

AWARD/CONTRACT

CERTIFIED FOR NATIONAL DEFENSE
UNDER EDSA REG. 2 AND/OR FPMR REG. 1

PAGE NO.

PAGE OF PAGES

1 27

CONTRACT OR SOLICITATION NO.

NRC-04-85-120

EFFECTIVE DATE

5-1-85

REQUISITION/PURCHASE REQUEST NUMBER

RI 5-85-120

ISSUED BY

CODE

ADMINISTERED BY (If other than form 8)

CODE

U. S. Nuclear Regulatory Commission
Division of Contracts
Washington, DC 20555

NAME AND ADDRESS OF CONTRACTOR (No. street, city, county, State and ZIP Code)

Technical University of Hannover
Callin Strasse 36
3000 Hannover
Federal Republic of Germany

DELIVERY

FOR ORIGIN OTHER (See Instructions)

DISCOUNT FOR PREPAYMENT

Net

TO SUBMIT INVOICES
(If copies are required,
list attached to the
ADDRESS SHOWN IN

ITEM

12

CODE FACILITY CODE

TO MARK FOR

CODE

U. S. Nuclear Regulatory Commission
Attn: Dr. Novak Zuber
Office of Nuclear Regulatory Research
Washington, DC 20555

U. S. Nuclear Regulatory Commission
Division of Accounting and Finance
Washington, DC 20555 ATTN: GOV/COM ACCOUNT

ACQUISITION

NEGOTIATED PURSUANT TO

WAS (Check)

DDI box 192)

10 USC 2301a(1) 1 ☐ 41 USC 251c(1)(1) ☒

15A ITEM NO.

15B SUPPLIES/SERVICES

15C QUANTITY

15D UNIT

15E UNIT PRICE

15F AMOUNT

"Countercurrent Steam Water Tests"

Firm Fixed Price - \$50,000.00

8510040355 850930
PDR CONTR
NRC-04-85-120 PDR

15G TOTAL AMOUNT OF CONTRACT \$ 50,000.00

16 TABLE OF CONTENTS

DESCRIPTION	PAGE(S)	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE		PART I - CONTRACT CLAUSES	18
A SOLICITATION/CONTRACT FORM			
B SUPPLIES OR SERVICES AND PRICES/COSTS		PART II - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH	
C DESCRIPTION/SPECS/WORK STATEMENT	2	J LIST OF ATTACHMENT	30
D PACKAGING AND MARKING	3		
E INSPECTION AND ACCEPTANCE	5	PART IV - REPRESENTATIONS AND INSTRUCTIONS	
F DELIVERIES OR PERFORMANCE	5	K REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFICERS	31
G CONTRACT ADMINISTRATION DATA	9	L INSTRS, CONDS, AND NOTICES TO OFFER	
H SPECIAL CONTRACT REQUIREMENTS	13	M EVALUATION FACTORS FOR AWARD	

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

7. ☒ CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is re-

quired to sign this document and return 4 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 acquisition 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. (All documents are listed in the Table of Contents.)

INSTITUT FÜR VERFAHRENTHECHNIK DER UNIVERSITÄT HANNOVER

SA. WILHELM-STRASSE 10, 3000 HANNOVER 1

Der Präsident

In Vertretung

Prof. Dr.-Ing. Dieter Mewes

Callinstraße 36

3000 Hannover 1

Signature of person authorized to sign

7.6.85

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.

NAME OF CONTRACTING OFFICER

Patricia A. Smith

Signature of Contracting Officer

9-30-85

NAME OF CONTRACTOR

Jehlsen

Signature of person authorized to sign

7.6.85

Signature of Contracting Officer

9-30-85

SN 7140-01-152 8069

REVIOUS EDITION UNUSABLE

Section C - Description/Specifications/Work Statement

C.1 Background

This agreement between the United States Nuclear Regulatory Commission and Technical University of Hannover, Federal Republic of Germany, is established pursuant to and in conformity with the "TECHNICAL EXCHANGE AND COOPERATIVE AGREEMENT BETWEEN THE UNITED STATES NUCLEAR REGULATORY COMMISSION AND THE BUNDESMINISTER FÜR FORSCHUNG UND TECHNOLOGIE OF THE FEDERAL REPUBLIC OF GERMANY IN THE FIELD OF REACTOR SAFETY RESEARCH AND DEVELOPMENT" dated April 30, 1981.

