifying the number of lots verified by



date and time.

#### C.7.0 PRESENTATION AND PUBLICATION OF TECHNICAL RESULTS

In addition to the reports required under the "Deliverables" section above, the contractor and the Project Officer shall discuss whether the information developed as a result of this contract warrants publication in refereed science and engineering journals. Such publication shall focus on advances in science and technology, and minimize conclusions and/or recommendations which may have regulatory implications. The Contracting Officer will make the final determination whether the publication of research results is within the scope of work under this contract and therefore an allowable cost. The Contracting Officer shall notify the contractor of the decision in writing. The contractor shall not incur costs associated with such publication until after receipt by the contractor of notification that publication should be pursued. If the decision is made to publish, the contractor should actively pursue the publication in accordance with the provision of NRC Handbook 3.8 and NRC Manual Chapter 3206. The contractor shall coordinate all such publications with, and transmit a copy of the proposed article to, the Project Officer for review and approval prior to final publication. The intent of this provision is to facilitate the broad dissemination of significant information. It is not intended to control the publication of research supported by the NRC.

#### C.8.0 LEVEL OF EFFORT

The contractor shall provide a Project Manager/Lead Analyst who shall be NRC's primary contact for all of the contractor's activities associated with this contract. This individual should have, at a minimum, a bachelors degree in health physics, nuclear engineering or a related field in addition to 5 years experience in dosimetry records or health physics. This individual should have an in-depth knowledge of both PC based and VAX based data management software packages. The Project Manager shall have immediate access to all other personn under this contract.

The contractor shall provide a Health Physicist (HP) to review the overexposure reports and prepare the draft text of the chapter on overexposures for each volume of NUREG-0713.

The contractor shall provide a Computer Programmer who shall update, maintain, and query the REIRS database.

The contractor shall provide two Data Entry Clerks/Technicians who shall key termination data.

The contractor shall provide a Data Analyst to perform quality assurance/control functions and to assist with the preparation of

data for final loading into the database.

The contractor shall provide a Database Administrator to oversee loading of the data, to query the database as needed, and to ensure that the required hardware and software is maintained properly. This individual shall have thorough knowledge of DBase, Clipper, Oracle, SQL, Foxpro, and C as well as PC applications.

#### C.9.0 SECURITY AND BACKUP REQUIREMENTS

Because the exposure data constitute a system of records that is subject to the Privacy Act, the contractor shall treat the incoming and processed data as "confidential" (sensitive unclassified). None of the REIRS data is to be released to anyone except the Project Officer. None of the REIRS analyses are to be released to anyone without written approval of the Project Officer. The source documents (paper or electronic) shall not be left unattended unless they are in a locked area. After the documents have been processed and the verified data loaded into REIRS, they must be maintained for a period of two years or until the expiration of this contract. These documents must be stored in a locked area. At that time, the documents must be destroyed by shredding, incineration, or an other completely destructive method approved by the Project Officer. Electronic media shall be completely erased and verified prior to disposal or recycling.

In order to safeguard the REIRS data, backup procedures shall be developed by the contractor and approved by the Project Officer. The goal of these procedures shall be to minimize the amount of data that could be lost due to a catastrophic equipment failure and to provide a means for recovery of data that has been lost or corrupted.

#### C.10.0 TRAVEL

It is estimated that 2 trips per year shall be required for one individual to attend meetings with NRC staff.

[End of Clause]

#### C.11 NRCAR 2052.215-83 TRAVEL APPROVALS (JAN 1993)

- (a) All domestic travel requires the prior approval of the project officer.
- (b) All foreign travel must be approved in advance by the NRC on NRC Form 445 and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. Foreign travel approval must be communicated in writing through the contracting officer.

[End of Clause]

## 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.

[End of Clause]



## SECTION E - INSPECTION AND ACCEPTANCE

## E.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

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.

## I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

NUMBER	TITLE	DATE
52.248-5	INSPECTION OF SERVICES - COST-REIMBURSEMENT	APR 1984

[End of Clause]

## 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.

[End of Clause]

## SECTION F - DELIVERIES OR PERFORMANCE

## F.1 NRCAR 2052.212-70 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 Section J for List of Attachments).

[End of Clause]

## F.2 NRCAR 2052.212-71 TECHNICAL PROGRESS REPORT

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, Financial Identification Number (FIN), 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.

[End of Clause]

## F.3 NRCAR 2052.212-72 FINANCIAL STATUS REPORT

The contractor shall provide a monthly Financial Status 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

## F.3 (Continued)

must identify the title of the project, the contract number, Financial Identification Number (FIN), 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) Provide total estimated cost (value) of the project as reflected in the contract, the amount of funds available in the contract to date, and the balance of funds required to complete the work as follows:
    - (1) Total estimated contract amount.
    - (2) Total funds obligated to date.
    - (3) Total costs incurred this reporting period.
    - (4) Total costs incurred to date.
    - (5) Provide a 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.
    - (6) Balance of obligations remaining.
    - (7) Balance of funds required to complete contract/task order.
    - (8) Contractor Spending Plan (CSP) status:
      - (i) Projected percentage of completion cumulative through the report period for the project/task order as reflected in the current CSP.
      - (ii) Indicate if there has been a significant change 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 8.
  - (9) 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.
- (b) If the data in this report indicates a need for additional

## F.3 (Continued)

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.

[End of Clause]

## F.4 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 (2 copies)

U.S. Nuclear Regulatory Commission  
Office of Nuclear Regulatory Research  
11545 Rockville Pike  
Rockville, Maryland 20852

(b) Contracting Officer (1 copy)

[End of Clause]

F.5 DURATION OF CONTRACT PERIOD (MAR 1987)  
ALTERNATE 3 (MAR 1987)

Although the Government contemplates use of the system(s) (hardware and software) for the system's life of 5 years from date of installation, the term of this contract is from 8/5/94 through 8/4/96.

[End of Clause]



## SECTION G - CONTRACT ADMINISTRATION DATA

G.1 NRCAR 2052.215-71 PROJECT OFFICER AUTHORITY  
(JAN 1993)

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

Name: Charleen Raddatz

Address: U.S. Nuclear Regulatory Commission  
Office of Nuclear Regulatory Research  
11845 Rockville Pike  
Rockville, Maryland 20852

Telephone Number: (301)492-3750

- (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, fills in details, or otherwise serves to accomplish the contractual statement of work.
  - (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 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

## G.1 (Continued)

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.
  - (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 there to is subject to FAR 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.

## G.1 (Continued)

- (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.

[End of Clause]

G.2 NRCAR 2052.215-82 TRAVEL REIMBURSEMENT  
- ALTERNATE 1 (JAN 1993)

- a) The contractor is encouraged to use Government contract airlines, AMTRAK rail services, and discount hotel/motel properties in order to reduce the cost of travel under this contract. The contracting officer shall, upon request, provide each traveler with a letter of identification which is required in order to participate in this program. The Federal Travel Directory (FTD) identifies carriers, contract fares, schedules, payment conditions, and hotel/motel properties which offer their services and rates to Government contractor personnel traveling on official business under this contract. The FTD, which is issued monthly, may be purchased from the U.S. Government Printing Office, Washington, DC 20402.
- (b) The contractor will be reimbursed for reasonable travel costs incurred directly and specifically in the performance of this contract. The cost limitations for travel costs are determined in accordance with the specific travel regulations cited in FAR 31.205-46, as are in effect on the date of the trip. 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.
- (c) When the Government changes the Federal Travel Regulations, or other applicable regulations, it is the responsibility of the contractor to notify the contracting officer in accordance with the Limitations of Cost clause of this contract if the contractor will be unable to make all of the approved trips and remain within the cost and fee limitations of this contract due to the changes.

## G.2 (Continued)

(End of Clause)

## G.3 NRCAR 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:

Overhead - 87.1% of Direct Labor costs

Fringe Benefits - 35.5% of Direct Labor costs

G & A - 10.3% of Total Estimated Cost less Subcontract costs

Material and Subcontract Overhead - 2.0% of Subcontract costs

- (b) The contracting officer may adjust the above 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.

[End of Clause]

## SECTION H - SPECIAL CONTRACT REQUIREMENTS

## H.1 NRCAR 2052.215-70 KEY PERSONNEL (JAN 1993)

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

D. Hagemeyer  
L. Friedman  
S. Harris  
R. Cale  
T. Clark

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 or his/her authorized representative shall evaluate the request and promptly notify the contractor of his or her approval or disapproval 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



## H.1 (Continued)

price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

[End of Clause]

## H.2 NRCAR 2052.235-70 PUBLICATION OF RESEARCH RESULTS (JAN 1993)

- (a) The principal investigator(s)/contractor shall comply with the provisions of NRC Handbook 3.8 (formerly MC 3202) and NRC Manual Chapter 3206 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) Prior to any such publication, the contractor shall submit the proposed publication to the NRC Contracting Officer and Project Officer for review and approval.

[End of Clause]

## H.3 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY (JUNE 1988)

- (a) The NRC will provide the contractor with the following items for use under this contract:

One (1) MicroVAX 3100 computer running VMS 5.5-2

Two (2) DEC SCSI RZ-57 1.2Mb disk drives

One (1) Micro Technologies Inc. Mustang MSTG-X100 8mm tape drive

Five (5) Desktop PC's (386DX)

One (1) Laser Jet Printer

Software packages

- (b) Only the equipment/property listed above in the quantities shown will be provided by the Government. This property is subject to the provisions of the Government Property clause under this contract. All other equipment/property required in performance of the contract shall be furnished by the Contractor.

[End of Clause]

#### H.5 ENGINEERING CHANGES (ADP REQUIREMENTS) (JUN 1988)

- (a) After contract award, the Government may solicit, and the Contractor is encouraged to propose independently, engineering changes to the equipment, software specifications or other requirements of this contract. These changes may be proposed to save money, to improve performance, to save energy, or to satisfy increased data processing requirements. However, if proposed changes relating to improved performance are necessary to meet increased data processing requirements of the user, those requirements shall not exceed the contract requirements by more than 25 percent. If the proposed changes are acceptable to both parties, the Contractor shall submit a price change proposal to the Government for evaluation within 30 days of such acceptance. Those proposed engineering changes that are acceptable to the Government will be processed as modifications to the contract.
- (b) As a minimum, the following information shall be submitted by the Contractor with each proposal:
- (1) A description of the difference between the existing contract requirement and the proposed change, and the comparative advantages and disadvantages of each;
  - (2) Itemized requirements of the contract which must be changed if the proposal is adopted, and the proposed revision to the contract for each such change;
  - (3) An estimate of the changes in performance and cost, if any, that will result from adoption of the proposal;
  - (4) An evaluation of the effects the proposed change would have on collateral costs to the Government such as Government-furnished property costs, costs of related items, and costs of maintenance and operation; and
  - (5) A statement of the time by which the change order adopting the proposal must be issued so as to obtain the maximum benefits of the changes during the remainder of

## H.5 (Continued)

this contract, also, any effect on the contract completion time or delivery schedule shall be identified.

- (c) Engineering change proposals submitted to the Contracting Officer shall be processed expeditiously. The Government shall not be liable for proposal preparation costs or any delay in acting upon any proposal submitted pursuant to this clause. The Contractor has the right to withdraw, in whole or in part, any engineering change proposal not accepted by the Government within the period specified in the engineering change proposal. The decision of the Contracting Officer as to the acceptance of any such proposal under this contract shall be final and shall not be subject to the "Disputes" clause of this contract.
- (d) The Contracting Officer may accept any engineering change proposal submitted pursuant to this clause by giving the Contractor written notice thereof. This written notice may be given by issuance of a modification to this contract. The Contractor shall remain obligated to perform in accordance with the terms of the existing contract.
- (e) If an engineering change proposal submitted pursuant to this clause is accepted and applied to this contract, an equitable adjustment in the contract price and in any other affected provisions of this contract shall be made in accordance with this clause and other applicable clauses of this contract. When the cost of performance of this contract is increased or decreased as a result of the change, the equitable adjustment increasing or decreasing the contract price shall be in accordance with the "Changes" clause rather than under this clause, but the resulting contract modification shall state that it is made pursuant to this clause.
- (f) The Contractor is requested to identify specifically any information contained in the engineering change proposal which it prefers not be disclosed to the public. The identification of information as confidential and/or proprietary is for information purposes only and shall not be binding on the Government to prevent disclosure of such information. The Contractor is advised that such information may be subject to release upon request pursuant to the Freedom of Information Act (5 U.S.C. 552).

[End of Clause]

## H.6 FIPS PUBS AND STANDARDS COMPLIANCE (MAR 1987)

In no case shall the Contractor or any subcontractor take any

## H.6 (Continued)

action or use any replacement parts that would result in equipment that is not in compliance with applicable FIPS PUBS and Standards (See Section J for List of Attachments) without written approval of the Contracting Officer.

[End of Clause]

## PART II - CONTRACT CLAUSES

## SECTION I - CONTRACT CLAUSES

## I.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

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.

## I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

NUMBER	TITLE	DATE
52.202-1	DEFINITIONS	SEP 1991
52.203-1	OFFICIALS NOT TO BENEFIT	APR 1984
52.203-3	GRATUITIES	APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	APR 1984
52.203-7	ANTI-KICKBACK PROCEDURES	OCT 1988
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	SEP 1990
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JAN 1990
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	NOV 1992
52.215-1	EXAMINATION OF RECORDS BY COMPTROLLER GENERAL	FEB 1993
52.215-2	AUDIT - NEGOTIATION	FEB 1993
52.215-22	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	JAN 1991
52.215-24	SUBCONTRACTOR COST OR PRICING DATA	DEC 1991
52.215-26	INTEGRITY OF UNIT PRICES	APR 1991
52.215-27	TERMINATION OF DEFINED BENEFIT PENSION PLANS	SEP 1989
52.215-33	ORDER OF PRECEDENCE	JAN 1986
52.215-39	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS OTHER THAN PENSIONS (PRB)	JUL 1991
52.216-7	ALLOWABLE COST AND PAYMENT	JUL 1991
52.216-8	FIXED FEE	APR 1984
52.217-1	LIMITATION OF PRICE AND CONTRACTOR OBLIGATIONS	APR 1984
52.217-2	CANCELLATION OF ITEMS Alternate I (APR 1984)	APR 1984



## I.1 (Continued)

NUMBER	TITLE	DATE
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL DISADVANTAGED BUSINESS CONCERNS	FEB 1990
52.219-9	SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS SUBCONTRACTING PLAN	JAN 1991
52.219-13	UTILIZATION OF WOMEN-OWNED SMALL BUSINESSES	AUG 1986
52.219-16	LIQUIDATED DAMAGES--SMALL BUSINESS SUBCONTRACTING PLAN	AUG 1989
52.220-3	UTILIZATION OF LABOR SURPLUS AREA CONCERNS	APR 1984
52.220-4	LABOR SURPLUS AREA SUBCONTRACTING PROGRAM	APR 1984
52.222-3	CONVICT LABOR	APR 1984
52.222-26	EQUAL OPPORTUNITY	APR 1984
52.222-35	AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS	APR 1984
52.222-36	AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS	APR 1984
52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	JAN 1988
52.223-2	CLEAN AIR AND WATER	APR 1984
52.223-6	DRUG-FREE WORKPLACE	JUL 1990
52.224-1	PRIVACY ACT NOTIFICATION	APR 1984
52.224-2	PRIVACY ACT	APR 1984
52.225-11	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	MAY 1992
52.227-1	AUTHORIZATION AND CONSENT	APR 1984
52.227-17	RIGHTS IN DATA - SPECIAL WORKS	JUN 1987
52.228-7	INSURANCE - LIABILITY TO THIRD PERSONS	APR 1984
52.230-2	COST ACCOUNTING STANDARDS	AUG 1992
52.230-5	ADMINISTRATION OF COST ACCOUNTING STANDARDS	AUG 1992
52.232-17	INTEREST	JAN 1991
52.232-22	LIMITATION OF FUNDS	APR 1984
52.232-23	ASSIGNMENT OF CLAIMS	JAN 1986
52.232-25	PROMPT PAYMENT	SEP 1992
52.232-28	ELECTRONIC FUNDS TRANSFER PAYMENT METHODS	APR 1989
52.233-1	DISPUTES	DEC 1991
52.233-3	PROTEST AFTER AWARD Alternate I (JUN 1985)	JUN 1985
52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR 1984
52.242-13	BANKRUPTCY	APR 1991
52.243-2	CHANGES - COST REIMBURSEMENT SERVICES ALT. 1	APR 1984

## I.1 (Continued)

NUMBER	TITLE	DATE
52.244-2	SUBCONTRACTS (COST-REIMBURSEMENT AND LETTER CONTRACTS)	JUL 1985
52.244-5	COMPETITION IN SUBCONTRACTING	APR 1984
52.245-5	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS)	JAN 1986
52.248-1	VALUE ENGINEERING	MAR 1989
52.249-6	TERMINATION (COST-REIMBURSEMENT)	MAY 1986
52.249-14	EXCUSABLE DELAYS	APR 1984
52.253-1	COMPUTER GENERATED FORMS	JAN 1991

[End of Clause]

## I.2 52.203-9 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (NOV 1990)

- (a) Definitions. The definitions set forth in FAR 3.104-4 are hereby incorporated in this clause.
- (b) The Contractor agrees that it will execute the certification set forth in paragraph c) of this clause when requested by the Contracting Officer in connection with the execution of any modification of this contract.
- (c) Certification. As required in paragraph (b) of this clause, the officer or employee responsible for the modification proposal shall execute the following certification:

CERTIFICATE OF PROCUREMENT INTEGRITY--  
MODIFICATION (NOV 1990)

(1) I, [Name of certifier] \_\_\_\_\_, am the officer or employee responsible for the preparation of this modification proposal and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certification, I have no information concerning a violation or possible violation of subsection 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended\* (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement (contract and modification number).

