

PDR

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING			
2. CONTRACT NO. NRC-04-93-055	3. EFFECTIVE DATE JAN 1 1993	4. REQUISITION/PROJECT NO. RS-RES-92-069			
5. ISSUED BY Code: U.S. Nuclear Regulatory Commission Div. of Contracts & Property Mgmt. Contract Negotiation Br. 2; P-1042 Washington, DC 20555		6. ADMINISTERED BY Code: (If other than Item 5) U.S. Nuclear Regulatory Commission Div. of Contracts & Property Mgmt. Contract Administration Br. 1; P-902 Washington, DC 20555			
7. NAME AND ADDRESS OF CONTRACTOR SBA/Compa Industries, Inc. Attn: Ali Tabatabai 6290 Montrose Road, 2nd Floor Rockville, MD 20852 Principal Investigator/Technical Contact: Valerie E. Barnes Telephone No: 301-230-0041		8. DELIVERY [] FOB ORIGIN [X] OTHER (See below) 9. DISCOUNT FOR PROMPT PAYMENT N/A			
10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN ITEM: 6					
11. SHIP TO/MARK FOR CODE US Nuclear Regulatory Commission Attn: Jerry Wachtel - NLN-316 Div. of Systems Research, RES Washington, DC 20555		12. PAYMENT WILL BE MADE BY CODE U. S. Nuclear Regulatory Commission Division of Accounting and Finance GOV/COM Accounting Section Washington, DC 20555			
13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION [] 10 U.S.C. 2304(c)() [X] 41 U.S.C. 253(c) (5)					
14. ACCOUNTING AND APPROPRIATION DATA B&R: 360-19-20-2200 FIN: L2446 BOC: 2542 Appn. No. 31X0200.360 Amount Obligated: \$80,000.00					
15A. ITEM NO.	15B. SUPPLIES/ SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
The NRC hereby accepts Compa Industries' technical proposal dated 4/23/92, as revised 6/19/92, 7/24/92, 9/9/92, 9/15/92, and 10/5/92, all of which are incorporated herein and made part of this cost-plus-fixed-fee contract to perform an effort entitled "Feasibility of a Human Factors Regulatory Research Facility."					

15G. TOTAL AMOUNT OF CONTRACT \$159,376.00

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

Prescribed by GSA

D502 01

SB0920 93 1 08015

TRIPARTITE AGREEMENT

Signature Page

PRIME CONTRACTOR:

US Small Business Administration

By: [Signature]

Date: 12-17-92

Name: STANLEY A. HUSTON

Title: CONTRACTING OFFICER

SUBCONTRACTOR:

COMPA Industries, Inc.

By: [Signature]

Date: 12-10-92

Name: ROBERT H. HARRIS

Title: MANAGER

PROCURING OFFICE:

US Nuclear Regulatory Commission

By: [Signature]

Date: 12-4-92

Name: Mary H. Mace

Title: Contracting Officer

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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:

"Feasibility of a Human Factors
Regulatory Research Facility"

[End of Clause]

B.2 BRIEF DESCRIPTION OF WORK (MAR 1987)

Perform a study to determine the feasibility of
developing a human factors research facility.

[End of Clause]

B.3 CONSIDERATION AND OBLIGATION--COST PLUS FIXED FEE (JUNE
1988) ALTERNATE I (JUN 1991)

a. The total estimated cost to the Government for full performance of this contract is \$159,376.00, of which the sum of \$148,257.00 represents the estimated reimbursable costs, and of which \$11,119.00 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 \$80,000.00, of which the sum of \$74,419.00 represents the estimated reimbursable costs, and of which \$5,581.00 represents the fixed fee.

d. It is estimated that the amount currently allotted will cover performance through 3-15-93.

e. In the event that the option to extend the services to include Tasks 6 through 12 herein is exercised, the total estimated cost to the Government for full performance of optional Tasks 6 through 12 is \$197,715.00, of which the sum of \$183,921.00 represents the estimated reimbursable costs, and of which \$13,794.00 represents the fixed fee.

(End of Clause)

X SEC	16. TABLE OF CONTENTS DESCRIPTION	PAGE(S)
	PART I - THE SCHEDULE	
A	SOLICITATION/CONTRACT FORM	
B	SUPPLIES OR SERVICES AND PRICES/COSTS	
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L	INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS	
M	EVALUATION FACTORS FOR AWARD	

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. ☒ CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 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)	20A. NAME OF CONTRACTING OFFICER See Attached
19B. NAME OF CONTRACTOR by _____ (Signature of person authorized to sign)	20B. UNITED STATES OF AMERICA by _____ (Signature of Contracting Officer)
19C. DATE SIGNED	20C. DATE SIGNED

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

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 STATEMENT OF WORK

C.1.1 BACKGROUND

Human factors research in support of the regulatory function of the U.S. Nuclear Regulatory Commission has been performed for more than ten years. This research has been performed at many facilities, including private contractors, universities, DOE laboratories, and international cooperatives.