C.2 Statement of Work

The contractor shall furnish personnel, facilities, equipment, materials, supplies, and services necessary for the performance of the work set forth below; and therewith perform, utilizing its best efforts, the work provided for therein and report thereon pursuant to the provisions of this contract.

Task 1: Effects of Water Injection

The effects of subcooled water injection should be determined on the mass flow measurements across the tie-plate. To this end:

- a. Experiments will be performed to investigate the thermal mixing of subcooled and heated liquid above the tie-plate and within the volume above the upper grid-spacer. The water injection ports will be similar to those in the KWU-Karlstein test facility, flush with the tie-plate. The water will be injected with saturation temperature as well as subcooled by 50 K. The steam and water volume flows will be varied in the possible range of the test facility.
- b. The injected and exceeding volume flows will be related with the signals of mass flow modul.
- c. The data will be compared with results of experiments for water injection through a weir and through a downward oriented tube located 0.3 m above the end-box. These tests were performed at University of Hannover. Additional the results of the KWU-Karlstein tests will be introduced in the evaluations, so that the effect of water injection mode on drag body and turbine meter measurements can be assessed.
- d. A report will be provided containing experimental data and analysis.

Task 2: Effects of Slots in the Tie-Plate

The turbine meter and the drag body were calibrated in a flow duct with one fuel element dummy. At the walls of the flow channel the steam velocity is much smaller than in the middle, so a great effect of slots in the tie-plate exists. The influence of the slots on the water penetration should be investigated:

- a. During the experiments the geometrie of the internals should become more complex.

In detail it should be investigated:

- Counter-current flow of steam and water at single-slots in plates with consideration of the slot position
- Counter-current flow of steam and water at slots in perforated plates with consideration of the slot position
- Counter-current flow of steam and water at slots in perforated plates in conjunction with a 8 x 8 rod bundle

During these experiments the water will be injected direct above the tie-plate through injection ports or in a distance of nearly 0.3 m above the plate through a downward oriented tube. The test parameter will be varied in the range which is important for counter-current flow.

- b. The experimental results will allow to assess the effect of slots in tie-plate on the counter-current flow behaviour. The knowledge of this effect is important for the calibration tests of the drag body and the turbine meter.
- c. A report will be provided containing experimental data and analysis.

Section D - Packaging and Marking

D.1 Packaging and Marking

The Contractor shall use standard commercial packaging for all items to be delivered. On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

Section E - Place of Inspection and Acceptance

E.1 Place of Inspection and Acceptance

- A. Inspection and acceptance of the deliverable items to be furnished hereunder shall be made at the destination.

Section F - Deliveries and Performance

F.1 Reports, Documentation and Other Deliverable End Items

- a. The Contractor shall submit the following reports:
 - (1) Individual test results reports.
 - (2) Quarterly Technical Progress Reports
 - (3) Topical Reports as appropriate
 - (4) A Final Report upon the conclusion of the contract work
- b. All reports provided solely to the NRC are to be submitted in accordance with the report preparation guidance set forth in NRC Manual Chapter 3202 and are to be submitted in six copies together with a reproducible master. Topical Reports, and quarterly technical progress reports may be provided in the format as published.
- c. The Quarterly Technical Progress Reports are due one month after the end of each calendar quarter.
- d. The Final Report shall document and summarize the results of the entire contract period, including recommendations and conclusions based on the experience and results obtained. The final report shall include tables, graphs, diagrams, curves, sketches, photographs, and drawings in sufficient detail to comprehensively explain the results achieved under the contract.

F.2 Place of Delivery

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

U.S. Nuclear Regulatory Commission
Attn: Dr. Bradley Burson
Office of Nuclear Regulatory Research
Division of Accident Evaluation
Mail Stop: 1130-SS
Washington, D.C. 20555

Project Officer (6 copies)
Report Cover Letter to Contracting Officer (1 copy)

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F.3 Duration of Contract Period

This contract shall become effective May 1, 1985, and shall continue through to April 30, 1986.