(2) As required by subsection 27(e)(1)(B) of the Act, I further certify that to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant

I.2 (Continued)

of [Name of Offeror] \_\_\_\_\_ who has participated personally and substantially in the preparation or submission of this proposal has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.

(3) Violations or possible violations: (Continue on plain bond paper if necessary and label Certificate of Procurement Integrity--Modification (Continuation Sheet), ENTER NONE IF NONE EXISTS)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
[Signature of the officer or employee responsible for the modification proposal and date]

\_\_\_\_\_  
[Typed name of the officer or employee responsible for the modification proposal]

\* Subsections 27(a), (b), and (d) are effective on December 1, 1990. Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

(d) In making the certification in paragraph (2) of the certificate, the officer or employee of the competing Contractor responsible for the offer or bid, may rely upon a one-time certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the contractor. If a contractor decides to rely on a certification executed prior to the suspension of section 27 (i.e., prior to December 1, 1989), the Contractor shall ensure that an individual who

## I.2 (Continued)

has so certified is notified that section 27 has been reinstated. These certifications shall be maintained by the Contractor for a period of 6 years from the date a certifying employee's employment with the company ends or, for an agency, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the contractor.

- (e) The certification required by paragraph (c) of this clause is a material representation of fact upon which reliance will be placed in executing this modification.

[End of Clause]

## I.3 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 1989)

- (a) The Government may extend the term of this contract by written notice to the Contractor within 60 days; provided, that the Government shall give the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option provision.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

[End of Clause]

## I.4 201-39.5202-3 PROCUREMENT AUTHORITY (OCT 1990 FIRMR)

This acquisition is being conducted under the regulatory blanket delegation of GSA's exclusive procurement authority for FIP resources.

## I.5 201-39.5202-5 PRIVACY OR SECURITY SAFEGUARDS (OCT 1990 FIRMR)

(a) The details of any safeguards the contractor may design or develop under this contract are the property of the Government and shall not be published or disclosed in any manner without the contracting officer's express written consent.

(b) The details of any safeguards that may be revealed to the contractor by the Government in the course of performance under this contract shall not be published or disclosed in any manner without the contracting officer's express written consent.

(c) The Government shall be afforded full, free, and

## I.5 (Continued)

uninhibited access to all facilities, installations, technical capabilities, operations, documentation, records, and data bases for the purpose of carrying out a program of inspection to ensure continued efficacy and efficiency of safeguards against threats and hazards to data security, integrity, and confidentiality.

(d) If new or unanticipated threats or hazards are discovered by either the Government or the contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party. Mutual agreement shall then be reached on changes or corrections to existing safeguards or institution of new safeguards, with final determination of appropriateness being made by the Government. The Government's liability is limited to an equitable adjustment of cost for such changes or corrections, and the Government shall not be liable for claims of loss of business, damage to reputation, or damages of any other kind arising from discovery of new or unanticipated threats or hazards, or any public or private disclosure thereof.

I.6 201-39.5202-6 WARRANTY EXCLUSION AND LIMITATION  
OF DAMAGES (OCT 1990 FIRMR)

Except as expressly set forth in writing in this agreement and except for the implied warranty of merchantability, there are no warranties expressed or implied.

In no event will the Contractor be liable to the Government for consequential damages as defined in the Uniform Commercial Code, section 2-715, in effect in the District of Columbia as of January 1, 1973, i.e.--

Consequential damages resulting from the seller's breach include--

(a) Any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise; and

(b) Injury to person or property proximately resulting from any breach of warranty.



PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

J.1 ATTACHMENTS (MAR 1987)

Attachment Number	Title
1	Billing Instructions
2	NRC Handbook 3.8
3	Contractor Spending Plan (CSP) Instructions
4	Subcontracting Plan

J.2 FEDERAL ADP AND TELECOMMUNICATIONS STANDARDS CHECKLIST  
(APR 1993) (UNLESS STANDARD IS CHECKED, THE STANDARD DOES NOT APPLY)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 1-2, Code for Information Interchange, Its Representations, Subsets, and Extensions
.....	.....	.....	FIPS 2-1, Perforated Tape Code for Information Interchange
.....	.....	.....	FIPS 4-1, Calendar Date
.....	.....	.....	FIPS 5-2, Codes for the Identification of the States, District of Columbia, and the Outlying Areas of the United States, and Associated Areas
.....	.....	.....	FIPS 6-4, Counties and County Equivalents of the States of the United States and District of Columbia
.....	.....	.....	FIPS 8-5, Standard Metropolitan Statistical Areas
.....	.....	.....	FIPS 9-1, Congressional Districts of the United States
.....	.....	.....	FIPS 10-3, Countries, Dependencies and areas of Special Sovereignty
.....	.....	.....	FIPS 13, Rectangular Holes in Twelve-row Punched Cards

J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 14-1, Hollerith Punched Card Code
.....	.....	.....	FIPS 16-1, Bit Sequencing of the Code for Information Interchange in Serial-by-Bit Data Transmission
.....	.....	.....	FIPS 17-1, Character Structure and Character Parity Sense for Serial-by-Bit Data Communication in the Code for Information Interchange
.....	.....	.....	FIPS 21-3, COBOL
.....	.....	.....	FIPS 22-1, Synchronous Signaling Rates Between Data Terminal and Data Communication Equipment
.....	.....	.....	FIPS 26, One-Inch Wide Perforated Paper Tape for Information Interchange
.....	.....	.....	FIPS 27, Take-up Reels for One-Inch Perforated Tape for Information Interchange
.....	.....	.....	FIPS 30, Software Summary for Describing Computer Programs and Automated Data Systems
.....	.....	.....	FIPS 32-1, Optical Character Recognition Character Sets
.....	.....	.....	FIPS 33-1, Character Set for Handprinting
.....	.....	.....	FIPS 46-1, Data Encryption Standard (DES)
.....	.....	.....	FIPS 53, Transmittal Form for Describing Computer Magnetic Tape File Properties
.....	.....	.....	FIPS 54-1, Computer Output Microform (COM) Formats and Reduction Ratios, 16 mm and 105 mm
.....	.....	.....	FIPS 58-1, Representations of Local Time of the Day for Information Interchange
.....	.....	.....	FIPS 59, Representations of Universal Time, Local Time Differentials and United States Time Zone References for Information Interchange
.....	.....	.....	FIPS 66, Standard Industrial Classification (SIC) Codes

J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 68-2, BASIC
.....	.....	.....	FIPS 69-1, FORTRAN
.....	.....	.....	FIPS 70-1, Representation of Geographic Point Locations for Information Interchange
.....	.....	.....	FIPS 71, Advanced Data Communications Control Procedures (ADCCP)
..X..	.....	.....	FIPS 81, Data Encryption Standard (DES) Modes of Operation
.....	.....	.....	FIPS 84, Microfilm Readers
.....	.....	.....	FIPS 85, Optical Character Recognition (OCR) Inks
.....	.....	.....	FIPS 86, Additional Controls For Use With American National Standard Code for Information Interchange
.....	.....	.....	FIPS 89, Federal Standard for Optical Character Recognition (OCR) Character Positioning
.....	.....	.....	FIPS 95, Code for the Identification of Federal and Federally-Assisted Organizations
.....	.....	.....	FIPS 100-1, Interface between Data Terminal Equipment (DTE) and Data Circuit-Terminating Equipment (DCE) for Operation with Packet-Switched Data Communication Networks (PSDN) or Between Two DTEs by Dedicated Circuits
.....	.....	.....	FIPS 103, Codes for the Identification of Hydrologic Units in the United States and the Caribbean Outlying Areas
.....	.....	.....	FIPS 104-1, ANS Codes for the Representation of Names of Countries, Dependencies, and Areas of Special Sovereignty for Information Interchange
.....	.....	.....	FIPS 107, Local Area Networks: Baseband Carrier Sense Multiple Access with Collision Detection Access Method and Physical Layer Specifications and Link Layer Protocol

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## J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 108, Alphanumeric Computer Output Microform Quality Test Slide
.....	.....	.....	FIPS 109, PASCAL
.....	.....	.....	FIPS 112, Password Usage
.....	.....	.....	FIPS 113, Computer Data Authentication
.....	.....	.....	FIPS 119, Ada
.....	.....	.....	FIPS 120-1, Graphical Kernel System (GKS)
.....	.....	.....	FIPS 121, Videotex/Teletext Presentation Level Protocol Syntax (North America PLPS)
.....	.....	.....	FIPS 123, Specification for a Data Descriptive File for Information Interchange (DDF)
.....	.....	.....	FIPS 125, MUMPS Programming Language
.....	.....	.....	FIPS 126, Database Language NDL
.....	.....	.....	FIPS 127-1, Database Language SQL
.....	.....	.....	FIPS 128-1, Computer Graphics Metafile (CGM)
.....	.....	.....	FIPS 129, Optical Character Recognition (OCR) Dot Matrix character sets for OCR-MA
.....	.....	.....	FIPS 137, Analog to Digital Conversion of Voice by 2400 Bits/Second Linear Predictive Coding
.....	.....	.....	FIPS 138, Electrical Characteristics of Balanced Voltage Digital Interface Circuits
.....	.....	.....	FIPS 139, Interoperability and Security Requirements for Use of the Data Encryption Standard in the Physical Layer of Data Communications
.....	.....	.....	FIPS 140, General Security Requirements for Equipment Using the Data Encryption Standard

## J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 141, Interoperability and Security Requirements for Use of the Data Encryption Standard with CCITT Group 3 Facsimile Equipment
.....	.....	.....	FIPS 142, Electrical Characteristics of Unbalanced Voltage Digital Interface Circuits
.....	.....	.....	FIPS 143, General Purpose 37-Position and 9-Position Interface Between Data Terminal Equipment and Data Circuit-Terminating Equipment
.....	.....	.....	FIPS 144, Data Communications Systems and Service-user Oriented Performance Parameters
.....	.....	.....	FIPS 146-1, GOSIP: Government Open System Interconnection Profile
.....	.....	.....	FIPS 147, Group 3 Facsimile Apparatus of Document Transmission
.....	.....	.....	FIPS 148, Procedures for Document Facsimile Transmission
.....	.....	.....	FIPS 149, General Aspects of Group 4 Facsimile Apparatus
.....	.....	.....	FIPS 150, Facsimile Coding Schemes and Coding Control Functions for Group 4 Facsimile Apparatus
.....	.....	.....	FIPS 151-1, Portable Operating Systems Interface for Computer Environments (POSIX)
.....	.....	.....	FIPS 152, Standard Generalized Markup Language (SGML)
.....	.....	.....	FIPS 153, Programmer's Hierarchical Interactive Graphics System (PHIGS)
.....	.....	.....	FIPS 154, High Speed 25-position for Data Terminal Equipment and Data Circuit-terminating Equipment

## J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 155, Data Communication Systems and Services User-oriented Performance Measurement Methods
.....	.....	.....	FIPS 156, Information Resource Dictionary System (IRDS)
.....	.....	.....	FIPS 159, Detail Specifications for 62.5 $\mu$ m Core Diameter/125 $\mu$ m Cladding Diameter Class Ia Multimode, Graded-Index Optical Waveguide Fibers
.....	.....	.....	FIPS 160, C
.....	.....	.....	FIPS 161, Electronic Data Interchange (EDI)
.....	.....	.....	FIPS 162, 1,200 bits per Second Two-Wire Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 163, 2,400 Bits per Second Two-Wire Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 164, 2,400 Bits per Second Four-Wire Duplex and Two-Wire Half-Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 165, 4,800 and 9,600 Bits per Second Four-Wire Duplex and Two-Wire Half-Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 166, 4,800 Bits per Second Two-Wire Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 167, 9,6000 Bits per Second Two-Wire Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 168, 12,000 and 14,400 Bits per Second Four-Wire Duplex Modems for Data Communications use on Telephone-Type Circuits
.....	.....	.....	FIPS 169, Error Correction in Modems Employing Asynchronous-To-Synchronous Conversion



## J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FIPS 170, Data Compression in Modems Employing CCITT Recommendation V.42 Error Correction
.....	.....	.....	FIPS 171, Key Management Using ANSI X9.17
.....	.....	.....	FIPS 172, VHSIC Hardware Description Language (VHDL)
.....	.....	.....	FIPS 174, Federal Building Telecommunications Wiring Standard
.....	.....	.....	FIPS 175, Federal Building Standard for Telecommunications Pathways and Spaces
.....	.....	.....	FIPS 176, Residential and Light Commercial Telecommunications Wiring Standard
.....	.....	.....	FIPS 177, Initial Graphical Exchange Standard (IGES)
.....	.....	.....	FIPS 178, Video Teleconferencing Services at 56 to 1,920 KBPS
.....	.....	.....	FIPS 179, Government Network Management Profile (GNMP)

## FEDERAL TELECOMMUNICATIONS STANDARDS (FED-STD)

.....	.....	.....	FED-STD 1002A, Telecommunications: Time and Frequency Reference Information in Telecommunication Systems
.....	.....	.....	FED-STD 1016, Telecommunications: Analog to Digital Conversion of Radio Voice by 4,800 Bit/Second Code Excited Linear Prediction (CELP)
.....	.....	.....	FED-STD 1023, Telecommunications: Interoperability Requirements for Encrypted Digitized Voice Utilized with 25 KHz Channel FM Radios Operating Above 30 MHz

## J.2 (Continued)

Standard Applies	Standard Does Not Apply	Standard Applies, But Waived	Standards Titles
.....	.....	.....	FED-STD 1035A, Telecommunications: Coding Modulations and Transmission Requirements for Single Channel Medium and High Frequency Radio Telegraph Systems Used In Government Maritime Mobile Telecommunications
.....	.....	.....	FED-STD 1037B, Telecommunications: Glossary of Telecommunications Terms

BILLING INSTRUCTIONS FOR  
COST-REIMBURSEMENT TYPE CONTRACTS

General: The contractor shall prepare vouchers/invoices for reimbursement of costs in the manner and format described herein. A sample voucher/invoice is provided for your reference. **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 and Property Management  
Contract Administration Branch, P-902  
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 locations:

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 and Property Management.

Agency Payment Office: Payment will continue to be made by the office designated in the contract in Block 12 of SF 26 of 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.

Form: Claims should be submitted in the format depicted on the attached sample form entitled "Voucher for Purchase and Services Other than Personal" (see Enclosure 1). The sample form is provided for guidance only. The form is not required for submission of a voucher/invoice. Alternate formats are permissible provided all requirements of the billing instructions are addressed. Additional copies of the form are available from the Contracting Officer. The instructions form preparation and itemization of the voucher/invoice are included with the sample form (See Enclosure 2).

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 (p) of the attached instructions, together with appropriate supporting information (see Enclosure 3 for a sample of support information).

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 Enclosure 4. 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 carryout the program. Common costs include costs associated with the following: preparatory or startup 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 to the total U.S. dollars authorized in the contract.

Supersession: These instructions supersede any previous billing instructions.

INSTRUCTIONS FOR PREPARING  
COST INFORMATION FOR NRC CONTRACTS

Preparation and Itemization of the Voucher/Invoice: In order to constitute a proper invoice, the contractor shall furnish all the information set forth below. These notes are keyed to the entries on the sample voucher/invoice.

Official Agency Billing Office: Address the original and 3 copies of the voucher/invoice, together with supporting documentation attached to each copy to: U.S. Nuclear Regulatory Commission, Division of Contracts and Property Management, P-902, Washington, DC 20555.

Vouchers/invoices delivered by hand, including delivery by express mail or special delivery services which use a courier or other person to deliver the voucher/invoice in person to the NRC, should be addressed in accordance with the foregoing and delivered to: U. S. Nuclear Regulatory Commission, One White Flint North, 1155 Rockville Pike, Rockville, Maryland 20852. Hand-delivered vouchers/invoices will not be accepted at other than the above address. Note, however, 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 and Property Management.

Payee's name and address. Show the name of the contractor as it appears in the contract and its correct address. When an approved assignment has been made by the contractor, or a different payee or addressee has been designated, insert the name and address of the payee. Indicate the name and telephone number of the individual responsible for answering any questions that the NRC may have regarding the invoice.