Although research at these facilities has been of generally high quality, and has proven to be of assistance to the agency's programs, it appears that limitations remain in the agency's ability to resolve important regulatory research needs.

Unlike software and hardware, which is expected to perform within design specifications in a predictable and reliable manner, the performance of people, is affected by many factors. Since an understanding of human performance is crucial to the agency's ability to perform its regulatory function effectively, any research undertaken about operations in which people play a central role must be conducted in a manner that controls for the many factors that can affect performance.

The facilities available to the NRC may not always be able to control these factors to the extent necessary for robust research. As a result, human factors research findings have occasionally been limited in their applicability.

Examples of these limitations include:

- Lack of available licensed nuclear power plant operators or other representative personnel to serve as test subjects for research involving control room design, operations, maintenance practices, etc.
- Limited access to realistic simulator environments.
- Research laboratory settings which represent plants different from those in use in the United States.
- Lack of sufficient laboratory time to support experiments that require longitudinal study (such as vigilance, shift work, slowly evolving events).
- Lack of industry cooperation because of regulatory exposure or impact (real or perceived).

From time to time, suggestions have been made that the NRC undertake a study addressing the limitations mentioned above. The National Research Council, in its report titled: "Human Factors Research and the Nuclear Industry" (1988) recommended the creation of " . . . a national research facility for the study of human factors in nuclear power systems" (p. 4). The NRC Commissioners, in a Staff Requirements Memorandum (SRM M880531, July 21, 1988), requested staff to: "Improve researchers access to reactor simulators for enhancement of the basic understanding of human factors at nuclear power plants."

Recently, an information paper for the Commissioners (SECY-90-042) included an evaluation of the costs and benefits of NRC's continued participation in the Halden Project for 1991-93. The staff evaluated alternative approaches which assumed conduct of the research in the United States. Alternatives which were discussed included: (a) development of a research facility similar to Halden's Man-Machine Laboratory (HAMMLAB) in the US; (b) encouraging the development of such a facility by a DOE national laboratory; (c) enhancing or supplementing the simulation facilities at NRC's Technical Training Center (TTC) in Chattanooga, Tennessee. Only the last option was evaluated to any extent, and it was estimated that establishment of such a facility might require nine staff-years of effort and cost \$2,375K to develop and \$1,950K to operate annually. The Staff concluded that it was not a cost-effective alternative at this time to replace participation in the Halden project by the third alternative. Nonetheless, the staff concluded that it was not "inappropriate to initiate . . . formal consideration of plans to establish a facility such as HAMMLAB within the U.S." In addition, the Director of the TTC concluded that "it is feasible to establish a HAMMLAB-like facility at the NRC Technical Training Center in Chattanooga, Tennessee" (Memorandum from K. Raglin to E. Jordan, 3/29/90).

C.1.2. OBJECTIVES

The objectives of this project are to: (a) determine the availability and capabilities of existing research facilities to support the current and expected human factors regulatory research needs of the NRC; (b) determine the need, if any, for an enhancement of, or supplement to the present human factors research facilities by detailing those regulatory research needs, current and expected, that cannot be met with existing facilities, or that cannot be performed at these facilities; (c) specify the characteristics of facilities that would be required to support these needs; and (d) perform a cost-benefit study of possible alternatives.

C.1.3 SCOPE OF WORK

This project is the continuation of an earlier effort which was not completed. The contractor shall resume the work which was previously begun and bring it to successful completion. The project shall be performed using the expertise of the contractor's

staff and consultants who possess expertise in diverse aspects of the field of human factors. In addition, the contractor shall establish a panel of individual subject matter experts (SMEs) who are not employees of the contractor, for the purpose of advising the contractor regarding the technical aspects of the project. These panelists shall be selected by the contractor for their expertise in the areas of importance to the regulatory research program. To expedite the performance of the contract, the contractor shall give priority consideration to selection of the same panelists as were selected under the previous contract. The contractor shall arrange for panel meetings to be held regularly throughout the project.

C.1.4 REQUIREMENTS

TASK 1

The contractor shall review all of the issues to be addressed in this project, and the work completed to date. The contractor shall contact each member of the Subject Matter Expert Panel (SMEP) to ensure his or her willingness to participate in the project in accordance with the previously agreed terms and conditions. At an initial meeting with the NRC staff, the contractor shall demonstrate its understanding of the project and the approach to be taken, and make any recommendations it deems warranted for modifications to this approach.