F.4 FAR Citations

52.212-13 STOP-WORK ORDER. (APR 1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts a claim for the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim asserted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(End of clause)

(AV 7-105.3 1971 APR)

52.212-15 GOVERNMENT DELAY OF WORK. (APR 1984)

(a) If the performance of all or any part of the work of this contract is delayed or interrupted (1) by an act of the Contracting Officer in the

administration of this contract that is not expressly or impliedly authorized by this contract, or (2) by a failure of the Contracting Officer to act within the time specified in this contract, or within a reasonable time if not specified, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by the delay or interruption and the contract shall be modified in writing accordingly. Adjustment shall also be made in the delivery or performance dates and any other contractual term or condition affected by the delay or interruption. However, no adjustment shall be made under this clause for any delay or interruption to the extent that performance would have been delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an adjustment is provided or excluded under any other term or condition of this contract.

(b) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved, and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the delay or interruption, but not later than the day of final payment under the contract.

(End of clause)

(AV 7-104.77 1968 SEP)

52.247-34 F.O.B. DESTINATION. (APR 1984)

(a) The term "f.o.b. destination," as used in this clause, means--

(1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and

(2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee. If the Contractor uses rail carrier or freight forwarder for less than carload shipments, the Contractor shall assure that the carrier will furnish tailgate delivery if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall--

(1) (i) Pack and mark the shipment to comply with contract specifications; or

(ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;

(2) Prepare and distribute commercial bills of lading;

(3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;

(4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;

(5) Furnish a delivery schedule and designate the mode of delivering carrier; and

technical problems encountered during performance. Within the purview of this authority, the Project Officer is authorized to review all costs requested for reimbursement by Contractors and submit recommendations for approval, disapproval, or suspension for supplies/services required under the contract. The Contracting Officer is responsible for directing or negotiating any changes in terms, conditions, or amounts cited in the contract.

For guidance from the Project Officer to the Contractor to be valid, it must: (1) be consistent with the description of work set forth in the contract; (2) not constitute new assignment of work or change to the expressed terms, conditions or specifications incorporated into this contract; (3) not constitute a basis for an extension to the period of performance or contract delivery schedule; and, as stated above, (4) not constitute a basis for any increase in the contract cost.

B. Name and Mail Code: Dr. Bradley Burson, 1130-SS
Office Address: Office of Nuclear Regulatory Research
Division of Accident Evaluation

Washington, DC 20555
Telephone Number: (301) 427-4562

6.3 Invoice Requirements

Invoices shall be submitted in an original and 4 copies to:

U.S. Nuclear Regulatory Commission
Division of Accounting and Finance
Office of Resource Management
ATTN: GOV/COM Accounts Section
Washington, D.C. 20555.

To constitute a proper invoice, the invoice must include the following information and/or attached documentation:

- (1) Name of the business concern and invoice date.
- (2) Contract number or other authorization for delivery of property or services.
- (3) Description price and quantity of property and services actually delivered or rendered.
- (4) Shipping and payment terms.
- (5) Name (where practicable), title, phone number, and complete mailing address of responsible official to whom payment is to be sent.
- (6) Other substantiating documentation or information as required by the contract.

Section G - Contract Administration Data

G.1 Consideration and Payment

In full consideration of the Contractor's performance hereunder, NRC will pay the Contractor the sum of \$50,000.00 in accordance with contract Clause 52.232-1 entitled "Payments."

Said payments shall be made as soon as practicable upon submission by the contractor of vouchers in form satisfactory to the Contracting Officer; provided, however, that said payments shall not be deemed to prejudice any rights which the Government may have by law or under other provisions of this contract.

G.2 Project Officer

- A. The individual(s) listed in "B" below is (are) hereby designated as the Contracting Officer's authorized representative (hereinafter called Project Officer) for technical aspects of this contract. The Project Officer is not authorized to approve or request any action which results in or could result in an increase in contract cost; or terminate, settle any claim or dispute arising under the contract, or issue any unilateral directive whatever.