- (a) Contract Number. Insert the NRC contract number  
Task Order Number, if applicable. Insert the task order number.
- (b) Title of Project. List the full title of the project being performed under the contract.
- (c) Sequential voucher/invoice number. The appropriate sequential number of the voucher/invoice, beginning with 001 should be designated. Contractors may also include individual internal accounting number, if desired, in addition to the 3-digit sequential number.
- (d) Project Officer's name as designated in the contract.



- (e) Date of voucher/invoice. Insert the date the voucher/invoice is prepared.
- (f) Contract Amount. Insert the total estimated cost of the contract, exclusive of fixed-fee. Include this information as it applies to individual task orders as well.
- (g) Fixed-Fee. Insert total fixed-fee. Include this information as it applies to individual task orders as well.
- (h) 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.
- (i) Direct Costs - Insert the major cost elements:

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

Labor Category	Labor Hrs. Negotiated	Hrs. Billed	Rate	Total	Cumulative Hrs. Billed
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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) Direct Equipment. For education institutions, list each item costing \$500 or more and having a life expectancy of more than one year. For contractors other than educational institutions, list each item costing \$200 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. A reference shall be made to the following (as applicable): (a) the item number for the specific piece of equipment listed in the property schedule of the contract; (b) the Contracting Officer's approval letter if the equipment is not covered by the property schedule; or (c) be preceded by an asterisk (\*) if the equipment is below the approval level. Further itemization of vouchers/invoices shall only be required for items having specific limitations set forth in the contract.
- (4) Materials, Supplies, or Other Expendable Items. These are consumable materials, supplies, and equipment other than that described in (3) above.
- (5) Premium Pay. This remuneration in excess of the basic hourly rate. (Requires written approval of the Contracting Officer.)

(6) Consultant's Fee. 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. Domestic travel is travel within the United States, its territories, possessions, and Canada. It should be billed separately from foreign travel.

All costs associated with each trip must be shown in the following format:

Date		Traveler	Destination		Purpose	Cost
From	To		From	To		\$

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

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

(j) Indirect Costs - Overhead. Cite the formula (rate and base) in effect during the time the cost was incurred and for which reimbursement is claimed.

(k) 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. The contractor may bill for fixed fee only up to 85% of total fee.

(l) Amount Billed for Current Period. Insert the amount billed for the major cost elements, adjustments, and total amount for the period.

(m) Cumulative Amount from Inception to Date of Current Billing. Insert the cumulative amounts billed for the major cost elements and adjusted amounts claimed during this contract.

(n) Total Amounts Claimed. Insert the total amounts claimed for the current cumulative periods.

(o) Adjustments. This includes cumulative amounts billed that have been suspended or disallowed.

(p) Grand Totals.

(1) Direct Labor - \$2400

Labor Category	Labor Hour Negotiated	Hours Billed	Rate	Total	Cumulative Hours Billed
Senior Engineer 1	2400	100	\$14	\$1400	975
Engineer	1500	50	\$10	\$500	465
Computer Analyst	700	100	\$5	\$500	320
				\$2400	

(3) Direct Equipment

Spectrometer - General Electric (as approved in Property Schedule)  
\$5,000

(4) Materials, Supplies & Other Expendable Items

10 Radon Tubes @ \$110 = \$1100  
6 Pairs Electrostatic Gloves @ \$150 = \$900  
\$2000

(5) Premium Pay

Walter Murphy - 10 hours @ \$10 Per Hour = \$100  
(This was approved by NRC in letter dated 3/6/89)

(6) Consultants' Fee

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

(7) Travel

Date	Traveler	Destination	Purpose	Costs
From To		From To		
3/1/89 3/6/89	William King	Chicago Wash	Mtg. w/PO	\$200

MONTHLY CONTRACTUAL COST SUMMARY REPORT FOR FEE BILLING

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				

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Remarks:

# ***Unclassified Contractor and Grantee Publications in the NUREG Series***

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***Directive***

*(Formerly  
MC 3202)* **3.8**

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# U. S. Nuclear Regulatory Commission

Volume: 3 Information Management  
Part 1: Publications, Mail, and Information  
Disclosure

ADM

## Unclassified Contractor and Grantee Publications in the NUREG Series Directive 3.8

### Policy

(3.8-01)

This directive and handbook govern the publishing of (1) unclassified NRC contractor, consultant or grantee formal reports, books, and international agreement reports, in the NUREG/CR, NUREG/GR, and NUREG/IA series; (2) reports and books by contractors of the U.S. Department of Energy (DOE); and (3) publications prepared for NRC under memoranda of understanding and interagency agreements.

### Objectives

(3.8-02)

- To ensure the production and dissemination of information and publications as required by the Energy Reorganization Act of 1974 and the Freedom of Information Act. (a)
- To ensure the technical and management reviews of formal reports and books prior to publication. (b)
- To ensure that national security, patent rights, copyrights, proprietary rights, and rights in other sensitive unclassified information, including those specified in interagency and international agreements and memoranda of understanding, are not compromised by the release or publication of information by NRC. (c)
- To ensure that all unclassified NRC contractor or grantee publications in the NUREG series carry the registered Government identification NUREG/CR-0000, NUREG/GR-0000, or NUREG/IA-0000, with the exception of some publications

## Objectives

(3.8-02) (continued)

- prepared by grantees, and indicate the availability of source material used in these publications. (d)
- To ensure that NRC-sponsored book manuscripts receive proper peer review from experts within and outside NRC. (e)
  - To provide uniform procedures for publishing formal reports and books prepared by NRC contractors or grantees. (f)

## Organizational Responsibilities and Delegations of Authority

(3.8-03)

### Executive Director for Operations (EDO)

(031)

Delegates to the Deputy Executive Directors for Operation decisionmaking authority for the resolution of differences between NRC and contractors about the contents of publications, about granting contractors permission to publish NRC-sponsored information in the open literature, and about permitting contractors to issue press or other media releases concerning NRC-sponsored information.

### Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research

(032)

As delegated from the EDO, makes final decisions in the following areas for the Office of Nuclear Reactor Regulation, Office of Nuclear Regulatory Research, and Regional Offices:

- When an Office Director refuses to publish an NRC-sponsored document because of irreconcilable differences between themselves and the author(s) about the contents of the document. (a)
- When an Office Director refuses to permit a contractor's principal investigator to publish NRC-sponsored information in the open literature. (b)

**Deputy Executive Director for  
Nuclear Reactor Regulation,  
Regional Operations and Research**  
(032) (continued)

- When an Office Director refuses to permit a contractor to issue a press or other media release about an NRC-sponsored publication. (c)

**Deputy Executive Director for  
Nuclear Materials Safety, Safeguards,  
and Operations Support**  
(033)

As delegated from the EDO, makes final decisions in the following areas for the offices reporting to this official:

- When an Office Director refuses to publish an NRC-sponsored document because of irreconcilable differences between themselves and the author(s) about the contents of the document. (a)
- When an Office Director refuses to permit a contractor's principal investigator to publish NRC-sponsored information in the open literature. (b)
- When an Office Director refuses to permit a contractor to issue a press or other media release about an NRC-sponsored publication. (c)

**Directors of Offices**  
(034)

- Ensure that publications will be reviewed in draft prior to final printing and distribution for acceptability by determining that they are consistent with agency policy, management decisions, and that they raise no significant legal issues. (a)
- Ensure that statements of work include statements requiring contractor\* compliance with this directive and handbook and Government Printing and Binding Regulations. (b)

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\*"Contract" in this context encompasses the "Standard Order for DOE Work" (NRC Form 173), interagency and international agreements, and grants.

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**Unclassified Contractor and Grantee  
Publications in the NUREG Series  
Part 1 – Publications, Mail, and Information Disclosure  
Directive 3.8**

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**Directors of Offices**

(034) (continued)

- Sign, or delegate signature authority for, the NRC Form 426A, "Release to Publish Unclassified NRC Contractor, Consultant, or Conference Proceedings Reports," and for memoranda requesting reprints of contractor publications. (c)

**Director, Office of Administration (ADM)**

(035)

As delegated from the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, administers NRC's programs and policies for publishing unclassified contractor and grantee reports and books in the NUREG series.

**Director, Division of Freedom of  
Information and Publications  
Services, ADM**

(036)

- Develops and administers, as delegated from the Director, ADM, NRC's program and policies for publishing unclassified contractor, consultant, and grantee formal reports, books, and international agreement reports in the NUREG/CR, NUREG/GR, and NUREG/IA series. (a)
- Applies the policy, procedures, standards, and guides for the documentation, formatting, composition, printing, and dissemination of NRC-sponsored publications in the NUREG series consistent with the mission of the agency and in accordance with the requirements of the Government Printing and Binding Regulations issued by the Joint Committee on Printing, U.S. Congress. (b)
- Develops and administers the central agency publication numbering system for identifying, producing, and retrieving unclassified NRC-sponsored publications in the NUREG series. (c)

**Director, Division of Contracts and  
Property Management, ADM**

(037)

Ensures that those requests for proposals, invitations for bids, and grant proposals, and the ensuring contracts and grants that require

**Director, Division of Contracts and  
Property Management, ADM**  
(037) (continued)

publications as deliverables, include provisions requiring contractor compliance with this directive and handbook and Government Printing and Binding Regulations.

**Applicability**  
(3.8-04)

**Employees**  
(041)

This directive and handbook apply to and must be followed by all NRC employees.

**Other Publications**  
(042)

The provisions of this directive and handbook do not apply to NRC staff publications in the NUREG series, NRC docket material, or documents created by NRC boards, panels, advisory committees, and offices that report to the Commission.

**Handbook**  
(3.8-05)

Detailed guidelines for the preparation of publications are contained in Handbook 3.8.

**References**  
(3.8-06)

1. Executive Order 12291—Federal Regulation, February 17, 1981.
2. Title 17, U.S. Code, Copyrights.
3. Government Printing and Binding Regulations, S. Pub. 101-9, February 1990.

## References

(3.8-06) (continued)

4. DOE-NRC Memorandum of Understanding, February 24, 1978.
5. Title 44, U.S. Code, "Public Printing and Documents," Chapter 3, Government Printing Office.
6. U.S. Government Printing Office *Style Manual*, 1984.
7. Energy Reorganization Act of 1974 (42 U.S.C. 5801, et seq.).
8. The Freedom of Information Act (5 U.S.C. 522).
9. Public Law 95-224, The Federal Grant and Cooperative Agreement Act, February 3, 1978.
10. Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations, OMB Circular A-110, July 1976.
11. Cost Principles for State and Local Governments, OMB Circular A-87, January 1981.
12. NUREG-0650, Revision 1, "Publishing Documents in the NUREG Series," November 1990.



# ***Unclassified Contractor and Grantee Publications in the NUREG Series***

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## ***Handbook***

*(Formerly  
Appendix 3202)* **3.8**

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## Introduction

This handbook specifies the procedures necessary for Nuclear Regulatory Commission (NRC) contractors and grantees to follow when preparing the following kinds of publications for the NRC.

- Final NUREG Reports
- International Agreement Reports
- Books
- Grant Publications

The handbook is divided into five major parts and includes a glossary and exhibits. Part I provides general information for staff consideration in the preparation of statements of work. Parts II, III, IV, and V provide publishing guidelines specific to, respectively, **contractor reports, international agreement reports, books, and grantee publications.**

*Contractor* means a private contractor, consultant, expert, another State or Federal agency working under an interagency agreement, or a DOE facility or subcontractor, such as the National Laboratories, working under the DOE/NRC Memorandum of Understanding of February 24, 1978, and any subcontractors of these organizations.

This directive and handbook, as well as a copy of "Publishing Documents in the NUREG Series" (NUREG-0650, Revision 1), must be included or referenced in all contracts, interagency and international agreements, and grants for which the publications listed above are contract deliverables or grant obligations. In addition to the guidelines specific to each type of publication that appear in subsequent parts of this handbook, all statements of work must contain the applicable guidelines outlined in Part I.



## Part I

# Preparing Publication Requirements for Statements of Work for Contracts

### Specifying Publication Requirements (A)

List and describe the type of technical reports required from each project, task or subtask, as applicable. State when, how many, and to whom they should be submitted and the scope of information they should contain. These reports may be unclassified, sensitive unclassified, or classified. For guidelines and requirements covering sensitive unclassified and classified publications, refer to NRC Management Directive 12.2, NRC Information Security Program (formerly MC 2101).

This directive and handbook pertain to publications that will be issued in the NUREG/CR, NUREG/IA, and NUREG/GR series.

### Publishing Formal Reports (B)

NUREG series reports will be printed and distributed by NRC from camera-ready copy submitted by the contractor to the Regulatory Publications Branch, MS P-223, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The camera-ready copy is to be prepared in accordance with the provisions of this handbook. Recommended guidelines for the organization and format of formal reports are specified in "Publishing Documents in the NUREG Series" (NUREG-0650, Revision 1).

When the report contains sensitive unclassified or classified information, the contractor must comply with Management Directive 12.2, NRC Information Security Program (formerly MC 2101).

## Publishing Formal Reports (B) (continued)

If a draft is desired prior to completion of a final report, specify in the statement of work (SOW) the due date for delivering the final camera-ready copy after receiving NRC or participant comments (if applicable) on the draft. State that all draft material be submitted to the cognizant NRC contact.

When the contractor is to submit draft material for comment prior to the preparation of the final report, state that if there are NRC program or participant comments (if applicable), the contractor will be asked to make changes. If agreement on the changes is reached, the NRC contact will authorize the contractor to prepare the final copy and submit it to the NRC contact, if it is a letter report or input to a Safety Evaluation Report or an Environmental Statement, or to the Director, Division of Freedom of Information and Publications Services (DFIPS), if it is a camera-ready copy for printing and distribution. This is to be done to ensure proper publication, handling, distribution and, among other things, to preclude further changes that might nullify the agreement.

If special caveats were agreed to between the contractor and the NRC contact, the caveats should accompany Form 426A (Exhibit 1) for approval when it is sent to the NRC contact. A copy of special caveats should also accompany the camera-ready copy sent to DFIPS.

If agreement on changes to a formal technical report to be issued in the NUREG/CR series is not reached, the NRC contact may request the contractor to prepare the camera-ready copy with, in addition to the standard disclaimer required on all contractor formal reports (see Section II.F. below), any caveats deemed necessary to cover NRC objections. Such caveats may range from "The views expressed in this report are not necessarily those of the U.S. Nuclear Regulatory Commission" to the addition of a preface setting forth the NRC opinion or footnotes at appropriate locations within the text.

If NRC objections cannot be covered in this manner, NRC can refuse to publish the report. In the case of DOE/National Laboratory reports, the DOE Operations Office Manager responsible for that laboratory should be informed by the NRC Office Director or Regional Administrator of the decision and the reasons therefor, with a copy to the Laboratory Director. In the case of another Federal agency, a State, or a private contractor, the person who entered into the contract should similarly be informed by the NRC contracting officer. The contractor is then free to publish the report without NRC

## **Publishing Formal Reports (B) (continued)**

being identified as the funding sponsor of the report and without the NRC disclaimer. Office Director or designee decisions may be appealed to the appropriate Deputy Executive Director for Operations.

## **Publishing Unclassified Information in Open Literature and Presenting Papers (C)**

Specify whether the contractor's principal investigator is permitted to publish in the **open literature** instead of submitting a final report and/or to present papers at public or association meetings during the course of the work. If that arrangement is authorized, add the following statement to the Statement of Work (SOW):

**The principal investigator(s) may publish the results of this work in the open literature instead of submitting a final report and/or present papers at public or association meetings at interim stages of the work.**

If the NRC contact wants to review the paper or journal article prior to presentation or submission for publication, state so in the SOW, as follows:

**The principal investigator(s) may publish the results of this work in the open literature instead of submitting a final report and/or present papers at public or association meetings at interim stages of the work, if the article or paper has been reviewed by the NRC contact in draft form and agreement has been reached on the content.**

If the agreement is not reached, NRC may also require that the paper include in addition to the standard statement "Work supported by the U.S. Nuclear Regulatory Commission," any caveats deemed necessary to cover NRC objections. If NRC objections cannot be covered in this manner, NRC may refuse to authorize publication in the open literature and/or presentation of papers.

In the latter case, NRC will inform the contractor of the decision, as stated above. The contractor is then free to publish without NRC being identified as the funding sponsor of the information. Office Director

## Publishing Unclassified Information in Open Literature and Presenting Papers (C) (continued)

or designee decisions may be appealed to the appropriate NRC Deputy Executive Director for Operations.

If the contractor proposes to publish in the **open literature** or present the information at meetings *in addition* to submitting the required technical reports, approval of the proposed article or presentation should be obtained from the NRC. The NRC shall take one of the following actions: approve the material as submitted, approve it subject to NRC-suggested revisions, or disapprove it. In any event, the NRC may disapprove or delay presentation of papers on information that is subject to Commission approval that has not been ruled upon or which has been disapproved.

If the contractor requests permission to publish in the open literature even though the contract does not explicitly provide for this type of publication, the contract can be modified to provide for such presentations.

When the contractor submits journal articles for publication, each must be accompanied by the following statement:

The submitted manuscript has been authored by a contractor of the U.S. Government under Contract\* No. \_\_\_\_\_. Accordingly, the U.S. Government has a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for U.S. Government purposes.