Estimated Level of Effort: 2 Staff Weeks

Estimated Completion Date: 2 Weeks After Project Initiation

For planning purposes, it should be assumed that the panel will consist of ten (10) individuals, and that three panel meetings will be arranged by the contractor at locations to be determined. For pricing purposes, assume the panel meetings will be held in Chattanooga, TN; Dayton, OH; and Palo Alto, CA. The contractor shall be responsible for making and supporting all logistical arrangements necessary for the panel meetings, and for providing all honoraria and travel expenses required by panelists.

TASK 2a

Through a supplemental review of the literature, and through discussion, as required, with personnel who performed the work reported in that literature, the contractor shall develop an in-depth description of the weaknesses of human factors research that has been performed in the nuclear industry as a consequence of limitations in, or unavailability of research facilities. This description should include, as a minimum: (a) an identification of past, current, and expected human factors regulatory research needs; (b) problems with meeting the regulatory research needs; (c) and a discussion of "compromises" that may have been made during efforts to meet these needs due to limitations in the facilities used.

TASK 2b

Through a supplemental review of the literature, and through discussion with personnel who perform and who use the results of human factors research, the contractor shall develop an in-depth characterization of the strengths and weaknesses of existing human factors research facilities and laboratories to meet the current and expected regulatory research needs. To the extent that they can provide a model for any future development or enhancement of such laboratories, other, non-human factors facilities should also be addressed.

Estimated Level of Effort: 6 Staff Weeks

Estimated Completion Date: 2 Months After Project Initiation

TASK 3a

The contractor shall construct a comprehensive matrix to permit a detailed, direct comparison of human factors regulatory research needs (current and expected) against the detailed features, including strengths and weaknesses, of available facilities to meet these needs. The matrix should be exhaustive when discussing the facilities, and should include cost information.

Task 3b

The contractor shall brief the NRC Project Officer and interested staff on the results of Tasks 2 and 3. Panel members will not participate in this briefing. The contractor shall prepare a technical letter report which describes the findings of the work conducted in Tasks 2 and 3.

Estimated Level of Effort: 4 Staff Weeks

Estimated Completion Date: 3 Months After Project Initiation

TASK 4a

The contractor shall convene the second meeting of the SMEP (the first meeting took place under the previous contract), prepare a meeting agenda and a packet of materials relevant to the subject of the meeting, and ensure that these materials are transmitted to all panelists at least two weeks in advance of the meeting date. The objectives for the meeting shall include, but not necessarily be limited to: (a) a presentation about the findings of Tasks 2 and 3 and their implications for the work to be undertaken in the remainder of this project; (b) a discussion of additional literature to examine and/or individuals to contact to further ensure the completeness of the results of Task 2; (c) a presentation about the matrix developed in Task 3, and suggestions for its further refinement.

TASK 4b

The contractor shall prepare a technical letter report which describes the meeting, its objectives and accomplishments, and any

recommendations for changes to the approach to be taken for future meetings.

Estimated Level of Effort: 4 Staff Weeks
Estimated Completion Date: 4 Months After Project Initiation

TASK 5a

The contractor shall examine the relationship between NRC and other organizations within the nuclear industry to determine what implications, if any, this relationship may have on the feasibility of establishing and operating a human factors regulatory research facility. Organizations to be contacted should include, but not necessarily be limited to: The Institute for Nuclear Power Operations (INPO); The Electric Power Research Institute (EPRI); The Nuclear Utility Management and Resources Committee (NUMARC); The International Brotherhood of Electrical Workers (IBEW); and The Professional Reactor Operators' Society (PROS). The feasibility assessment should include considerations of the funding, staffing, and operation of such a facility, as well as the availability of appropriate test subjects for participation in its research projects. The contractor shall contact personnel from government and quasi-governmental organizations recommended by members of the panel, to determine the results of their experience with the development and operation of similar facilities in other industries, especially those within regulated industries.

TASK 5b

The contractor shall modify the matrix developed in Task 3 as appropriate based upon the findings of Task 5a.

TASK 5c

The contractor shall prepare a technical letter report which describes the results of the work performed in Task 5.

Estimated Level of Effort: 4 Staff Weeks
Estimated Completion Date: 5 Months After Project Initiation

OPTION CLAUSE: The quality and thoroughness of the work produced through Task 5 is critical to the following tasks. Therefore, the NRC Project Officer will evaluate the work performed to date upon the completion of Task 5c, and, based on that evaluation, may or may not recommend continuation of Tasks 6 through 12 of the project. Upon approval by the Project Officer, the NRC Contracting Officer will modify the contract to exercise the option to perform the remaining tasks.