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) interpreting the scope of work; (3) performing technical evaluation as required; (4) performing technical inspections and acceptances required by this contract; and (5) assisting the Contractor in the resolution of

Section H - Special Contract Requirements

H.1 Drawings, Designs, and Specifications

All drawings, sketches, designs, design data, specifications, notebooks, technical and scientific data, and all photographs, negatives, reports, findings, recommendations, data and memoranda of every description relating thereto, as well as all copies of the foregoing relating to the work or any part thereto, shall be subject to inspection by the Commission at all reasonable times (for which inspection the proper facilities shall be afforded the Commission by the Contractor and its subcontractors), shall be the property of the Government and may be used by the Government for any purpose whatsoever without any claim on the part of the Contractor and its subcontractors and vendors for additional compensation and shall, subject to the right of the Contractor to retain a copy of said material for its own use, be delivered to the Government, or otherwise disposed of by the Contractor either as the Contracting Officer may from time to time direct during the progress of the work or in any event as the Contracting Officer shall direct upon completion or termination of this contract. The Contractor's right of retention and use shall be subject to the security, patent, and use of information provisions, if any, of this contract.

H.2 Proprietary Data and Confidential Information

In connection with the performance of the work under this contract, the Contractor may be furnished, or may develop or acquire, proprietary data (trade secrets) or confidential or privileged technical, business, or financial information, including Commission plans, policies, reports, financial plans, internal data protected by the Privacy Act of 1974 (P.L. 93-579), or other information which has not been released to the public or has been determined by the Commission to be otherwise exempt from disclosure to the public. Contractor agrees to hold such information in confidence and not to directly or indirectly duplicate, disseminate, or disclose such information in whole or in part to any other person or organization except as may be necessary to perform the work under this contract. Contractor agrees to return such information

to the Commission or otherwise dispose of it either as the Contracting Officer may from time to time direct during the progress of the work or in any event as the Contracting Officer shall direct upon completion or termination of this contract. Failure to comply with this clause shall be grounds for termination of this contract.

H.3

Contractor Organizational Conflicts of Interest (OMB Clearance Number 3150-0112)

(a) Purpose. The primary purpose of this clause is to aid in ensuring that the Contractor: (1) is not placed on a conflicting role because of current or planned interest (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 herein shall apply to performance or participation by the Contractor as defined in 41 CFR §20-1.5402(f) in the activities covered by this clause.

(c) Work for Others. Notwithstanding any other provision of this contract, during the term of this contract, the Contractor agrees to forgo 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 who are employed full time under this contract and employees designated as key personnel, if any, under this contract abide by the provision of this clause. If the Contractor believes with respect to itself or any such 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.

(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 41 CFR 20-1.5402(a).

(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 shall 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 for convenience if it deems such termination to be in the best interests of the Government.

(e) Access to and use of information.

(1) If the Contractor in the performance of this contract obtains access to information, such as NRC plans, policies, reports,

studies, financial plans, internal data protected by the Privacy Act of 1974 (Pub. L. 93-579), or data which has not been released to the public, the Contractor agrees not to:

- (i) Use such information for any private purpose until the information has been released to the public;
- (ii) compete for work for the Commission based on such information for a period of six (6) months after either the completion of this contract or the release of such information to the public, whichever is first;
- (iii) submit an unsolicited proposal to the Government based on such information until one year after the release of such information to the public, or
- (iv) release the information without prior written approval by the Contracting Officer unless such 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 (Pub. L. 93-579), or other confidential or privileged technical, business, or financial information under this contract, the Contractor shall treat such information in accordance with restrictions placed on use of the information.

(3) The Contractor shall have, subject to patent and security provisions of this contract, 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 41 CFR 20-1.5402(h), the Contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms "contract," "Contractor," and "Contracting Officer," shall be appropriately modified to preserve the Government's rights.

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

(h) Waiver. A request for waiver under this clause shall be directed in writing through the Contracting Officer to the Executive Director for Operations (EDO) in accordance with the procedures outlined in §20-1.5411.