All published papers and articles must include the following disclaimer:

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights. The views expressed in this paper are not necessarily those of the U.S. Nuclear Regulatory Commission.

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\*For DOE work orders the appropriate FIN number is applicable.

## Publishing Unclassified Information in Open Literature and Presenting Papers (C) (continued)

Should the contractor be requested by the journal or other publisher to transfer the copyright, the contract author will respond to the journal or other publisher in writing in accord with the sample letter shown as follows:

Dear (Copyright Holder's Name):

We recently received a document for signature assigning copyright and republication rights in the submitted article (title) to (name of publication). This letter is offered in lieu of the document as a means of completing the transfer of ownership. Accordingly, we hereby expressly transfer and assign our rights of ownership in the above-cited work to (name of publisher).

You are advised, however, that the above assignment and any publication or republication of the above-cited work is subject to the following Government rights:

The submitted manuscript has been authored by a contractor of the U.S. Government under Contract No. \_\_\_\_\_. Accordingly, the U.S. Government has a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for U.S. Government purposes.

Sincerely,

If NRC approves open literature publication and page charges and travel costs are required for the presentation of papers, see Management Directive 3.10, NRC Contractor Unclassified Papers, Journal Articles, and Press or Other Media Releases on Regulatory and Technical Subjects (formerly MC 3206).

## Reports Containing Sensitive Unclassified and Classified Information (D)

Examples of the proper marking of reports designated Official Use Only, Limited Official Use, Proprietary Information, Safeguards



## Reports Containing Sensitive Unclassified and Classified Information (D) (continued)

Information, and Classified (Confidential, Secret, and Top Secret) are provided in Management Directive 12.2, NRC Information Security Program (formerly MC 2101).

## Conference and Workshop Proceedings (E)

If NRC approves publication of compilations of papers presented at NRC-sponsored or cosponsored meetings, conferences, and symposia, see Management Directive 3.11, Conferences and Conference Proceedings (formerly MC 3207).

## Distribution of Reports to Contractors (F)

Up to 50 copies of printed unclassified NUREG/CR, NUREG/GR, and NUREG/IA reports will be bulk shipped to the contractor by NRC. (Joint Committee on Printing's *Government Printing and Binding Regulations* permit contractors to receive up to 50 copies of reports they have produced for NRC free of charge.) If fewer than 50 copies are needed, indicate the desired quantity on NRC Form 426A (Exhibit 1). Contractors requesting single copies for specific individuals in organizations other than the contractor's organization who are not included in the distribution requested by the NRC contact may address such request(s), with written justification, to the NRC contact. If the additional distribution is approved by the NRC contact, the contractor shall send address labels with the camera-ready copy to the Regulatory Publications Branch, DFIPS, USNRC, Washington, DC 20555, and that distribution will be made along with the standard distribution.

## Coordinating Contractor Press or Other Media Releases of Information (G)

A contractor may request permission to issue a press or other media release on the work being done. That request must be made to the NRC Office Director or designee, who will consult with the Public Affairs staff. The contractor must not issue a press release on nonroutine information without this prior approval. This approval may be obtained by a telephone call to the Office Director or designee to expedite the request. The contractor may appeal decisions not to authorize the release of information or delays in handling the request to the appropriate Deputy Executive Director for Operations.



## Part II

# Draft and Final NUREG Reports

### Identification Information (A)

#### NUREG Number (1)

Each contractor report published by NRC must be identified by a unique alphanumeric designation controlled and maintained by the Division of Freedom of Information and Publications Services (DFIPS). To obtain an NRC report number, call the Regulatory Publications Branch, DFIPS, at FTS 49-27001 or (301)49-27001.

The NRC identification numbers will have one of the following forms:

- NUREG/CR-0000
- NUREG/GR-0000
- NUREG/IA-0000

where CR indicates **contractor report**, GR indicates **grant report**, and IA indicates **international agreement report**. The contractor report number, if any, will be placed below the NUREG number on the title page and cover.

When a report consists of more than one volume or binding or is issued in more than one edition, an appropriate volume, number, supplement, part, addendum, or revision designation must appear immediately below the NRC report number and the contractor's report number, if any.

#### Author Names (2)

Authors' names routinely appear on the report cover and title page, unless doing so is impractical, as for an annual report having many contributors. Editors or compilers with subject-area expertise may also be identified as such on the cover and title page. Author

## Identification Information (A) (continued)

### Author Names (2) (continued)

affiliations need not be listed unless the affiliation differs from the organization creating the report.

### Organizational Identification (3)

The Regulatory Publications Branch, DFIPS, prepares the covers and title pages for all reports and will list information about the organization that created the report as it is provided.

### Previous Reports in Series (4)

If the report being prepared is one in an ongoing series, list all previous reports in the series. Include report numbers and issuance dates. Place this list on the back of the title page.

### Report Dates (5)

The report dates are shown on the title page. These dates include the month and year the report is completed, and the month and year it is published.

## Report Organization and Components (B)

The organization and components of contractor reports vary somewhat, depending on their purpose and scope. Recommended format and organizational guidelines appear in "Publishing Documents in the NUREG Series" (NUREG-0650, Revision 1).

Each draft and final report prepared for NRC must include an abstract of 200 words or less that appears on a separate page preceding the table of contents. The abstract must also appear on the Bibliographic Data Sheet, NRC Form 335 (Exhibit 2A). The back of Form 335 contains instructions for completing the form (Exhibit 2B). Guidelines on the special writing requirements for preparing abstracts appears in Section 5.5 of NUREG-0650, Revision 1.

## Pre-Publication Reviews (C)

### Patent Review (1)

Patent implications must be considered prior to approval of reports for public release so that disclosure will not adversely affect the patent rights of NRC or the contractor. If the work being reported is contractually managed through another Government agency (e.g., DOE National Laboratories), that Government agency should be requested by the contractor to perform the patent review. The result of the review must be reported on NRC Form 426A under item 8 (Exhibit 1).

If NRC directly administers the contract, or the contractor is unable to obtain a patent clearance from the Government agency administering the contract, the responsible NRC contracting officer must be consulted, and the responsible NRC technical contact shall consider the patent implications. If there is no need for patent review because of the certainty that the report contains no description of novel technical developments that may be of an inventive nature, mark "N/A" on the NRC Form 426A in the space for the Patent Counsel's signature. If there is a possibility that there is disclosure of developments of an inventive nature, the contracting officer shall request assistance from the NRC Assistant General Counsel for Administration, Office of the General Counsel, on FTS 49-21553 or (301)49-21553.

### Security Review (2)

Should a report of sensitive unclassified or classified work be required, the NRC contact must work with the NRC Division of Security to establish the appropriate procedures and inform the contractor of these procedures through the contracting officer. The standards for marking and handling these reports are given in Management Directive 12.2, NRC Information Security Program (formerly MC 2101).

### Copyright Review (3)

Copyrighted material must not appear in NRC-sponsored publications without written permission from the copyright holder. See NUREG-0650, Revision 1, Section 3.4, for information about obtaining copyright permission.

## Color Printing (D)

Regulations issued by the Joint Committee on Printing (JCP) restrict the use of color in printed materials to those uses that are of demonstrable value. JCP regulations specify that "Demonstrably valuable multicolor printing..." includes the following categories:

- Maps and technical diagrams where additional color is necessary for clarity. (a)
- Object identification (medical specimens, diseases, plants, flags, uniforms, etc.). (b)
- Safety programs, fire prevention, savings bonds programs, and competitive areas of personnel recruiting. (c)
- Areas wherein clearly identifiable savings in costs can be soundly predicated on multicolor use. (d)
- Printing for programs required by law, whose relative success or failure is in direct ratio to the degree of public response, and where that response can be logically attributable to the number of colors planned and the manner in which they are proposed to be used. (e)
- Color for promotional or motivational purposes such as programs concerning public health, safety, consumer benefits; or to encourage utilization of Government facilities such as programs for Social Security, Medicare, and certain areas of need for veterans would come within this category. (f)

The regulations indicate that the following categories do not meet the "demonstrable value" criteria.

- Printed items wherein additional color is used primarily for decorative effect. (a)
- Printed items where additional color is used primarily in lieu of effective layout and design. (b)
- Printed items where additional color is used excessively, i.e., four colors when two or three will fulfill the need; three colors when two are adequate; two colors when one is adequate. (c)
- Printed items wherein the inclusion of multicolor does not reflect careful, competent advanced planning which recognizes the contribution that the use of color is expected to make to the ultimate end-purpose. (d)

## Color Printing (D) (continued)

If color printing is anticipated when the statement of work or Standard Order for DOE work is being prepared, contact the Regulatory Publications Branch, DFIPS. Prior approval must be granted by the Director of DFIPS. If a requirement for color printing arises as the report is being prepared, submit a written justification for its use to the Director of DFIPS.

## Microfiche (E)

NRC contractors and DOE Laboratories submitting microfiche with reports must submit a hard copy of each microfiche, include headers on each microfiche, as shown in Exhibit 3, and conform to the following NRC specifications.\*

1. Microfiche must conform to either the 24/98 format for source documents with 14 columns and 7 rows (reduction ratio of 1:24) or the 48/270 format for computer output microfilm with 18 columns and 15 rows (reduction ratio of 1:48).
2. The microfiche sheet must be standard 105 mm x 148 mm.
3. The microfiche must be either a silver-halide master or a black or blue-black diazo placed in acid free envelopes.
4. The microfiche must contain headers as shown in the sample in Exhibit 3. Specifically, the first block of the header must contain the NUREG number (include volume or revision, if applicable), the contractor identification number, and the classification (e.g., unclassified, proprietary). The second block must contain the description of the microfiche and may include the contractor name. The third block must contain the publication date and sheet identification.
5. The header information must be eye readable on a clear background.
6. A foldout page must be microfilmed in sections if the page is too large to be microfilmed in a double frame. No less than 25 mm overlap of original material is acceptable.

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\*With the exception of items 3, 4, and 8, these specifications are consistent with the American National "Standard for Micrographics-Microfiche, ANSI/AIIM MS5-1985." Copies of this Standard are available from the American National Standards Institute, ATTN: Sales Department, 1430 Broadway, New York, NY 10018 (212)354-3300, or from the Association for Information and Image Management, ATTN: Publications Section, 1100 Wayne Avenue, Silver Spring, MD 20910 (301)598-8202.



### Microfiche (E) (continued)

7. The first frame must be blank (on the first sheet only), and the second frame must contain the National Institute of Standards and Technology's Reference Material resolution target in Microcopy Test Charts (NBS SRM 1010A).
8. Jacketed microfiche is unacceptable.

### Disclaimer (F)

The following notice will be added by the Regulatory Publications Branch, DFIPS, before the printing process on the inside front cover:

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights.

The following additional statement, "The views expressed in this report are not necessarily those of the U.S. Nuclear Regulatory Commission" will be printed below the standard disclaimer, if appropriate. Other qualifying statements may be added, if needed.

### Availability Information (G)

#### Reference Availability (1)

Reports or other documents referenced in text, reference sections, bibliographies, and appendixes of unclassified regulatory and technical reports in the NUREG series must be available to the public either in the public domain (as in a public library, at the Government Printing Office (GPO), at the National Technical Information Service (NTIS), or at other reference or sales outlets) or in the NRC Public Document Room (PDR). This means that references should not be made to personal communications and interviews, unpublished information and information with restricted distribution (e.g.,



## Availability Information (G) (continued)

proprietary, national security, official use only, etc.). If the unretrievable information is important and unrestricted, it can be quoted in the text, in footnotes, or in appendixes. If credit is due to individuals, they can be mentioned in the text or in an acknowledgement section. Availability may be stated collectively for all entries.

Guidelines for developing and presenting reference material are provided in NUREG-0650, Revision 1.

### Report Availability (2)

Most final reports are sold by the GPO and NTIS. A statement indicating this availability is added to each report, as appropriate, by the Regulatory Publications Branch, DFIPS, before the report is printed.

Draft reports for which comments are requested are typically announced in the *Federal Register* as being available from the NRC. These reports are not sold at GPO or at NTIS.

## Forms (H)

### Bibliographic Data Sheet (NRC Form 335) (1)

All published NRC reports must include an NRC Form 335 as the final right-hand page of the manuscript. Instructions for completing the form appear on the back of the form. A completed Form 335 must be submitted to the Regulatory Publications Branch, DFIPS, with the camera-ready copy of the report. Exhibit 2A shows a completed Form 335.

### Release to Publish Unclassified NRC Contractor, Consultant, or Conference Proceedings Reports (NRC Form 426A) (2)

The NRC contact must submit a completed NRC Form 426A (Exhibit 1) with the camera-ready copy of the report to the Regulatory Publications Branch, DFIPS. NRC Form 426A must be signed by the staff member designated by the appropriate Office Director.

## Printing and Reprinting (I)

The Regulatory Publications Branch, DFIPS, will review the camera-ready report submitted for printing for its adherence to the standards and requirements set forth in this directive and handbook, as well as any relevant guidelines from NUREG-0650, Revision 1. Unsatisfactory manuscripts will be returned to the NRC contractor for appropriate action.

Submit a memorandum requesting a **reprint** to the Director, DFIPS, for approval. Include with the request a written justification and the approval of the Office Director of designee for reprinting. Send address labels for recipients of the reprinted copies, if appropriate.

## Distribution (J)

Distribution arrangements will be made by the Regulatory Publications Branch, DFIPS, for all copies of unclassified formal contractor reports in accordance with instructions on NRC Form 426A (Exhibit 1). The Regulatory Publications Branch, DFIPS, will also arrange automatic distribution of these reports to the NRC NUDOCS, the NRC PDR, NTIS, GPO, and the Depository Library Service.

Distribution of sensitive unclassified and classified reports will be made by the NRC sponsoring office on a case-by-case basis.

## Part III

# International Agreement Reports

### Background and Rationale (A)

NRC has cooperative nuclear safety research programs that involve either or both foreign governments and organizations and U.S. industry. These programs include monetary contributions, information exchange, and comments on program plans and results as authorized in 42 U.S.C. 5801. To this end, international and U.S. industry agreements have been signed that provide for transmitting unclassified technical information from foreign participants to NRC. These procedures apply only to NRC-managed work.

The interests of all NRC international nuclear safety research program participants are served best by formal dissemination of information on these programs or codes developed for or in cooperation with NRC.

### Identification Information (B)

#### Cover and Title Page (1)

These will contain a title, subtitle (if appropriate), authors, performing organization, and NRC office sponsoring the project. The cover and title page will be prepared by the Regulatory Publications Branch, DFIPS.

#### NRC Report Number (2)

Each report must be identified by an NRC-controlled alphanumeric number as the prime number unique to that report. The centralized document control system for unique identification is maintained by DFIPS. Numbers may be obtained by calling Regulatory Publications Branch at FTS 49-24954 or (301)49-24954.

The NRC identification number will have the form:

- NUREG/IA-0000

## Identification Information (B) (continued)

### NRC Report Number (2) (continued)

where IA indicates "international agreement." The foreign participant's report number, if any, may be inserted below the NUREG number on the cover, if desired.

When a report consists of more than one volume or binding or is issued in more than one edition, an appropriate volume, number, supplement, part, addendum, or revision designation must appear below the report number and the foreign participant's report number, if any.

### Previous Reports in Series (3)

If the report being prepared is one in an ongoing series, list all previous reports in the series. Include report numbers and issuance dates. Place this list on the back of the title page.

## Report Organization and Components (C)

The organization and components of cooperative agreement reports vary somewhat, depending on their purpose and scope. Each of these reports must include an abstract of 200 words or less that appears on a separate page before the table of contents. The abstract must also appear on the Bibliographic Data Sheet, Form 335 (Exhibit 2A). Instructions for completing the form appear on the back (Exhibit 2B). Guidance on the special writing requirements for preparing abstracts appears in Section 5.5 of NUREG-0650, Revision 1.

## Availability Information (D)

### References and Bibliographies (1)

Reports or other documents referenced in text, reference sections, bibliographies, and appendixes of unclassified regulatory and technical reports in the NUREG series must be available to the public either in the public domain (as in a public library, at GPO, at NTIS, or at other reference or sales outlets) or in the NRC PDR.

This means that references should not be made to personal communications, interviews, and unpublished information with restricted distribution (e.g., proprietary, national security, official use only). If the unretrievable information is important and unrestricted, it

## Availability Information (D) (continued)

### References and Bibliographies (1) (continued)

can be quoted in the text, in footnotes, or in appendixes. If the title of a document containing proprietary information is unclassified, it can also be quoted in the text, in a footnote, or in appendixes. If credit is due to individuals, they can be mentioned in the text or in an acknowledgement section. Availability may be stated collectively for all entries. Guidelines for developing and presenting reference material are provided in NUREG-0650, Revision 1.

### Report Availability (2)

These reports will be made available for sale by GPO and NTIS.

## Disclaimer (E)

The following notice will be added by the Regulatory Publications Branch, DFIPS, on the inside front cover prior to printing.

### NOTICE

This report was prepared under an international cooperative agreement for the exchange of technical information. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product, or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights.