TASK 6a

The contractor shall convene the third panel meeting, prepare a meeting agenda and a packet of materials relevant to the subject of the meeting, and ensure that these materials are transmitted to

all panelists at least two weeks in advance of the meeting date. The objectives of this meeting shall be, at a minimum, to: review the revised draft matrix, particularly with regard to empty cells (cells where there is no match between regulatory research needs and available facilities) and cells where regulatory research needs can only be met by expensive approaches; and develop methods to best fill these empty cells in a cost-effective manner.

TASK 6b

The contractor shall brief the NRC staff on the revised matrix. Panel members will not participate in this briefing.

Estimated Level of Effort: 4 Staff Weeks
Estimated Completion Date: 6 Months After Project Initiation

TASK 7a

After consideration of the comments from the panelists during Task 6a, and from the NRC staff in Task 6b, the contractor shall modify the matrix as appropriate, with the goals of filling all cells.

TASK 7b

The contractor shall prepare a technical letter report which describes the revised matrix.

Estimated Level of Effort: 4 Staff Weeks
Estimated Completion Date: 7 Months After Project Initiation

TASK 8a

The contractor shall identify those most viable options from the revised matrix prepared in Task 7, and perform a cost-benefit study to address each of them. For planning purposes, it shall be assumed that three such alternatives will be evaluated. The contractor shall revise the matrix accordingly.

TASK 8b

The contractor shall prepare a technical letter report which describes the process used and the results obtained in the cost-benefit study performed in Task 8a.

Estimated Level of Effort: 8 Staff Weeks
Estimated Completion Date: 9 Months After Project Initiation

TASK 9

The contractor shall convene the fourth panel meeting, prepare a meeting agenda and a packet of materials relevant to the subject of the meeting, and ensure that these materials are transmitted to all panelists at least two weeks in advance of the meeting date. The objectives of this meeting shall be to discuss and finalize

the new draft matrix and the final recommendations of the panelists to the contractor.

Estimated Level of Effort: 2 Staff Weeks
Estimated Completion Date: 11 Months After Project Initiation

TASK 10

The contractor shall brief the NRC staff on the results and findings of this project, including the conduct and result of the cost-benefit study performed in Task 8a, and the results of panel discussions conducted in Task 9. Panel members will not participate in this briefing.

Estimated Level of Effort: 2 Staff Weeks
Estimated Completion Date: 11 Months After Project Initiation

TASK 11

The contractor shall prepare and present papers describing the work conducted in this project at the Light Water Reactor Safety Meeting (LWRSM) to be held in Rockville, Maryland, and at the Nuclear Safety Research Review Committee (NSRRC) to be held at a place to be determined.

Estimated Level of Effort: 2 Staff Weeks
Estimated Completion Date: 11 Months After Project Initiation

TASK 12

The contractor shall prepare a Final Report covering the work conducted during this project, and the results obtained. Revise the report after receipt of NRC comments. The Final Report shall be prepared as a NUREG/CR.

Estimated Level of Effort: 4 Staff Weeks
Estimated Completion Date: 12 Months After Project Initiation
(Draft)
Estimated Completion Date: 1 Month After Receipt of NRC Comments
(Final)

C.2 MEETINGS AND TRAVEL

It is anticipated that the following trips will be required as part of this project.

- a. One trip for three persons for three days to NRC headquarters as part of Task 1.
- b. Three trips for two persons for two days each to various locations as part of Task 2.
- c. One trip for three persons for three days to NRC headquarters as part of Task 3.

- d. One trip for three persons for four days to a panel meeting location as part of Task 4.
- e. Three trips for two persons for two days each to various locations as part of Task 5.

Should NRC exercise the option, it is also anticipated that the following trips will be required:

- f. One trip for three persons for four days to a panel meeting location as part of Task 6.
- g. One trip for three persons for three days to NRC headquarters as part of Task 6.
- h. One trip for three persons for four days to a panel meeting location as part of Task 9.
- i. One trip for three persons for three days to NRC headquarters as part of Task 10.
- j. One trip for one person for three days to present a paper at LWRS as part of Task 11.
- k. One trip for one person for three days to present a paper at NSRRC as part of Task 11.

(Note: The anticipated travel shown in this section represents only that travel required by contractor and consultant personnel, and does not take into account any travel that may be required to be paid from contract funds for panel members. The contractor shall provide the NRC with an estimate of the costs associated with panel members' travel.)