PART II - CONTRACT CLAUSES

Section I - Contract Clauses

52.202-1 DEFINITIONS. (APR 1984)

(a) "Head of the agency" (also called "agency head") or "Secretary" means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency, and, in the Department of Defense, the Under Secretary and any Assistant Secretary of the Departments of the Army, Navy, and Air Force and the Director and Deputy Director of Defense agencies; and the term "authorized representative" means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(c) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

(End of clause)

(R 7-103.1 1979 MAR)

(R 7-203.1)

(R 7-302.1)

(R 7-402.1)

(R 7-901.1)

(R 7-1902.1)

(R 7-1909.1)

52.203-1 OFFICIALS NOT TO BENEFIT. (APR 1984)

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit arising from it. However, this clause does not apply to this contract to the extent that this contract is made with a corporation for the corporation's general benefit.

(End of clause)

(R 7-103.19 1949 JUL)

(R 1-7.102-17)

52.203-3 GRATUITIES. (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) above, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

(R 7-104.16 1952 MAR)

52.203-5 COVENANT AGAINST CONTINGENT FEES. (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

(R 7-103.20 1958 JAN)

(R 1-1.503)

(R 1-7.102-18)

52.215-1 EXAMINATION OF RECORDS BY COMPTROLLER GENERAL. (APR 1984)

(a) This clause applies if this contract exceeds \$10,000 and was entered into by negotiation.

(b) The Comptroller General of the United States or a duly authorized representative from the General Accounting Office shall, until 3 years after final payment under this contract or for any shorter period specified in Federal Acquisition Regulation (FAR) Subpart 4.7, Contractor Records Retention, have

access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract.

(c) The Contractor agrees to include in first-tier subcontracts under this contract a clause to the effect that the Comptroller General or a duly authorized representative from the General Accounting Office shall, until 3 years after final payment under the subcontract or for any shorter period specified in FAR Subpart 4.7, have access to and the right to examine any of the subcontractor's directly pertinent books, documents, papers, or other records involving transactions related to the subcontract. "Subcontract," as used in this clause, excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utility services at rates established to apply uniformly to the public, plus any applicable reasonable connection charge.

(d) The periods of access and examination in paragraphs (b) and (c) above for records relating to (1) appeals under the Disputes clause, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Comptroller General or a duly authorized representative from the General Accounting Office has taken exception shall continue until such appeals, litigation, claims, or exceptions are disposed of.

(End of clause)
(R 7-104.15 1975 JUN)
(R 1-7.103-3)

52.215-2 AUDIT--NEGOTIATION. (APR 1984)

(a) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable contract, or any combination of these, the Contractor shall maintain--and the Contracting Officer or representatives of the Contracting Officer shall have the right to examine and audit--books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred in performing this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(b) Cost or pricing data. If, pursuant to law, the Contractor has been required to submit cost or pricing data in connection with pricing this contract or any modification to this contract, the Contracting Officer or representatives of the Contracting Officer who are employees of the Government shall have the right to examine and audit all books, records, documents, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the contract or modification, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used.

(c) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or representatives of the Contracting Officer who are employees of the Government shall have the right to examine and audit books, records, other documents, and supporting materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(d) Availability. The Contractor shall make available at its office at all reasonable times the materials described in paragraphs (a) and (b) above, for examination, audit, or reproduction, until 3 years after final payment under this contract, or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation, or for any longer period required by statute or by other clauses of this contract. In addition--

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement; and

(2) Records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are disposed of.

(e) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (e), in all subcontracts over \$10,000 under this contract, altering the clause only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)
 (R 7-104.41(a) 1978 AUG)
 (R 1-3.814-2(a))
 (R 7-303.28)
 (R 7-402.30)
 (R 7-603.20)
 (R 7-605.11)
 (R 7-607.22)
 (R 7-802.7)
 (R 7-901.16)
 (R 7-1702.15 1971 APR)
 (R 7-1903.29)
 (R 7-1909.24)
 (R 7-2102.19)

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES. (APR 1984)

(a) If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

(b) The Contractor agrees to insert the substance of this clause, including this paragraph (b), in any subcontract to which a labor dispute may delay the timely performance of this contract; except that each subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify the next higher tier subcontractor or the prime Contractor, as the case may be, of all relevant information concerning the dispute.