## Forms (F)

### Bibliographic Data Sheet (NRC Form 335) (1)

A typed NRC Form 335 (Exhibit 2A) must be submitted with the camera-ready copy to the Regulatory Publications Branch, DFIPS, as the final right-hand page.

## **Forms (F) (continued)**

### **Release to Publish Unclassified NRC Contractor, Consultant, or Conference Proceedings Reports (NRC Form 426A) (2)**

An NRC Form 426A (Exhibit 1) must be completed and signed by the Office Director or designee and submitted with the camera-ready copy of the report to the Regulatory Publications Branch, DFIPS.

## **Classified or Sensitive Unclassified Information (G)**

The NRC contact should refer to Management Directive 12.2, NRC Information Security Program (formerly MC 2101), or call the Division of Security for answers to questions about the status of classified or sensitive unclassified information in NUREG/IA reports.



## Part IV

### Books

These guidelines apply to books written by contractors and grantees that are printed by NRC. See Section V below for guidance on publications, including books, by grantees.

#### Definition (A)

A book refers to a publication intended as a permanent reference or as a textbook or major critical review of a technical or regulatory topic.

#### Format (B)

Books are usually 6 x 9 inches in trim size, but size will be based on such requirements as ease of use and legibility for graphics, foldouts, and the like. The binding (casebound or paperback) will be chosen according to the need for durability. Additional guidance on manuscript preparations can be found in the U.S. Government Printing Office *Style Manual* and in *The Chicago Manual of Style* (13th edition). Refer also to NRC's "Publishing Documents in the NUREG Series" (NUREG-0650, Revision 1).

The contractor shall submit to the NRC project manager the typeset (photocomposed) manuscript suitable for printing. The NRC contact shall submit the manuscript to the Chief, Regulatory Publications Branch, DFIPS, where it will be reviewed for adherence to the standards set forth and referenced in this directive and handbook. The manuscript will also undergo a printing acceptability review by the Printing, Audiovisual, and Mail Services Branch, DFIPS. Unsatisfactory manuscripts will be reported to the NRC contact for appropriate contractual action by the NRC contracting officer or, in the case of Government agency or interagency agreement work, the publications manager of the performing organization.

### **Format (B) (continued)**

DFIPS will approve design of the cover and title page to contain the appropriate information concerning:

- (1) author names(s)
- (2) organizational identification
- (3) public availability and sales.

All books must include a comprehensive subject index of the book's contents, unless it is made up almost exclusively of graphical or tabular matter. See NUREG-0650, Revision 1, or *The Chicago Manual of Style* (13th ed.) for guidelines on creating an index.

### **NK Document Number (C)**

Each book must be identified by an NRC-controlled alphanumeric code unique to that book. The alphanumeric code will have the form: NUREG/CR for contractor-prepared books and NUREG/GR for grantee-prepared books.

When a book consists of more than one volume or binding, or is issued in more than one edition, an appropriate volume, number, supplement, part, addendum, or revision designation must appear directly below the document number.

Numbers are assigned by the Regulatory Publications Branch, DFIPS. The number may be obtained in advance of the time that the manuscript is submitted to DFIPS for printing by calling the Regulatory Publications Branch at FTS 49-24954 or (301)49-24954. The DFIPS staff will arrange to meet with the NRC contact for the project and when appropriate, the author(s), to discuss the publication production requirements and schedule for the book.

### **Availability of Reference Materials (D)**

The guidelines for availability of reference material applicable in Section II.G. of this handbook also apply to contractor-prepared and grantee-prepared books published by NRC.

## Reviews (E)

### Peer (1)

NRC published books must undergo peer review from experts within and outside NRC. Peer review refers to a critical evaluation of the technical contents of a publication. These reviews may be conducted anonymously by reviewers from the author's own or a related field who are totally independent of the work leading to the manuscript.

Reviewers should be chosen by the NRC Office sponsoring the book from the potential audience for the publication and should provide an independent judgment about whether the publication successfully accomplishes the author's aims. Peer reviewers should be chosen for their expertise in the subject matter of the book. They may come from academia, the National Laboratories, other Federal agencies, or from other research institutes or consulting firms. They may be identified from the membership rolls of professional societies, ANSI subcommittees, and the like. Do not choose more than one reviewer from the same organization.

When assessing potential peer reviewers, screen for demonstrated competence and achievement in a specific discipline or research specialty. Assess competence based on the quality of research accomplished, publications in refereed journals, and other significant technical activities, achievements, and honors. Consider the judgement, perspective, and objectivity of reviewers. Consider also the personal integrity of those selected to ensure the confidentiality of information reviewed. Finally, avoid real or perceived conflicts of interest. Do not choose reviewers who are licensees or consultants to licensees nor reviewers from intervenor groups. Likewise, do not choose reviewers who may profit financially from influencing the information reviewed.

The services of reviewers from outside the agency may be acquired through consultant services contracts. The decision as to whether to reimburse peer reviewers should be made on a case-by-case basis, however. Recognize that reimbursing peer reviewers may give the appearance of a conflict of interest, suggesting to some that because NRC is paying for this service, the agency will seek only reviewers thought to be favorably disposed to the material reviewed. One way to offset this impression is to seek recommendations for peer reviewers from independent organizations, like the American Physics Society,

## Reviews (E) (continued)

### Peer (1) (continued)

the American Nuclear Society, the American Society of Mechanical Engineers, or appropriate universities. Reimbursement could then be made to the organization.

### Copyright (2)

Copyrighted material must not be reproduced in NRC books without the written permission of the copyright holder. See NUREG-0650, Revision 1, Section 3.4, for information about obtaining copyright permission.

### Security (3)

Based on knowledge of the information sources used, the author is responsible for ensuring that the manuscript does not contain classified or other access-controlled information. If there is uncertainty with respect to the security classification of a reference document or manuscript, an authorized classifier or the NRC Division of Security should be contacted for assistance. See also Management Directive 12.2, NRC Information Security Program (formerly MC 2101).

### Patent (4)

The patent-review guidelines for draft and final formal reports specified in Section II.C of this handbook also apply to contractor- and grantee-prepared books.

## Publishing Authorization Form (F)

A completed NRC Form 426A (Exhibit 1), signed by the Office Director or designees or by a DOE National Laboratory-authorized official if the publication is done for the Office of Nuclear Regulatory Research, if applicable, must be submitted to DFIPS with the book manuscript.

## Disclaimers (G)

The following standard U.S. Government notice will be added prior to printing:

## Disclaimers (G) (continued)

This document was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product, or process disclosed in this document, or represents that its use by such third party would not infringe privately owned rights.

The following additional statement may be printed below the standard disclaimer, if authorized by the NRC Office Director or designee.

This document was prepared under U.S. Nuclear Regulatory Commission (NRC) Contract No. \_\_\_\_\_. The opinions, findings, conclusions, and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the NRC.

Other qualifying statements may be added, if needed.

## Printing (H)

Book manuscripts must be submitted by DFIPS to GPO for printing. The printing cycle requires from 6 to 8 weeks.

## Distribution and Sales (I)

Distribution will be arranged by the DFIPS staff in accordance with distribution guidance provided by the NRC project manager on NRC Form 426A (Exhibit 1).

Free distribution should be limited to those who contributed materially to the book or to those for whom the book's subject matter bears directly on their work at or for NRC.

DFIPS will arrange to make the book available for sale through GPO. DFIPS will also arrange to have it made available at the NRC PDR and the GPO Depository Library Program.

## Part V

# Grant Publications

### Background and Rationale (A)

The Nuclear Regulatory Commission funds grants for educational and nonprofit institutions, State and local Governments, and professional societies for the expansion, exchange, and transfer of knowledge and ideas pursuant to the Atomic Energy Act of 1954, as amended, Sections 31.a. and 141.b.

### Publication of Results (B)

The grant will specify the publication requirements of the award. Grant results may be published by NRC, by the grantee, or in the open literature.

#### Publication by NRC (1)

This publication option must be governed by the guidelines specified in Part I of this handbook for reports or in Part III of this handbook for books, as appropriate. See Identification of Grant Publications in the paragraphs under V.C.

#### Publication by a Grantee (2)

When the grant specifies that the grantee is to publish the results, the grantee must grant to the Government a royalty-free, nonexclusive, irrevocable license to reproduce, translate, publish, use, and dispose of all copyrightable material first produced or composed in the grantee's performance under the grant.

#### Open Literature Publication by Grantee (3)

When the grantee submits journal articles for publication, each must be accompanied by the following statement:



## Publication of Results (B) (continued)

### Open Literature Publication by Grantee (3) (continued)

The submitted manuscript has been authored by a grantee of the U.S. Government under Grant No. \_\_\_\_\_. Accordingly, the U.S. Government has a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for U.S. Government purposes.

All open literature publications prepared under this grant must contain the following statement:

This paper was prepared with the support of the U.S. Nuclear Regulatory Commission (NRC) under Grant No. \_\_\_\_\_. The opinions, findings, conclusions, and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the NRC.

Should the grantee be requested by the journal or other publisher to transfer the copyright, the grantee author will respond to the journal or other publisher in writing in accord with the sample letter shown as follows:

Dear (Publisher's Name):

We recently received a document for signature assigning copyright and republication rights in the submitted article (title) to (name of publication). This letter is offered in lieu of the document as a means of completing the transfer of ownership. Accordingly, we hereby expressly transfer and assign our rights of ownership in the above-cited work to (name of publisher).

You are advised, however, that the above assignment and any publication or republication of the above-cited work is subject to the following Government rights:

The submitted manuscript has been authored by a grantee of the U.S. Government under grant No. \_\_\_\_\_. Accordingly, the U.S. Government has a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for U.S. Government purposes.

Sincerely,

## Publication of Results (B) (continued)

### Reprints of Open Literature Publications (4)

When any article resulting from work under the grant is published in a scientific, technical, or professional journal, two reprints of the publication must be sent to the cognizant NRC Program Officer, clearly labeled with the grant number and other appropriate identifying information.

## Identification of Grant Publications (C)

Each report or book published by NRC that results from a grant must be identified by an alphanumeric number, as follows:

- NUREG/GR-0000

When the publication consists of more than one volume, number, supplement, part, or binding, or is issued in more than one edition, an appropriate volume, supplement, part, or revision designation must appear below the NUREG/GR number.

Numbers may be obtained from the Regulatory Publications Branch at FTS 49-24954 or (301)49-24954.

## Pre-Publication Reviews (D)

The U.S. Congress characterizes the relationship between a Federal agency and a grant recipient as one in which "the recipient can expect to run the project without agency collaboration, participation, or intervention as long as it is run in accordance with the terms of the instrument...."

## Glossary\*

- Book.** A publication intended as a permanent reference or textbook or as a major critical review of a technical or regulatory topic. It may be *casebound* (hardback) or paperbound.
- Camera-ready copy.** Pages ready for printing by the offset printing process. This is a colloquial term used even though the printing process may not involve the so-called copy camera (see also *reproducible masters*).
- Casebound.** Term denoting a book with a hard cover.
- Compose.** To arrange letters, in type or film, for printing. Usually synonymous with *typesetting*.
- Composition.** The process of setting type by hot-metal casting, phototypesetting, or electronic character generating devices (e.g., computers) for the purpose of producing *camera copy*, negatives, a plate, or image to be used in the production of *printing* or microform.
- Contractor report.** Record of work done (a report) prepared in accordance with the provisions of a contract or under or pursuant to an interagency agreement.
- Copyright.** A form of protection provided by the laws of the United States (Title 17, U.S. Code), to the authors of "original works of authorship" including literary, dramatic, musical, artistic, and certain other intellectual works. This protection is available to both published and unpublished works. Copyrighted material may not be reproduced without the permission of the author or publisher.
- Disseminate.** To announce the publication of reports and make them available for free distribution, sale, or copying.

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\*Words in *italics* in definitions are also defined in the glossary.

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## Glossary (continued)

**Distribute.** To dispense reports to specific organizations and individuals to ensure their participation in the regulatory process and support of research and technological investigations. Such distribution may be accomplished by the use of standard distribution data banks established and maintained by the Division of Information Support Services, Office of Information Resources Management, at the request of the originating office or region.

**Documentation.** Classification and associated markings required for classified or sensitive unclassified documents, the NRC report number unique to the report, title (and subtitle, if any), author or correspondent (if any), organization identification and contract number (or FIN number), date, and availability.

**Edition.** All copies of a book printed from the same type. Edition also refers to format, such as *paperback*, *casebound*, or to the text, as revised, expanded, and so on. If extensive revisions have been made to the text and the book is reprinted, the revised version is the new edition.

**Grant.** A legal instrument which defines the relationship between the Government and a recipient for the transfer of money, property, services or anything of value to the recipient for the accomplishment of a public purpose of support or stimulation authorized by law. A grant presumes a limited amount of involvement by the agency in the performance by the recipient.

**Grant Report.** A record of work done prepared in accordance with the provisions of *grant*.

**Index.** An alphabetical list of all major topics discussed in a *book*. It cites the page numbers where each topic can be found. The index comes as the last section of a book.

**International agreement.** Cooperative nuclear safety research programs that involve either or both foreign governments and organizations and U.S. industry. Such involvement, authorized under 42 U.S.C. 5801, includes monetary contributions, information exchanges, and comments on program plans and results.

**International agreement report.** A record of work done prepared in accordance with the provisions of an *international agreement*.

## Glossary (continued)

- Manuscript.** A handwritten, typewritten, or *composed* version of a document, as distinguished from a printed copy.
- NRC project manager.** The NRC staff member responsible for the work performed by consultants or contractors and their subcontractors, or for work performed under or pursuant to an interagency agreement.
- Paperback.** A *book* with a flexible paper cover.
- Peer review.** A critical evaluation of the technical contents of a publication. These reviews are conducted by reviewers from the author's own or a related field who are totally independent of the work leading to the *manuscript*. Reviewers should be chosen from the potential audience for the publication and should provide an independent judgment about whether the publication successfully accomplishes the author's aims.
- Photocomposition.** *Typesetting* performed when photosensitive paper or film is exposed to light in the form of letters and characters. Photocomposition is to be distinguished from hot metal and typewriter *composition*.
- Printing.** As defined by the Joint Committee on Printing, includes and applies to the process of *composition*, platemaking, presswork, collating, and microform; the equipment used in such processes; or the end product produced by such processes and equipment.
- Proprietary information.** Trade secrets; privileged or confidential research, development, commercial or financial information, exempt from mandatory disclosure under 10 CFR Part 2 (Sections 2.740 and 2.790) and under 10 CFR Part 9 (Section 9.17); and other information submitted in confidence to the NRC by a foreign source and determined to be unclassified by the NRC.
- Public domain.** Materials on which *copyright* never existed, such as U.S. Government publications, or on which copyright has expired.
- Publicly available documents.** Information (reports and references) that is available in the NRC Public Document Room (PDR) for public inspection and copying or available in the *public domain*.

## Glossary (continued)

**Reproducible masters.** *Camera-ready copy* that includes (1) originals of line drawings (or prints that can be copied); (2) glossy prints of black and white photographs; (3) original *typeset* or printed text, tables, cover, title page, contents, and abstract; or (4) other forms of the materials that a printer can reproduce.

**Trim size.** The final size of the whole page, margins included.

**Typesetting.** The placement of type on a page (letters, numbers, and other characters) in conformance with specific style and layout instructions.

**Unique identification.** NRC identification (NUREG number) used on a report and its attachments, revisions, and supplements, that is not used on any other publication.