[End of Clause]

C.3 TRAVEL APPROVALS (MAR 1987)

- 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 shall be in compliance with 52.247-63, Preference For U.S. Flag Air Carriers. Such approval will 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.

NUMBER	TITLE	DATE
52.246-5	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 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.

NUMBER	TITLE	DATE
52.212-13	STOP-WORK ORDER Alternate I (APR 1984)	AUG 1989

[End of Clause]

F.2 PREPARATION OF TECHNICAL REPORTS (JUN 1991)

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 NRC Handbook 3.8. NRC Handbook 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.3 TECHNICAL PROGRESS REPORT (OMB CLEARANCE NUMBER 3150-0112) (JUN 1988)

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 shall identify the title of the project, the contract number, project manager and/or principal investigator, the contract period of performance, and the period covered by the report. Each report shall include the following for each discrete task:

- a. A listing of the efforts completed during the period; 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.4 FINANCIAL STATUS REPORT (OMB CLEARANCE NUMBER 3150-0112)
(JUN 1988)

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 shall identify the title of the project, the contract number, project manager and/or principal investigator, the contract period of performance, and the period covered by the report. Each report shall include the following for each discrete task:

- 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) CSP Status:
 - (a) Project Percentage (%) of Completion cumulative through the report period for the Project/Task Order as reflected in the current CSP.
 - (b) Indicate if there has been a significant change in the original Contractor Spending Plan (CSP) projection in either dollars or percentage of completion. Identify what the change is, 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 this 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.

If the data in this report indicates a need for additional funding beyond that already obligated, this information may only be used as backup 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.5 PLACE OF DELIVERY--REPORTS (JUN 1988)

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

(a) Project Officer (2 copies)

US Nuclear Regulatory Commission
Attn: Jerry Wachtel - NLN-316
Division of Systems Research
Office of Nuclear Regulatory Research
Washington, DC 20555

(b) Contracting Officer (1 copy)

[End of Clause]

F.6 DURATION OF CONTRACT PERIOD (MAR 1987)
ALTERNATE II (MAR 1987)

The contract shall commence on the effective date and will expire five months thereafter. The term of this contract may be extended at the option of the Government for an additional eight months.

[End of Clause]

F.7 REPORTING REQUIREMENTS

Technical Reporting - The contractor shall submit the following documents to the NRC Project Officer in accordance with the schedule as detailed in Section C.1.4 of the Statement of Work:

Task 3b Technical Letter Report
Task 4b Technical Letter Report
Task 5c Technical Letter Report
Task 7b Technical Letter Report
Task 8b Technical Letter Report
Task 11 LWRSM Paper
Task 11 NSRRC Paper
Task 12 Draft NUREG/CR Report
Task 12 Final NUREG/CR Report

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 INDIRECT COST RATES (JUN 1988)

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

CATEGORY	RATE (%)	COST BASE	APPLICABLE PERIOD
Overhead	69.46%	Direct Labor	10/1/92 - 12/31/93
G&A	13.03%	Total Direct Cost and Overhead	10/1/92 - 12/31/93

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 52.232-20 - Limitation of Cost or 52.232-22 - Limitation of Funds, as applicable, if such change(s) affect(s) performance of work within the established cost or funding limitations.

[End of Clause]

G.2 PROJECT OFFICER AUTHORITY (JUN 1988)

(a) The Contracting Officer's authorized representative hereinafter referred to as the Project Officer for this contract is:

Name: Jerry Wachtel

Address: US Nuclear Regulatory Commission
Division of Systems Research - NLN-316
Office of Nuclear Regulatory Research
Washington, DC 20555

Telephone Number: (301) 492-3543

(b) Performance of the work under this contract shall be 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 reports, drawings, specifications and technical information to be delivered by the Contractor to the Government under the contract.

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

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

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

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

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

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

(d) All technical directions shall be issued in writing by the Project Officer or shall be confirmed by such person in writing within ten (10) working days after verbal issuance. A copy of said written direction shall 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 such person'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 c above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within five (5) working days after the receipt of any such instruction or direction and shall request the Contracting Officer to modify the contract accordingly. Upon receiving such notification from the Contractor, the Contracting Officer shall issue an appropriate contract modification or advise the Contractor in writing that, in the Contracting Officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the Changes Clause.

(g) Any unauthorized commitment or direction issued by the

Project Officer may result in an unnecessary delay in the Contractor's performance and may even result in the Contractor expending funds for unallowable costs under the contract.

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

(i) In addition to providing technical direction as defined above, the Project Officer is responsible for:

(1) Monitoring the Contractor's technical progress, including surveillance and assessment of performance, and recommending to the Contracting Officer changes in requirements.

(2) Assisting the Contractor in the resolution of technical problems encountered during performance.