(End of clause)
 (R 7-203.27 1967 JUN)
 (AV 7-104.4 1958 SEP)
 (AV 7-603.1 1958 SEP)

52.222-3 CONVICT LABOR. (APR 1984)

The Contractor agrees not to employ any person undergoing sentence of imprisonment in performing this contract except as provided by 18 U.S.C. 4082(c)(2) and Executive Order 11755, December 29, 1973.

(End of clause)

(R 7-104.17 1975 OCT)

(R 7-607.12 1975 OCT)

(R 1-12.204)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT--OVERTIME
COMPENSATION--GENERAL. (APR 1984)

This contract, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333) (the Act), is subject to the following terms and all other applicable provisions and exceptions of the Act and the regulations of the Secretary of Labor.

(a) Overtime requirements. Contractor or subcontractor shall not require or permit any laborer or mechanic to work in excess of 8 hours in any calendar day, or 40 hours in any workweek, on any part of the contract work subject to the Act; unless, the laborer or mechanic receives compensation at a rate not less than 1 1/2 times the basic rate of pay for all hours worked in excess of 8 hours in any calendar day, or 40 hours in any workweek, whichever produces the greater amount of overtime.

(b) Violation, liability for unpaid wages, and liquidated damages. If the terms of paragraph (a) above are violated, the Contractor and any subcontractor responsible for the violation shall be liable to any affected employee for unpaid wages. In addition, the Contractor and subcontractor shall be liable to the United States for liquidated damages. These damages are computed for each individual laborer or mechanic at \$10 for each calendar day on which the employee was required or permitted to be employed in violation of paragraph (a) above.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such amounts as may administratively be determined to be necessary to satisfy any liabilities of the Contractor or subcontractor for unpaid wages and liquidated damages as provided in paragraph (b) above.

(d) Subcontracts. The Contractor and subcontractor shall insert paragraphs (a) through (d) of this clause in all subcontracts.

(e) Records. The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). These records shall be preserved for 3 years from contract completion. The contractor will make the records available for inspection by authorized representatives of the U. S. Nuclear Regulatory Commission and the Department of Labor, and will permit such representatives to interview employees during working hours on the job.

(End of clause)

(R 7-103.16(a) 1971 NOV)

(R 7-607.11 1972 APR)

(R 1-12.303)

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA.
(APR 1984)

(a) The Contractor agrees to submit a Material Safety Data Sheet (Department of Labor Form OSHA-20), as prescribed in Federal Standard No. 313A, for all hazardous material 5 days before delivery of the material, whether or not listed in Appendix A of the Standard. This obligation applies to all materials delivered under this contract which will involve exposure to hazardous materials or items containing these materials.

(b) "Hazardous material," as used in this clause, is as defined in Federal Standard No. 313A, in effect on the date of this contract.

(c) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(d) The Contractor shall comply with applicable Federal, state, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(e) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate, and disclose any data to which this clause is applicable. The purposes of this right are to (i) apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials; (ii) obtain medical treatment for those affected by the material; and (iii) have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (e)(1) above, in precedence over any other clause of this contract providing for rights in data.

(3) That the Government is not precluded from using similar or identical data acquired from other sources.

(4) That the data shall not be duplicated, disclosed, or released outside the Government, in whole or in part for any acquisition or manufacturing purpose, if the following legend is marked on each piece of data to which this clause applies--

"This is furnished under United States Government Contract No. and shall not be used, duplicated, or disclosed for any acquisition or manufacturing purpose without the permission of This legend shall be marked on any reproduction of this data."

(End of legend)

(5) That the Contractor shall not place the legend or any other restrictive legend on any data which (i) the Contractor or any subcontractor previously delivered to the Government without limitations or (ii) should be delivered without limitations under the conditions specified in the Federal Acquisition Regulation in the clause at 52.227-18, Rights in Data.

(f) The Contractor shall insert this clause, including this paragraph (f), with appropriate changes in the designation of the parties, in subcontracts at any tier (including purchase designations or purchase orders) under this contract involving hazardous material.

(End of clause)

(R 7-104.98 1977 OCT)

52.232-1 PAYMENTS. (APR 1984)

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if--

(a) The amount due on the deliveries warrants it; or

(b) The Contractor requests it and the amount due on the deliveries is at least \$1,000 or 50 percent of the total contract price.