Unclassified Contractor and Grantee  
 Publications in the NUREG Series  
 Part 1 - Publications, Mail, and Information Disclosure  
 Handbook 3.8 Exhibits

Exhibit 1

NRC FORM 428A (2-89) NRCM 1102, 3203		U.S. NUCLEAR REGULATORY COMMISSION		1. REPORT NUMBER (If any) NUREG/CR-5627 BNL-NUREG-52257 <small>Obtain from the Technical Publications Section on 452-7953</small>	
RELEASE TO PUBLISH UNCLASSIFIED NRC CONTRACTOR, CONSULTANT, OR CONFERENCE PROCEEDINGS REPORTS <small>(Please Type or Print)</small>					
2. TITLE AND SUBTITLE (State in full as shown on description) Alternate Modal Combination Methods in Response Spectrum Analysis				3. FIN OR GRANT NUMBER <small>(Do not list DOE contract number)</small> A-3955	
4. AUTHORS (If more than three, name first author followed by "and others") P. Berler and others					
5. CONTRACTOR Brookhaven National Laboratory Department of Nuclear Energy		MAILING ADDRESS (Number and Street, Ctr. Str. and ZIP Code) Building 129 Upton, NY 11973		TELEPHONE NUMBER 666-2447	
6. TYPE OF DOCUMENT (Check appropriate box)					
<input checked="" type="checkbox"/> A. TECHNICAL REPORT					
<input checked="" type="checkbox"/> FORMAL <input type="checkbox"/> LETTER REPORT					
<input type="checkbox"/> B. CONFERENCE PAPER (If so, indicate issue (1), (2), and (3) below)					
(1) TITLE OF CONFERENCE PAPER: (2) DATE(S) OF CONFERENCE: (3) LOCATION OF CONFERENCE:					
<input type="checkbox"/> C. OTHER (Indicate type of item)					
7. DISTRIBUTION (For NRC distribution codes, provide mailing address for general distribution not covered by NRC code. If NRC code, provide name of the code with its symbol, provide complete mailing address.) RA 50 copies: Judy Liu, Technical Information Division, Bldg. 477B, Brookhaven National Laboratory, Upton, NY 11973 10 copies: Nilesh Chokshi, RES, NU/S-217					
8. CERTIFICATION (ANSWER ALL QUESTIONS)					
YES	NO	<input checked="" type="checkbox"/> A. REFERENCE AVAILABILITY - Is all material referenced in this report available to the public either through a public library, the Government Printing Office, the National Technical Information Service, or the NRC Public Document Room? <small>If no, list the specific availability of a reference document with the reference listing below.</small> SPECIFIC AVAILABILITY			
		<input checked="" type="checkbox"/> B. COPYRIGHTED MATERIAL - Does this report contain copyrighted material? <small>If yes, attach a letter of release from the source that owns the copyright.</small>			
		<input checked="" type="checkbox"/> C. COMPUTER CODES - Does this report contain a computer code? <small>If yes, does it comply with the standards in NRC Manual Chapter 0501, "Planning and Control of Automatic Data Processing (ADP) Resources"?</small>			
		<input checked="" type="checkbox"/> D. PATENT CLEARANCE - Does this report require patent clearance? <small>If yes, the NRC Patent Counsel must signify clearance by signing below.</small> NRC PATENT COUNSEL (Type or Print Name)      SIGNATURE      DATE			
		<input checked="" type="checkbox"/> E. INFORMATION REQUESTS - Does this report contain any questionnaires, surveys, or data collection requests?			
		<input checked="" type="checkbox"/> F. LICENSING REQUIREMENTS - Does this report impact requirements on licensees?			
9. AUTHORIZATION					
A. DOE LAB AUTHORIZED OFFICIAL (If applicable) <small>(Type or print name)</small> R.A. Bari		SIGNATURE <i>R.A. Bari</i>		DATE 9/25/90	
B. NRC RESPONSIBLE STAFF MEMBER <small>(Type or print name)</small> A. Murphy		SIGNATURE <i>Andrew J. Murphy</i>		OFF/DIV 442-3860	TELEPHONE NLS217A
				MAIL STOP 10/10/90	DATE

Unclassified Contractor and Grantee  
Publications in the NUREG Series  
Part 1 - Publications, Mail, and Information Disclosure  
Handbook 3.8 Exhibits

## Exhibit 2A

<p>NRC FORM 325 (7 89)</p> <p style="text-align: center;">U.S. NUCLEAR REGULATORY COMMISSION</p> <p style="text-align: center;"><b>BIBLIOGRAPHIC DATA SHEET</b></p> <p style="text-align: center;"><i>(See instructions on the reverse)</i></p>	<p>1. REPORT NUMBER <i>(As adopted by NRC. Add Vol., Suppl., Rev., and Abbreviation Numbers, if any.)</i></p> <p style="text-align: center;">NUREG/CR-5603 EGG-2607</p> <p>3. DATE REPORT PUBLISHED <small>MONTH      YEAR</small></p> <p style="text-align: center;">October      1990</p> <p>4. FIN OR GRANT NUMBER B5699</p> <p>6. TYPE OF REPORT Technical</p> <p>7. PERIOD COVERED <i>(Include Dates)</i></p>
<p>2. TITLE AND SUBTITLE</p> <p style="text-align: center;">Pressure-Dependent Fragilities for Piping Components: Pilot Study on Davis-Besse Nuclear Power Station</p>	
<p>5. AUTHOR(S)</p> <p style="text-align: center;">D.A. Wesley, T.R. Kipp, D.K. Nakaki, H. Hadidi-Tamjed</p>	
<p>8. PERFORMING ORGANIZATION - NAME AND ADDRESS <i>(If NRC, provide Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address. If contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.)</i></p> <p>ABB Impell Corporation 27401 Los Altos, Suite 480 Mission Viejo, CA 92691</p> <p style="text-align: center;">Under contract to: Idaho National Engineering Laboratory EG&amp;G Idaho, Inc. Idaho Falls, ID 83415</p>	
<p>9. SPONSORING ORGANIZATION - NAME AND ADDRESS <i>(If NRC, give "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.)</i></p> <p style="text-align: center;">Division of Safety Issue Resolution Office of Nuclear Regulatory Research U.S. Regulatory Commission Washington, D.C. 20555</p>	
<p>10. SUPPLEMENTARY NOTES</p>	
<p>11. ABSTRACT <i>(200 words or less)</i></p> <p>The capacities of four, low-pressure fluid systems to withstand pressures and temperatures above the design levels were established for the Davis-Besse Nuclear Power Station. The results will be used in evaluating the probability of plant damage from Interfacing System Loss of Coolant Accidents (ISLOCA) as part of the probabilistic risk assessment of the Davis-Besse nuclear power station undertaken by EG&amp;G Idaho, Inc. Included in this evaluation are the tanks, heat exchangers, filters, pumps, valves, and flanged connections for each system. The probabilities of failure, as a function of internal pressure, are evaluated as well as the variabilities associated with them. Leak rates or leak areas are estimated for the controlling modes of failure. The pressure capacities for the pipes and vessels are evaluated using limit-state analyses for the various failure modes considered. The capacities are dependent on several factors, including the material properties, modeling assumptions, and the postulated failure criteria. The failure modes for gasketed-flange connections, valves, and pumps do not lend themselves to evaluation by conventional structural mechanics techniques and evaluation must rely primarily on the results from ongoing gasket research test programs and available vendor information and test data.</p>	
<p>12. KEY WORDS/DESCRIPTORS <i>(List words or phrases that will assist researchers in locating the report.)</i></p> <p>pressure-dependent fragilities piping components Interfacing System Loss of Coolant Accidents (ISLOCA) probabilistic risk assessment Davis-Besse Nuclear Power Station</p>	<p>13. AVAILABILITY STATEMENT Unlimited</p> <p>14. SECURITY CLASSIFICATION <i>(If not known)</i> Unclassified <i>(If not known)</i> Unclassified</p> <p>15. NUMBER OF PAGES</p> <p>16. PRICE</p>

## Exhibit 2B

DO NOT PRINT THESE INSTRUCTIONS AS A PAGE IN THE NUREG REPORT

### INSTRUCTIONS

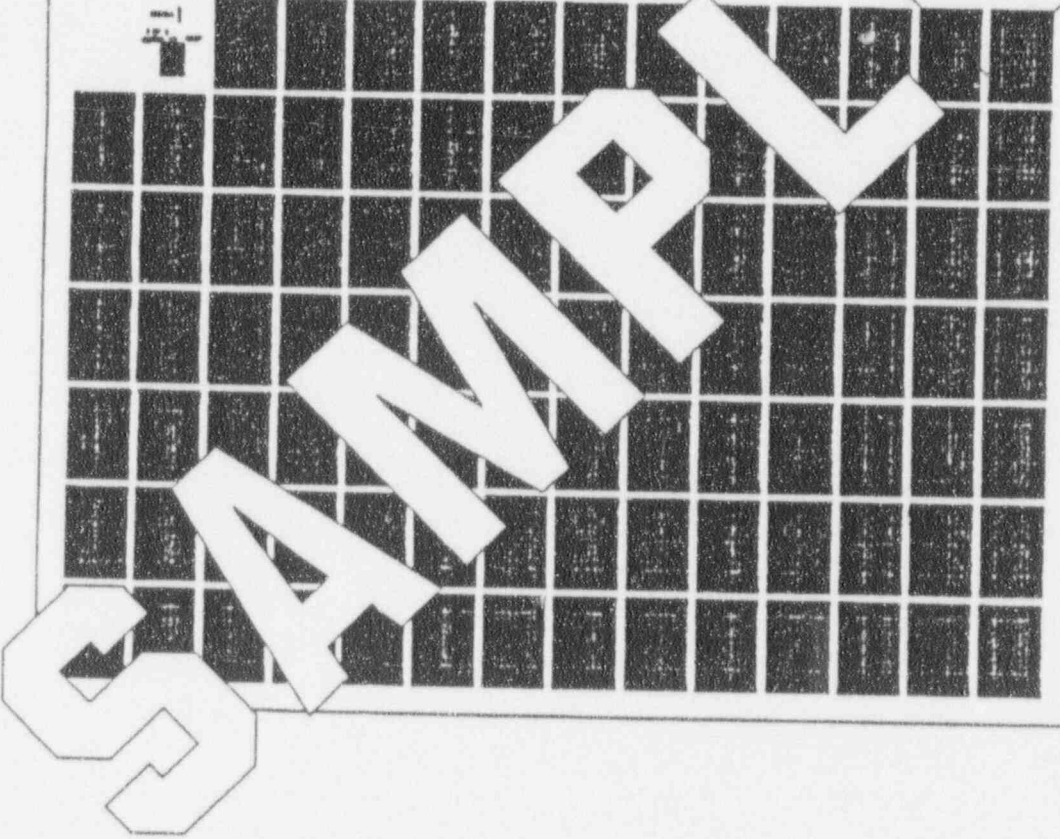
NRC FORM 335, BIBLIOGRAPHIC DATA SHEET, IS BASED ON GUIDELINES FOR FORMAT AND PRODUCTION OF SCIENTIFIC AND TECHNICAL REPORTS, ANSI Z39.18-1967 AVAILABLE FROM AMERICAN NATIONAL STANDARDS INSTITUTE, 1430 BROADWAY, NEW YORK, NY 10018. EACH SEPARATELY BOUND REPORT—FOR EXAMPLE, EACH VOLUME IN A MULTIVOLUME SET—SHALL HAVE ITS UNIQUE BIBLIOGRAPHIC DATA SHEET.

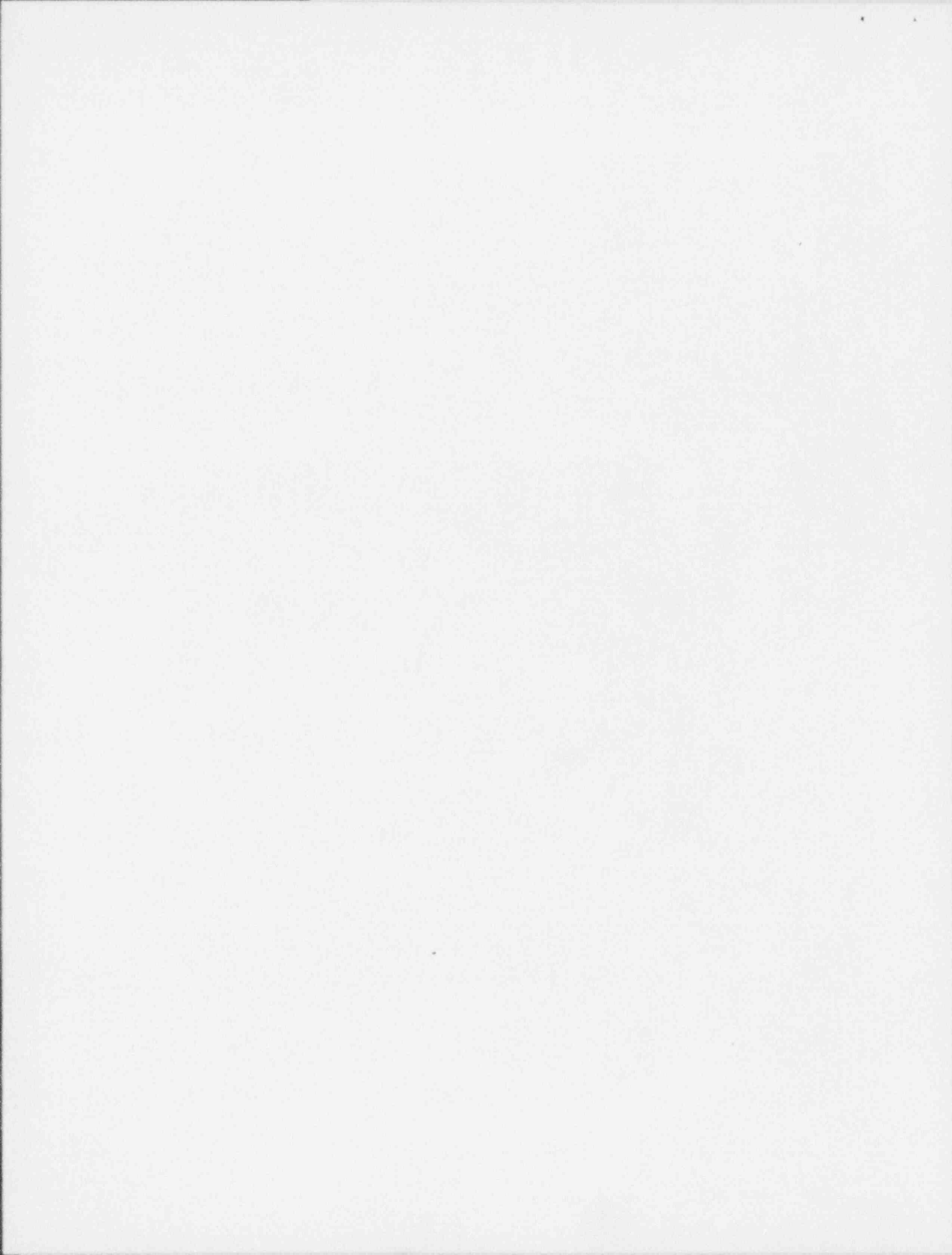
1. **REPORT NUMBER.** Each individually bound report must carry a unique alphanumeric designation (NUREG) assigned by the Regulatory Publications Branch, Division of Freedom of Information and Publications Services, in accordance with American National Standard ANSI Z39.23-1983, Standard Technical Report Number (STRN). Use uppercase letters, Arabic numerals, slashes, and hyphens only, as in the following examples: NUREG-0100, NUREG/CP-0010, NUREG/CR-0100, and NUREG/BR-0010. For reports in a series add Vol., Supp., Rev., and Addendum, when necessary. Add contractor cross-reference identification number (if any) below NUREG-series number, e.g., PNL-XXXX, SANDXX-XXXX, SAI-XXXX.
2. **TITLE AND SUBTITLE.** Title should indicate clearly and briefly the subject (coverage) of the report; including any subtitle to the main title. When a report is prepared in more than one volume, repeat the primary title, add volume number and include subtitle for the specific volume. Use upper and lower case letters, but capitalize computer code names. Do not use acronyms and initialisms in titles; may be added in parenthesis.
3. **DATE REPORT PUBLISHED.** Each report must carry a date indicating month and year published.
4. **FIN OR GRANT NUMBER.** Insert the FIN or grant number under which report was prepared.
5. **AUTHOR(S).** Give name(s) in conventional order (e.g., John R. Doe, J. Robert Doe). List author's affiliation if it is different from the performing organization.
6. **TYPE OF REPORT.** State draft, final, preliminary, topical, technical, regulatory, annual, quarterly, etc.
7. **PERIOD COVERED.** Add inclusive dates.
8. **PERFORMING ORGANIZATION NAME AND MAILING ADDRESS.** Give name, street, city, state, and ZIP code. List no more than two levels of an organizational hierarchy. Display the name of the organization exactly as follows: Division, Office, Organization or Government agency, and address.
9. **SPONSORING ORGANIZATION.** If NRC, type "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.
10. **SUPPLEMENTARY NOTES.** Enter information not included elsewhere but useful, such as: Prepared in cooperation with ... Presented at conference of ... To be published ... Docket No. ... When a report is revised, indicate whether the new report supersedes or supplements the older report.
11. **ABSTRACT.** Include a brief (200 words or less) factual summary of the most significant information contained in the report. If the report contains a significant bibliography or literature survey or multiple volumes, mention it here. Abstract is to be prepared by author or project manager.
12. **KEY WORDS/DESCRIPTORS.** Select from the Energy Data Base Subject Thesaurus, DOE/TIC-700R R-5, the proper authorized terms that identify the major concept of the research, and are sufficiently specific and precise to be used as index entries for cataloging.
13. **AVAILABILITY STATEMENT.** Denote public releasability, for example "unlimited", or limitation for reasons other than security.
14. **SECURITY CLASSIFICATION.** Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., unclassified).
15. **NUMBER OF PAGES.** Leave blank. (Added by NTIS)
16. **PRICE.** Leave blank. (Added by NTIS)

U.S. GOVERNMENT PRINTING OFFICE: 1983 O-844-084

### Exhibit 3

#### MICROFICHE SHEET SAMPLE

NUREG/CR-XXXX CONTRACTOR ID NO. CLASSIFICATION	DESCRIPTION OF MICROFICHE (e.g., Appendix A)	PUBLICATION DATE 81 of 09 (Sheet ID)
CONTRACTOR NAME (Optional)		
		