(3) Reviewing all costs requested for reimbursement by the Contractor and submitting to the Contracting Officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

[End of Clause]

G.3 TRAVEL REIMBURSEMENT (JUN 1988) ALTERNATE I (JUN 1988)

a. The Contractor is encouraged to use Government contract airlines, AMTRAK rail service, and discount hotel/motel properties in order to reduce the cost of travel under this contract. The Contracting Officer will, upon request, provide each additional 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 domestic travel costs incurred directly and specifically in the performance of this contract. The cost limitations for travel costs are determined by the Federal Travel Regulations that are in effect on the date of the trip. These Regulations specify the daily maximum per diem rates for specific localities within the Conterminous United States (CONUS), the standard CONUS rate, the allowance for meals and incidental expenses (M&IE), the cost of travel by privately owned automobile, and the items which require receipts. A copy of the Regulations may be obtained from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.

c. When the Government changes the Federal Travel Regulations, it is the responsibility of the Contractor to notify the Contracting Officer in accordance with the Limitation 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.

d. The rates for foreign travel are established by the U.S. Department of State and are listed in a publication entitled "Maximum Travel Per Diem Allowances For Foreign Areas". Copies of this publication may be obtained from the U.S. Government Printing Office, Washington, D.C. 20402.

[End of Clause]

G.4 REMITTANCE ADDRESS (MAR 1987)

Remittance address is as follows:

Name: Compa Industries, Inc.

Address: 1799 Sandalwood Avenue
Anaheim, CA 92805

[End of Clause]

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 KEY PERSONNEL (JUN 1988)

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

Valerie E. Barnes

The Contractor agrees that such personnel shall not be removed from the contract work or replaced without compliance with paragraphs b and c hereof.

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 such personnel with personnel of at least substantially equal ability and qualifications.

c. All requests for approval of substitutions hereunder must be in writing and provide a detailed explanation of the circumstances necessitating the proposed substitutions. They contain a complete resume for the proposed substitute, and other information requested by the Contracting Officer to approve or disapprove the proposed substitution. The Contracting Officer will evaluate such requests and promptly notify the Contractor of his/her approval or disapproval thereof in writing.

d. If the Contracting Officer determines that:

(1) 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

(2) That the resultant reduction of effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the Contracting Officer for default or for the convenience of the Government, as appropriate. If the Contracting Officer finds the Contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss or damage.

[End of Clause]

H.2 SAFETY, HEALTH, AND FIRE PROTECTION (MAR 1987)

The Contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of employees and of members of the public and to minimize danger from all hazards to life and property and shall comply with all applicable health, safety, and fire protection regulations and requirements (including reporting requirements) of the Commission and the Department of Labor. In the event that the Contractor fails to comply with these regulations or requirements, the Contracting Officer, may, without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work; thereafter, a start order for resumption of work may be issued at the discretion of the Contracting Officer. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

[End of Clause]

H.3 DISSEMINATION OF CONTRACT INFORMATION (JUN 1991)

The Contractor shall comply with the requirements of the attached NRC Handbook 3.8 and, if applicable, NRC Manual Chapter 3206 (See Section J for List of Attachments) regarding publications 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.

[End of Clause]

H.4 PRIVATE USE OF CONTRACT INFORMATION AND DATA (JUN 1988)

Except as specifically authorized by this contract, or as otherwise approved by the Contracting Officer, information and other data developed or acquired by or furnished to the Contractor in the performance of this contract shall be used only in connection with the work under this contract.

[End of Clause]

H.5 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST (DEC 1991)

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

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

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

(b) Scope. The restrictions described apply to performance or participation by the contractor as defined in Section I, "Scope of Policy," paragraph C, of document entitled "NRC Organizational Conflicts of Interest" (see Section J, List of Attachments).

(c) Work for others.

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

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

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

(d) Disclosure after award.

(1) The contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in this contract, it does not have any organizational conflicts of interest as defined in Section II, "Definitions," paragraph F, of the document entitled "NRC Organizational Conflicts of Interest" (see Section J, List of Attachments).

(2) The contractor agrees that, if after award, it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the contracting officer. This statement must include a

description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract if termination is in the best interest of the Government.

(3) It is recognized that the scope of work of a task-order-type contract necessarily encompasses a broad spectrum of activities. Consequently, if this is a task-order-type contract, the contractor agrees that it will disclose all proposed new work involving NRC licensees or applicants that comes within the scope of work of the underlying contract. Such disclosure must be made before the submission of a bid or proposal to the utility or other regulated entity whenever possible, and must be received by the NRC at least 15 days before the proposed award date in any event. The disclosure must include the statement of work and any other documents that are needed to fully describe the proposed work for the regulated utility or other regulated entity. NRC may deny approval of the disclosed work only when the NRC has issued a task order which includes the technical area and, if site-specific, the site, or has plans to issue a task order which includes the technical area and, if site-specific, the site, or when such work violates (c)(3), above.