CONTRACTOR SPENDING PLAN

SOLICITATION NUMBER: RS-RES-93-075

Period of Performance: from 8/5/94 to 8/4/95

Cost Elements	Aug	Base Year 1	Oct	Nov	Dec	Jan
	1st Month	Sep 2nd Month	3rd Month	4th Month	5th Month	6th Month
Direct Costs	\$1,639	\$2,099	\$906	\$906	\$906	\$8,352
Indirect Costs	\$17,848	\$15,298	\$8,924	\$8,924	\$10,199	\$15,298
Total Estimated Costs	\$23,151	\$20,668	\$11,679	\$11,679	\$13,193	\$28,097
Project Completion	4%	9%	11%	13%	16%	21%

Cost Elements	Feb	Mar	Apr	May	Jun	Jul
	7th Month	8th Month	9th Month	10th Month	11th Month	12th Month
Direct Costs	\$8,352	\$8,352	\$9,545	\$8,352	\$8,352	\$8,527
Indirect Costs	\$15,298	\$16,573	\$14,661	\$11,474	\$12,749	\$15,917
Total Estimated Costs	\$28,097	\$29,612	\$28,757	\$23,553	\$25,068	\$29,040
Project Completion	27%	32%	38%	42%	47%	53%



CONTRACTOR SPENDING PLAN

SOLICITATION NUMBER: RS-RES-93-075

Period of Performance: from 8/5/95 to 8/4/96

Cost Elements	Base Year 2					
	Aug 1st Month	Sep 2nd Month	Oct 3rd Month	Nov 4th Month	Dec 5th Month	Jan 6th Month
Direct Costs	\$906	\$2,099	\$906	\$906	\$906	\$8,352
Indirect Costs	\$16,573	\$15,298	\$8,924	\$8,924	\$10,199	\$12,749
Total Estimated Costs	\$20,766	\$20,668	\$11,679	\$11,679	\$13,193	\$25,068
Project Completion	57%	61%	63%	66%	68%	73%

Cost Elements	Base Year 2					
	Feb 7th Month	Mar 8th Month	Apr 9th Month	May 10th Month	Jun 11th Month	Jul 12th Month
Direct Costs	\$8,352	\$8,352	\$9,545	\$8,352	\$8,352	\$8,527
Indirect Costs	\$10,199	\$10,199	\$14,024	\$10,836	\$10,199	\$10,199
Total Estimated Costs	\$22,039	\$22,039	\$28,000	\$22,796	\$22,039	\$22,247
Project Completion	77%	82%	87%	91%	96%	100%

CONTRACTOR SPENDING PLAN

SOLICITATION NUMBER: RS-RES-93-075

Period of Performance: from 8/5/96 to 8/4/97

Cost Elements	Aug	Option Year 1		Nov	Dec	Jan
	1st Month	Sep 2nd Month	Oct 3rd Month	4th Month	5th Month	6th Month
Direct Costs	\$1,043	\$2,236	\$1,043	\$1,043	\$1,043	\$8,699
Indirect Costs	\$10,388	\$9,090	\$10,388	\$11,687	\$9,739	\$12,985
Total Estimated Costs	\$13,580	\$13,455	\$13,580	\$15,123	\$12,809	\$25,761
Project Completion	5%	10%	15%	21%	26%	36%

Cost Elements	Feb	Mar	Apr	May	Jun	Jul
	7th Month	8th Month	9th Month	10th Month	11th Month	12th Month
Direct Costs	\$9,250	\$9,250	\$4,024	\$9,250	\$9,250	\$17,837
Indirect Costs	\$15,582	\$14,985	\$15,582	\$12,985	\$11,829	\$12,985
Total Estimated Costs	\$29,501	\$28,791	\$23,292	\$26,416	\$25,043	\$36,616
Project Completion	47%	58%	67%	77%	86%	100%

CONTRACTOR SPENDING PLAN

SOLICITATION NUMBER: RS-RES-93-075

Period of Performance: from 8/5/97 to 8/4/98

Cost Elements	Aug	Option Year 2	Oct	Nov	Dec	Jan
	1st Month	Sep 2nd Month	3rd Month	4th Month	5th Month	6th Month
Direct Costs	\$1,086	\$2,326	\$1,086	\$1,086	\$1,086	\$8,967
Indirect Costs	\$10,556	\$10,556	\$11,876	\$11,876	\$10,556	\$13,195
Total Estimated Costs	\$13,831	\$15,304	\$15,398	\$15,398	\$13,831	\$26,329
Project Completion	5%	11%	17%	22%	27%	37%

Cost Elements	Feb	Mar	Apr	May	Jun	Jul
	7th Month	8th Month	9th Month	10th Month	11th Month	12th Month
Direct Costs	\$8,967	\$8,967	\$10,208	\$8,967	\$8,967	\$8,072
Indirect Costs	\$15,834	\$15,834	\$17,172	\$13,195	\$13,195	\$13,195
Total Estimated Costs	\$29,464	\$29,464	\$32,527	\$26,329	\$26,329	\$25,265
Project Completion	48%	59%	71%	81%	91%	100%

CONTRACTOR SPENDING PLAN

SOLICITATION NUMBER: RS-RES-93-075

Period of Performance: from 8/5/98 to 8/4/99

Cost Elements	Aug	Option Year 3			Dec	Jan
	1st Month	Sep 2nd Month	Oct 3rd Month	Nov 4th Month	5th Month	6th Month
Direct Costs	\$1,129	\$2,420	\$1,129	\$1,129	\$1,129	\$9,250
Indirect Costs	\$12,067	\$10,726	\$12,067	\$12,067	\$10,726	\$13,408
Total Estimated Costs	\$15,677	\$15,617	\$15,677	\$15,677	\$14,084	\$26,918
Project Completion	6%	11%	17%	23%	28%	38%

Cost Elements	Feb	Mar	Apr	May	Jun	Jul
	7th Month	8th Month	9th Month	10th Month	11th Month	12th Month
Direct Costs	\$9,250	\$9,250	\$7,964	\$9,250	\$9,250	\$9,447
Indirect Costs	\$16,089	\$16,089	\$17,430	\$13,408	\$13,408	\$13,508
Total Estimated Costs	\$30,104	\$30,104	\$30,168	\$26,918	\$26,918	\$27,271
Project Completion	49%	60%	71%	80%	90%	100%

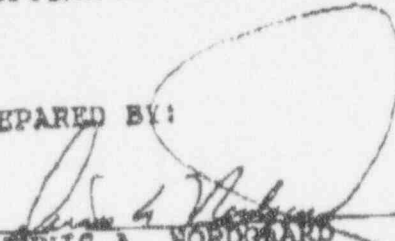
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

SMALL/SMALL DISADVANTAGED  
SUBCONTRACTING PLAN INCLUDING

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FROM 1 MAY 1993 TO 30 APRIL 1994

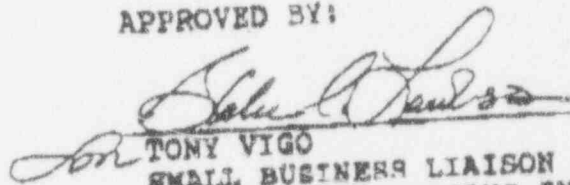
SUBCONTRACTING GOALS FOR PRIME CONTRACT/  
SOLICITATION NO.: RS-RES-93-075  
PROPOSAL NO.: 01-0264-71-0940-000

PREPARED BY:

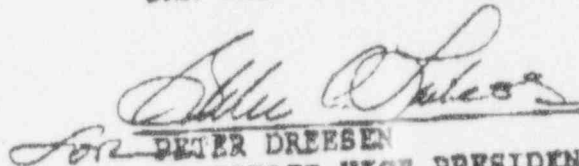
  
\_\_\_\_\_  
DENNIS A. NORDMARK  
SUBCONTRACT ADMINISTRATOR  
SCIENCE APPLICATIONS INTERNATIONAL CORP.  
OAK RIDGE, TN

10/28/93  
DATE

APPROVED BY:

  
\_\_\_\_\_  
TONY VIGO  
SMALL BUSINESS LIAISON OFFICER  
SCIENCE APPLICATIONS INTERNATIONAL CORP.  
SAN DIEGO, CALIFORNIA

28 Oct 93  
DATE

  
\_\_\_\_\_  
PETER DREESEN  
CORPORATE VICE PRESIDENT,  
DIRECTOR OF PURCHASING  
SCIENCE APPLICATIONS INTERNATIONAL CORP.  
SAN DIEGO, CALIFORNIA

28 Oct 93  
DATE



Science Applications International Corporation  
An Employee-Owned Company

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

SMALL/SMALL DISADVANTAGED  
SUBCONTRACTING PLAN INCLUDING

APPROVED MASTER SUBCONTRACTING PLAN EFFECTIVE  
FROM 1 MAY 1993 TO 30 APRIL 1994

SUBCONTRACTING GOALS FOR PRIME CONTRACT/  
SOLICITATION NO.: RS-RES-93-075  
PROPOSAL NO.: 01-0264-71-0940-009

PREPARED BY:

DENNIS A. NORDGAARD

10/18/93

DATE

SUBCONTRACT ADMINISTRATOR  
SCIENCE APPLICATIONS INTERNATIONAL CORP.  
OAK RIDGE, TN

APPROVED BY:

TONY VIGO

DATE

SMALL BUSINESS LIAISON OFFICER  
SCIENCE APPLICATIONS INTERNATIONAL CORP.  
SAN DIEGO, CALIFORNIA

PETER DREESEN

DATE

CORPORATE VICE PRESIDENT,  
DIRECTOR OF PURCHASING  
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SAN DIEGO, CALIFORNIA



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I	[(d)(1), SUBCONTRACTING GOALS (d)(2) & (d)(7)]	1
II	[(d)(3)] DISTRIBUTION OF SUBCONTRACT AWARDS	2
III	[(d)(4)] METHOD USED TO DEVELOP GOALS	3
IV	[(d)(6)] INDIRECT AND OVERHEAD COSTS	3
V	[(d)(5)] METHOD OF IDENTIFICATION/SOLICITATION	4

\* REFERENCE SPECIFICALLY IDENTIFIES FAR 52.219-9 REQUIREMENTS

I SUBCONTRACTING GOALS

- A. PRIME CONTRACT/SOLICITATION NUMBER: RS-RES-93-075  
SAIC PROPOSAL NUMBER: 01-0264-71-0940-009
- B. PROGRAM SUMMARY: SAIC proposes to provide the U.S. Nuclear Regulatory Commission (NRC) its requested "Operation and Maintenance of the Radiation Exposure Information Reporting System" (REIRS) in accordance with the provisions of the above referenced NRC Request for Proposal (RFP). Support to be provided includes management, control, and data entry of approximately 250,000 exposure records annually. SAIC will develop and manage of both the hardware and software systems necessary to effectively input and control data records received, and will maintain an employer data base, input exposure records, provide quality assurance oversight and control. Reports, technical assistance, and presentation and publication of technical results will be provided as requested and in accordance with the RFP.
- C. SUBCONTRACTING PLAN ADMINISTRATOR:
- Name: Dennis A. Nordgaard  
Title: Subcontract Administrator  
Address: 301 Laboratory Road  
Oak Ridge, TN 37831  
Telephone No.: (615) 481-2150
- D. CONTRACTS ADMINISTRATOR:
- Name: Brenda Young  
Title: Contracts Manager  
Address: 301 Laboratory Road  
Oak Ridge, TN 37831  
Telephone No.: (615) 481-2110
- E. CORPORATE S/SD BUSINESS COORDINATOR:
- Name: TONY VIGO  
Title: SMALL BUSINESS LIAISON OFFICER  
Address: 10260 CAMPUS POINT DRIVE, M/S #41  
SAN DIEGO, CA 92121  
Telephone No.: (619) 535-7463

F. SUBCONTRACTING GOAL SUMMARY

	<u>AMOUNT</u>	<u>PERCENTAGE</u>
1. TOTAL CONTRACT PRICE	\$1,323,366	
2. TOTAL TO BE SUBCONTRACTED	\$269,853	100%
a. TO LARGE BUSINESS	-0-	0%
b. TO SMALL BUSINESS	\$269,853	100%
(1) TO NON-DISADVANTAGED	-0-	0%
(2) TO DISADVANTAGED	\$269,853	100%
(3) HBCU/MI's	-0-	0%

II PROPOSED DISTRIBUTION AND DESCRIPTION OF SUBCONTRACT AWARDS

Estimated Award Value	SB	SDB	HBCU/MI	LB
A. Single Source Items Description	\$269,853	-0-	-0-	-0-

Q SYSTEMS, INC. (\$269,853): Q Systems will provide data entry support for the REIRS contract. Support to be provided includes: records receipt management, data entry (both REIRS data entry or REMIT software) in accordance with SAIC's published "Data Entry and Quality Control Procedures," data batch loading assistance, and quality assurance in accordance with SAIC's published QA plan.

B. Limited Competition Description	-0-	-0-	-0-	-0-
------------------------------------	-----	-----	-----	-----

A variety of other support services or resources necessary to perform the REIRS contract will be required as detailed in SAIC's Cost Proposal under Other Direct Costs. Such procurements will be competitively awarded whenever feasible, and Small/SDB sources will be provided the opportunity to compete to the maximum extent possible.

SAIC possesses all other technical capabilities necessary for performance of the proposed contract. As such, no further subcontracting opportunities currently exist. However, in the event subcontracting opportunities arise in performance of the proposed contract, SAIC will utilize its extensive resources, Government-approved Purchasing System, and the Corporate Small Business Liaison Office (i.e., PASS System), to identify, qualify and utilize small and small-disadvantage businesses to the maximum extent possible.

C. Open Competition            -0-            -0-            -0-            -0-  
Description

(See paragraph II, B, above)

D. Restricted Disadvantaged  
Competition                    -0-            -0-            -0-            -0-  
Description

(See paragraph II, B, above)

### III. METHOD USED TO DEVELOP GOALS

A. Proposed subcontracting goals as identified in Section I, were developed by a joint pre-proposal review of the solicitation statement of work and performance requirements. The joint review involved program, technical and purchasing personnel including, the Corporate Small Business Liaison Officer and the proposed Subcontracting Plan Administrator.

B. Criteria considered in the review process included:

1. Review of the solicitation statement of work.
2. Identification of the requirement for goods and services.
3. Identification of the potential to subcontract for goods and services.
4. Make - Buy Analysis.
5. Identification of potential suppliers.
6. Categorization of source requirements based on single source, limited competition and open competition as provided by the marketplace or as potentially could be developed.

### IV INDIRECT AND OVERHEAD CHARGES

A. Inclusion in Subcontracting Plan

Indirect and overhead charges are not included in this subcontracting plan.

B. Allocation Formula

If indirect and overhead charges were included in this subcontracting plan, the allocation is accomplished on a pro-rata basis as determined by an evaluation of the following criteria:

1. Determination of the ratio of indirect to direct (R) awards within the previous six (6) month period for programs or activities of a similar nature.

R = Indirect Awards/Direct Awards

2. Determination of the percentage of indirect awards made in the same period.

S = Small Business Awards/Total Indirect Awards

D = Disadvantaged Awards/Total Indirect Awards

L = Large Business Awards/Total Indirect Awards

3. The proportionate value of indirect awards resulting from the direct subcontracting plan goal can then be calculated.

S = Subcontracting Plan Direct Goal

I = Indirect Awards Resulting from S

R = Indirect/Direct Awards

I = RS

Indirect awards, if included in the subcontracting plan are then calculated as follows:

Small Business = SI

Disadvantaged = DI

Large = LI

The amounts used in the calculation are available from the purchasing data base and represent actual activity in the appropriate period.

#### V METHOD OF IDENTIFICATION /SOLICITATION

The development of goals as described in Section III resulted in the identification of potential/proposed subcontracting opportunities. The review process identified provided a categorization of items available from single sources, limited competition and open competition. Some single source items are available from "only qualified sources" as determined from previous programs of a similar nature.