(e) Access to and use of information.

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

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

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

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

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

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

use of the information.

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

(f) Subcontracts. Except as provided in Section II, "Definitions," paragraph I, of the document entitled "NRC Organizational Conflicts of Interest" (see Section J, List of Attachments), the contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms contract, contractor, and contracting officer, must be appropriately modified to preserve the Government's rights.

(g) Remedies. For breach of any of the above restrictions, or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract, or for such erroneous representations that necessarily imply bad faith, the Government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies permitted by law or this contract.

(h) Waiver. A request for waiver under this clause must be directed in writing to the contracting officer in accordance with the procedures outlined in Section VII, "Waiver," paragraph A, of the document entitled "NRC Organizational Conflicts of Interest" (see Section J, List of Attachments).

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

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

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

to the Government.

[End of Clause]

H.6 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY - NONE PROVIDED
(JUN 1988)

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

[End of Clause]

H.7 NRC-FURNISHED MATERIAL

The NRC will provide published reports and other documents pertinent to this project, including relevant publications issued by the staff of the Halden project.

(End of Clause)

H.8 OPTION FOR PERFORMANCE OF ADDITIONAL TASKS (PRICED
OPTIONS)

At the option of the Government, the contract may be modified to perform Tasks 6 through 12 as delineated in the Statement of Work, Section C.

(End of Clause)

H.9 OTHER TERMS AND CONDITIONS/REQUIREMENTS

Any purchase of equipment required for performance of work under this project that is to be billed directly to the project requires prior notification and justification to the NRC Project Officer, and written approval of the Contracting Officer. Information to be provided includes the item's description and estimated cost.

(End of Clause)

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

1.1 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
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	JUL 1985
52.203-7	ANTI-KICKBACK PROCEDURES	OCT 1988
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	APR 1984
52.215-2	AUDIT - NEGOTIATION	DEC 1989
52.215-22	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	JAN 1991
52.215-24	SUBCONTRACTOR COST OR PRICING DATA	DEC 1991
52.215-27	TERMINATION OF DEFINED BENEFIT PENSION PLANS	SEP 1989
52.215-31	WAIVER OF FACILITIES CAPITAL COST OF MONEY	SEP 1987
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
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL DISADVANTAGED BUSINESS CONCERNS	FEB 1990
52.219-13	UTILIZATION OF WOMEN-OWNED SMALL BUSINESSES	AUG 1986
52.219-14	LIMITATIONS ON SUBCONTRACTING	JAN 1991

52.220-3	UTILIZATION OF LABOR SURPLUS AREA CONCERNS	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
52.225-11	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	MAY 1992
52.227-1	AUTHORIZATION AND CONSENT	APR 1984
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	APR 1984
52.228-7	INSURANCE - LIABILITY TO THIRD PERSONS	APR 1984
52.232-17	INTEREST	JAN 1991
52.232-20	LIMITATION OF COST	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)	AUG 1989
52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR 1984
52.242-13	BANKRUPTCY	APR 1991
52.243-2	CHANGES - COST-REIMBURSEMENT Alternate I (APR 1984)	AUG 1987
52.244-2	SUBCONTRACTS (COST-REIMBURSEMENT AND LETTER CONTRACTS)	JUL 1985
52.244-5	COMPETITION IN SUBCONTRACTING	APR 1984
52.246-25	LIMITATION OF LIABILITY - SERVICES	APR 1984
52.249-6	TERMINATION (COST-REIMBURSEMENT)	MAY 1986
52.249-14	EXCUSABLE DELAYS	APR 1984

[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] John J. [unclear], 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 of [Name of Offeror] [unclear] 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)

John J. [unclear]
[Signature of the officer or employee responsible for the modification proposal and date]

JOHN J. [unclear]
[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.

(End of Certification)

(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 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]

1.3 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (SEP 1990)

(a) The Government, at its election, may reduce the price of a fixed-price type contract or contract modification and the total cost and fee under a cost-type contract or contract modification by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or his or her designee determines that there was a violation of subsection 27(a) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in the FAR. In the case of a contract modification, the fee subject to reduction is the fee specified in the particular contract modification at the time of execution, except as provided in subparagraph (b)(5) of this clause.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may--

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts or contract modifications, by 10 percent of the initial contract price; 10 percent of the contract modification price; or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award or modification.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

[End of Clause]

I.4 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 13 months.

[End of Clause]

I.5 52.219-11 SPECIAL 8(A) CONTRACT CONDITIONS
(FEB 1990)

The Small Business Administration (SBA) agrees to the following:

(a) To furnish the supplies or services set forth in this contract according to the specifications and the terms and conditions hereof by subcontracting with an eligible concern pursuant to the provisions of section 8(a) of the Small Business Act, as amended (15 U.S.C. 637(a)).

(b) That in the event SBA does not award a subcontract for all or a part of the work hereunder, this contract may be terminated either in whole or in part without cost to either party.

(c) Except for novation agreements and advance payments, delegates to the US Nuclear Regulatory Commission the responsibility for administering the subcontract to be awarded hereunder with complete authority to take any action on behalf of the Government under the terms and conditions of the subcontract; provided, however, that the US Nuclear Regulatory Commission shall give advance notice to the SBA before it issues a final notice terminating the right of a subcontractor to proceed with further performance, either in whole or in part, under the subcontract for default or for the convenience of the Government.

(d) That payments to be made under any subcontract awarded under this contract will be made directly to the subcontractor by the US Nuclear Regulatory Commission.

(e) That the subcontractor awarded a subcontract hereunder shall have the right of appeal from decisions of the Contracting Officer cognizable under the "Disputes" clause of said subcontract.

(f) To notify the US Nuclear Regulatory Commission Contracting Officer immediately upon notification by the subcontractor that the owner or owners upon whom 8(a) eligibility was based plan to relinquish ownership or control of the concern.

[End of Clause]

I.6 52.219-17 SECTION 8(A) AWARD (FEB 1990)

(a) By execution of a contract, the Small Business Administration (SBA) agrees to the following:

(1) To furnish the supplies or services set forth in the contract according to the specifications and the terms and conditions by subcontracting with the Offeror who has been determined an eligible concern pursuant to the provisions of section 8(a) of the Small Business Act, as amended (15 U.S.C. 637(a)).

(2) Except for novation agreements and advance payments, delegates to the US Nuclear Regulatory Commission the responsibility for administering the contract with complete authority to take any action on behalf of the Government under the terms and conditions of the contract; provided, however that the contracting agency shall give advance notice to the SBA before it issues a final notice terminating the right of the subcontractor to proceed with further performance, either in whole or in part, under the contract.

(3) That payments to be made under the contract will be made directly to the subcontractor by the contracting activity.

(4) To notify the US Nuclear Regulatory Commission Contracting Officer immediately upon notification by the subcontractor that the owner or owners upon whom 8(a) eligibility was based plan to relinquish ownership or control of the concern.

(b) The offeror/subcontractor agrees and acknowledges that it will, for and on behalf of the SBA, fulfill and perform all of the requirements of the contract.

[End of Clause]

I.7 52.222-2 PAYMENT FOR OVERTIME PREMIUMS (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed \$0 or the overtime premium is paid for work--

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances,

and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall--

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

[End of Clause]

I.8 52.222-18 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING
PAYMENT OF UNION DUES OR FEES (MAY 1992)

(a) During the term of this contract, the Contractor agrees to post a notice, of such size and in such form as the Secretary of Labor may prescribe, in conspicuous places in and about its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the last sentence shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)):

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you believe that you have been required to pay dues or fees used in part to support activities not related to collective

bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact either a Regional Office of the National Labor Relations Board or: National Labor Relations Board, Division of Information, 1717 Pennsylvania Avenue, N.W., Washington, DC 20570.

(b) The Contractor will comply with all provisions of Executive Order 12800 of April 13, 1992, and related rules, regulations, and orders of the Secretary of Labor.

(c) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (a) or (b) of this clause, this contract may be cancelled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in or adopted pursuant to Executive Order 12800 of April 13, 1992. Such other sanctions or remedies may be imposed as are provided in Executive Order 12800 of April 13, 1992, or by rule, regulation, or order of the Secretary of Labor, or as are otherwise provided by law.

(d) The Contractor will include the provisions of paragraphs (a) through (c) in every subcontract or purchase order entered into in connection with this contract unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 12800 of April 13, 1992, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any such subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance; provided, however, that if the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

[End of Clause]

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

J.1 ATTACHMENTS (MAR 1987)

<u>Attachment Number</u>	<u>Title</u>
1	Billing Instructions
2	NRC Contractor Organizational Conflicts of Interest
3	Unclassified Contractor and Grantee Publications in the NUREG Series, Handbook 3.8
4	Publishing Documents in the NUREG Series, NUREG-0650, Revision 1