Items available for limited or open competition provide the opportunity to subcontract to S/SDB. These prospective sources were identified through the mechanisms identified in Section II(c) of the Master Subcontracting Plan.

cc: T. Vigo

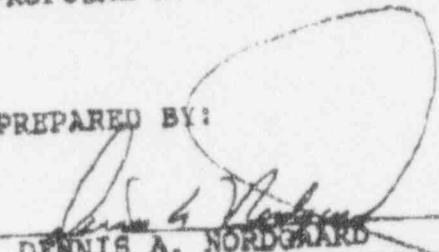
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PREPARED BY:

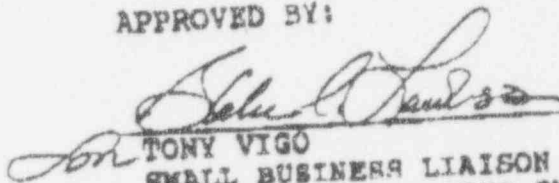


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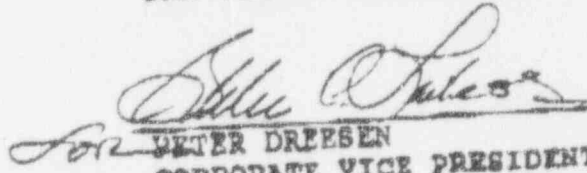
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28 Oct 93

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SCIENCE APPLICATIONS INTERNATIONAL CORP.  
SAN DIEGO, CALIFORNIA



28 Oct 93

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DENNIS A. NORDGAARD 10/18/93 DATE  
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APPROVED BY:

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B. Limited Competition -0-	-0-	-0-	-0-	-0-
Description				

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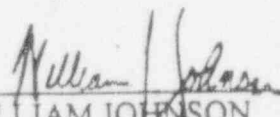
10260 CAMPUS POINT DRIVE  
SAN DIEGO, CA 92121

MEMORANDUM OF AGREEMENT REGARDING  
MASTER SUBCONTRACTING PLAN  
FOR THE PERIOD 01 MAY 1993 - 30 APRIL 1994

APPROVED BY:

APPROVED BY:

  
PETER D. DREESEN      DATE  
CORPORATE VICE PRESIDENT  
DIRECTOR OF PURCHASING

  
WILLIAM JOHNSON      DATE  
ADMINISTRATIVE CONTRACTING OFFICER  
DEFENSE CONTRACT MANAGEMENT AREA  
OPERATIONS - SAN DIEGO

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\* REFERENCES SPECIFICALLY IDENTIFY FAR 52.219-9 REQUIREMENTS

# SCIENCE APPLICATIONS INTERNATIONAL CORPORATION MASTER SUBCONTRACTING PLAN

## I COMPLIANCE STATEMENT

This master plan is in compliance with all laws, rules and regulations of FAR 52.219-9. In particular SAIC understands a full commitment to the spirit of recent Small Business legislation, including PL 99-661, PL 100-180, and PL 100-656.

## II PROGRAM RESPONSIBILITY/ADMINISTRATION

### A. Program Responsibility

The responsibility for the development and maintenance of the Small and Small Disadvantaged Business program and Historically Black Colleges and Universities/Minority Institutions (S/SDB/HBCU/MI) and for assuring the successful performance and achievement of program objectives has been assigned to Peter Dreesen, Corporate Vice President, Purchasing

### B. Program Coordination

1. The Corporate S/SDB Liaison Officer, identified in Individual Subcontracting Plan Section I D, has been assigned program implementation and coordination responsibility. These responsibilities include:

- (a) Establishing and maintaining internal source lists.
- (b) Acquisition of externally published source lists.
- (c) Distribution of S/SDB/HBCU/MI information company-wide.
- (d) Assist in identifying potential S/SDB/HBCU/MI sources.
- (e) Preparation and submittal of Standard Forms 294 and 295 on a timely basis.
- (f) Data base maintenance.
- (g) Representing the purchasing organization with Small Business Administration and DCMAO small business compliance reviews.
- (h) Representing the company at S/SDB/HBCU/MI seminars and conferences.
- (i) Providing staff training relative to Article I.
- (j) Seeking out S/SDB/HBCU/MI concerns and arranging Purchasing/QA/Technical surveys.
- (k) Assist in development and review of subcontracting plans.
- (l) Serve as coordinator for SAIC's participation in the DoD Pilot Mentor-Protege Program.

### C. Subcontracting Plan Administration

An individual Subcontracting Plan Administrator will be appointed and identified in Section I C of each subcontracting goal submittal. The Plan Administrator is specifically responsible for subcontracting plan development and implementation. Purchasing personnel assigned this responsibility are senior staff members involved at the proposal stage and work in conjunction with program, technical and contracts staff as defined in Section III A. Subcontracting Plan Administrators are responsible for goal attainment.

### III EQUITABLE OPPORTUNITY IMPLEMENTATION METHODS

A. Policy and Organization It is an established SAIC policy that S/SDB Concerns, including Historically Black Colleges and Universities and Minority Institutions (HBCU/MI), have an equitable opportunity to compete for SAIC purchases consistent with the efficient performance of SAIC's business. The S/SDB Liaison Officer and the Subcontracting Plan Administrator are chartered to assure compliance with this policy (ref: Corporate Purchasing Instruction CPI E-6 Small and Small Disadvantaged Business Subcontracting Program).

SAIC policy and procedures require inclusion of S/SDB/HBCU/MI sources on bid lists. An explanation of the absence of S/SDB/HBCU/MI sources on any award is required. Specific and periodic review (at or below \$25,000) and approval by purchasing management assures compliance with this requirement.

B. The following SAIC effort is a description of the efforts which have been and will be made by SAIC to assure that S/SDB/HBCU/MI concerns will have an equitable opportunity to compete for subcontracts:

1. SAIC corporate policy is stated in Corporate Purchasing Instruction CPI E-6 (Small and Small Disadvantaged Business Subcontracting Program)
2. It is SAIC policy to comply with all government regulations including those concerning S/SDB/HBCU/MI concerns. This includes PL 99-661, PL 100-180, and PL 100-656 as well as DFAR 219.705-4. The intent of these regulations is also applied to any company activity that offers purchasing/subcontract opportunities.
3. Viable programs have been established to effectively implement the S/SDB/HBCU/MI program. Purchasing personnel are kept informed and current through department reviews and training programs which are on-going. In addition, Program Managers are kept informed of S/SDB/HBCU/MI requirements at the proposal development stage, and S/SDB/HBCU/MI subcontractors are identified in proposals and subsequently utilized in the performance of prime contracts.
4. Buyer incentives for the solicitation and award to S/SDB/HBCU/MI concerns are reflected in performance review standards for Subcontracting Plan Administrators and Buyers.
5. S/SDB/HBCU/MI source lists are available to all purchasing personnel. (See Section III C 2).
6. Purchasing, quality assurance, technical and financial staff are available to assist in developing S/SDB/HBCU/MI concerns.
7. Special payment terms have been and will be arranged for S/SDB/HBCU/MI concerns.
8. A purchasing representative is a member of all make or buy committees, to ensure S/SDB/HBCU/MI representation.

9. For subcontracts involving research, HBCU/MI will be given an equitable opportunity to compete providing the requisite facilities and skills are available

### C. Implementation Methods

#### 1. Internal Source Identifiers

SAIC has prepared a comprehensive Small/Small Disadvantaged Business (S/SDB) Data Base which is used by all buyers and subcontract administrators. The data base is used in the development of the sources for immediate requirements and at the proposal stage for future requirements.

Additionally, actual awards included in the purchasing data base utilize the Standard Industrial Classification Code for each item purchased. This facility enables buyers and subcontract administrators to secure timely information through computer access of suppliers providing various goods and services.

#### 2. External Source Lists

In addition to internally developed source identification mechanisms, SAIC also utilizes source lists made available by agencies, states, associates and trade organizations. These source lists are available to all purchasing personnel and include but are not limited to, the following

- (a) California minority business enterprise directory, and other states that publish such a directory
- (b) Electronic Materials Source List
- (c) Procurement Automated Source System (PASS)
- (d) Try Us 1993
- (e) National Directory of Minority-Owned Business Firms
- (f) An Inventory of the Capabilities of HBCU/MI: A NAFEO/DOD Survey
- (g) United Indian Development Association Regional Procurement Directory of American Indian Firms
- (h) Small Business Administration profiles
- (i) Other local directories available where SAIC has purchasing office
- (j) Source directories made available by other government contractors.

## IV SUBCONTRACT FLOW-DOWN REQUIREMENTS

### A. FAR 52.219-8

The clause "Utilization of Small Business Concerns and Small Disadvantaged Business Concerns" 52.219-8 shall be included in all subcontracts over twenty-five thousand dollars (\$25,000) except (1) contracts for services which are personal in nature, and (2) contracts which will be performed entirely (including all subcontracting) outside any state, territory, or possession of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

## B. FAR 52.219-9

SAIC will include the clause entitled "Small Business and Small Disadvantaged Business Subcontracting Plan" in all subcontracts which offer further subcontracting opportunities and will require all subcontractors (except small business concerns) who received subcontracts in excess of five hundred thousand dollars (\$500,000), or in the case of a contract for the construction of any public facility, one million dollars (\$1,000,000), to negotiate a detailed subcontracting plan in accordance with FAR 52.219-9.

Subcontractors are further required to submit to SAIC Standard Form 294 and Standard Form 295 in accordance with FAR 52.219-9 or DEAR 952.219-9, as applicable. In turn, SAIC will submit these subcontractor SF 294's along with their own SF 294 to the S/SDB Coordinator of the Contract Awarding Office.

## C. FAR 52.220-3 and 52.220-4

"Utilization of Labor Surplus Area Concerns," FAR 52.220-3, and "Labor Surplus Area Subcontracting Program", FAR 52.220-4 are incorporated into SAIC's Purchase Order and Subcontract terms and conditions for contracts exceeding twenty-five thousand dollars (\$25,000) which require compliance.

Compliance with these requirements is assured through the use of proforma solicitation and subcontract documents wherein the above requirements are clearly defined for the suppliers benefit.

## V. REPORTS AND SURVEYS

SAIC will provide periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance with subcontracting plans or S/SDB/HBCU/MI requirements in general.

## VI. RECORDS

### A. On-line Access Data Base

SAIC has established and maintains an active and inactive data base. Information available includes:

1. S/SDB/HBCU/MI lists
2. Actual awards by Socio-Economic (S/E) Classification of any dollar value.
3. Identification of awards by S/E classification on a contract by contract or indirect charge basis to provide compliance reporting and general statistical information.



## B. Purchase Award Summary

Every purchase award, regardless of value, requires S/E identification of bidders solicited and a requirement to provide an explanation and justification if S/SDB/HBCU/MI concerns were not solicited. A S/E classification is also provided for woman-owned businesses.

The purchase award summary also identifies:

1. Whether small business concerns were solicited and if not, why not.
2. Whether small disadvantaged business concerns were solicited and if not, why not.
3. If applicable, the reasons awards were not made to a small or small disadvantaged business concern.

## C. Additional Activities

SAIC is energetically involved in other activities which are supported by appropriate records in the form of contact reports, trip reports and meeting schedules and agenda. These activities include, but are not limited to:

1. S/SDB/HBCU/MI supplier contacts and surveys.
2. Trade association and business development organizations.
3. Attendance at S/SDB/HBCU/MI conferences and trade fairs.
4. Internal and external workshops, seminars and training programs.

## VII POLICY STATEMENTS

Corporate Purchasing Instruction CPI E-6, Section 3.0 defines company-wide policy and procedures and assigns specific responsibility regarding the requirements of the FAR 52.219-9. In addition, written procedures describing the subcontracting plan goal tracking methods are detailed in Corporate Purchasing Instruction CPI E-6, Section 5.0.

## VIII INTEREST AND COMMITMENT

Policy statements expressing company interest and commitment to S/SDB/HBCU/MI Programs have been promulgated throughout the company by Dr. L.A. Kull, President and Chief Operations Officer. Performance in this area is continuously monitored, reviewed and expanded by the Corporate Vice President, Purchasing.

Success of a S/SDB/HBCU/MI Purchasing Program is dependent upon total corporate commitment to the fundamental objective of the program. All levels of management must continuously emphasize SAIC's dedication to the program. Increasing S/SDB/HBCU/MI participation in purchasing programs requires active participation by personnel in all disciplines.

Personnel generating production and non-production requirements evaluate the goods and services provided by S/SDB/HBCU/MI and identify requirements so as not to preclude these businesses from qualifying and being given an equal opportunity to bid

Division and Program Managers assure maximum consideration of S/SDB/HBCU/MI sources during proposal development and their inclusion in proposals. Program Managers continue emphasis on utilization of S/SDB/HBCU/MI firms during contract performance. SAIC's customers closely monitor company performance in this program, and the degree of success is a consideration in proposal evaluation and, in some cases, fee determination. Quality Assurance, while performing quality surveys, provides counseling and guidance to S/SDB/HBCU/MI concerns to achieve a broad base of quality approved sources for manufacturing tasks and processes.

Purchasing personnel assigned to specific programs assure early recognition of requirements to facilitate locating or developing sources for inclusion in bid lists for proposal development and buy requirements. Purchasing personnel ensure solicitation of S/SDB/HBCU/MI sources and assure that these concerns will have an equitable opportunity to compete for subcontracts.

All disciplines provide, when requested by the Subcontracting Plan Administrator, counseling and guidance to actual or potential S/SDB/HBCU/MI sources in such areas as technology, management, manufacturing techniques, quality control, financial and legal.

## **IX TRAINING AND MOTIVATION**

### **A. Training**

SAIC provides on-going training and awareness programs relative to PL 95-507, PL 99-661, PL 100-180, and PL 100-656.

Training is accomplished through regular staff meetings between managers, the S/SDB Liaison Officer and procurement personnel, seminars conducted by the Corporate Vice President, Purchasing and appropriate government and trade representatives, and written correspondence between the S/SDB Liaison Officer and procurement personnel.

### **B. Motivation**

Records of all awards with S/SDB/HBCU/MI concerns are maintained for each buyer. Performance to PL 95-507, PL 99-661, PL 100-180, and PL 100-656 objectives and individual subcontracting plans is a key factor in each individual's annual performance review.

## **X SOLICITATION PLANNING - MAKE/BUY DECISIONS**

SAIC is aware of its responsibility to manage solicitation and procurement efforts to provide the maximum participation by S/SDB/HBCU/MI concerns. Corporate Purchasing Instruction E-2 describes the methods used for performing make/buy decisions. The mechanisms utilized to effect fulfillment of solicitation planning have been previously described in Section VIII.

## XI ASSISTANCE TO S/SDB CONCERNS, HBCU AND MI

Special assistance has been provided to S/SDB/HBCU/MI concerns in several ways and additional efforts are being initiated. SAIC has incorporated the requirements of DFAR 219 705-4 regarding efforts to provide technical assistance to SDB concerns and to restrict competition to SDB concerns.

A. SAIC has commenced a program that gives potential SDB suppliers the opportunity to meet with program managers and subcontracting. SAIC *Small Disadvantaged Business Day* provides SDB's a forum to present their capabilities and qualifications, while the SAIC groups provide information on opportunities that would be mutually beneficial to all parties. The desired result is to establish a comprehensive network for SDB's learning SAIC's operational structure.

B. SAIC has been involved in outreach efforts to identify and qualify S/SDB concerns and HBCU/MI. An "open door" policy is maintained for all suppliers, and organizational elements provide special managerial and technical support in assisting these businesses to "set up" tasks. This includes providing assistance to HBCU/MI in performance of research type subcontracts, in addition to assisting these concerns with advanced payments or any financial problems.

C. When S/SDB/HBCU/MI concerns encounter technical difficulties while working on our contracts or potential suppliers require additional assistance in responding to a solicitation, subcontract administrators in conjunction with the Program Management Team provide direct assistance to overcome short-term difficulties. In addition, follow-up efforts to determine why S/SDB/HBCU/MI concerns did not respond to solicitations or were not successful in receiving an award are pursued.

D. Additional efforts which have been initiated include SDB seminars to encourage new suppliers to become qualified and able to respond to solicitation requirements. SAIC supports local trade fairs and small business conferences in areas where company purchasing offices are located.

E. SAIC is committed to achieving the SDB goals established on our individual subcontracting plans, and where the procurement action reasonably permits, solicitations will be restricted to SDBs.

## XII REPORT SUBMITTAL

SAIC has and will continue to submit Standard Form 294, Subcontracting Report for Individual Contracts, and Subcontractor's SF 294's, and Standard Form 295, Summary Subcontract Report, in accordance with instructions provided on the forms. Additionally, SAIC shall indicate in the remarks block of all SF 294's, the number and dollar amount of awards made to labor surplus area concerns.

## XIII UNDERSTANDING

SAIC understands that:

A. An acceptable plan must, in the determination of the Contracting Officer, provide the maximum practicable opportunity for small business concerns, small disadvantaged business concerns, and historically black colleges and universities and minority institutions to participate in the performance of the contract.

B. The Contracting Officer shall notify the contractor in writing of his/her reasons for determining a

subcontracting plan to be unacceptable. Such notice shall be given early enough in the negotiation process to allow the contractor sufficient time to modify the plan within the time limits prescribed.

C. Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

D. The failure of any contractor or subcontractor to comply in good faith with (i) the clause entitled "Utilization of Small Business and Small Disadvantaged Business Concerns" or (ii) an approved plan required by this Small Business and Small Disadvantaged Business Subcontracting Plan (negotiated) provision, will be a material breach of such contract or subcontract.

E. A Master Subcontract Plan on a plant or division-wide basis which contains all the elements required by FAR 52.219-9 above, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause, provided: (i) the master plan has been approved by the Contractor's cognizant Contract Administration Office; (ii) the offeror provides copies of the approved master plan and evidence of its approval to the Contracting Officer; and (iii) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

05/24/94

PROCUREMENTS AWARDED SINCE JUNE 1, 1993

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CONTRACT NUMBER MOD NUMBER  
04-94-053-000 00

NEW AWARDS ARE SHOWN AS MOD 00  
TITLE EXECUTED  
OPERATION AND MAINTENANCE OF THE RADIATION 04/14/94  
EXPOSURE INFORMATION REPORTING SYSTEM (REIRS)  
DATABASE