(End of clause)

(R 7-103.7 1958 JAN)

(R 1-7.102-7)

52.232-17 INTEREST. (APR 1984)

(a) Notwithstanding any other clause of this contract, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

(R 7-104.39 1972 MAY)

(R 1-7.203-15)

52.232-23 ASSIGNMENT OF CLAIMS. (APR 1984)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 203, 41 U.S.C. 15 (hereafter referred to as the "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

(R 7-103.8 1962 FEB; R 1-30.703 1976 MAY)

(R 7-602.8 1976 OCT)

(R 7-607.6 1976 OCT)

52.233-1 DISPUTES. (APR 1984)

(a) This contract is subject to the Contract Disputes Act of 1978 (41 U.S.C. 601-613) (the Act).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$50,000 is not a claim under the Act until certified as required by subparagraph (d)(2) below. A voucher, invoice, or other routine request for payment that is not in dispute when

submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d) (1) A claim by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2) For Contractor claims exceeding \$50,000, the Contractor shall submit with the claim a certification that--

(i) The claim is made in good faith;

(ii) Supporting data are accurate and complete to the best of the Contractor's knowledge and belief; and

(iii) The amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable.

(3) (i) If the Contractor is an individual, the certification shall be executed by that individual.

(ii) If the Contractor is not an individual, the certification shall be executed by--

(A) A senior company official in charge at the Contractor's plant or location involved; or

(B) An officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

(e) For Contractor claims of \$50,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$50,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (properly certified if required), or (2) the date payment otherwise would be due, if that date is later, until the date of payment. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(h) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

(R 7-103.12 1980 JUN)

(R FPR Temporary Regulation 55-11 1980 JUN)

52.244-5 COMPETITION IN SUBCONTRACTING. (APR 1984)

The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(End of clause)

(V 7-104.40 1962 APR)

(V 1-7.202-30)

(V 7-303.27)
 (V 7-402.29)
 (V 7-603.18)
 (V 7-605.37)
 (V 7-702.50)
 (V 7-703.43)
 (V 7-704.35)
 (V 7-1703.5)
 (V 7-1903.28)
 (V 7-1909.23)

52.247-63 PREFERENCE FOR U.S.-FLAG AIR CARRIERS. (APR 1984)

(a) "International air transportation," as used in this clause, means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.

"United States," as used in this clause, means the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and possessions of the United States.

"U.S.-flag air carrier," as used in this clause, means an air carrier holding a certificate under section 401 of the Federal Aviation Act of 1958 (49 U.S.C. 1371).

(b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 1517) (Fly America Act) requires that all Federal agencies and Government contractors and subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

(c) The Contractor agrees, in performing work under this contract, to use U.S.-flag air carriers for international air transportation of personnel (and their personal effects) or property to the extent that service by those carriers is available.

(d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a certification on vouchers involving such transportation essentially as follows:

CERTIFICATION OF UNAVAILABILITY OF U.S.-FLAG AIR CARRIERS

I hereby certify that international air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons (see section 47.403 of the Federal Acquisition Regulation): [State reasons]:

.....
 (End of certification)

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase under this contract that may involve international air transportation.

(End of clause)
 (R 7-104.95 1979 NOV)
 (R 1-1.323-2)

52.249-1 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE)
(SHORT FORM). (APR 1984)

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the rights, duties, and obligations of the parties, including compensation to the Contractor, shall be in accordance with Part 49 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

(R 1-8.705-1)

(R 1-8.705-2)

(R 7-103.21(a) 1968 FEB)

(R 7-602.29(b) 1965 JAN)

52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE). (APR 1984)

(a) (1) The Government may, subject to paragraphs (c) and (d) below, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to--

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) below); or

(iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) below).

(2) The Government's right to terminate this contract under subdivisions (1)(ii) and (1)(iii) above, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

(R 1-8.707)

(R 7-103.11 1959 AUG)

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

Section J - List of Attachments

<u>Attachment Number</u>	<u>Title</u>
1	Technical Exchange and Cooperative Arrangement Between The United States Nuclear Regulatory Commission and The Bundesminister Fuer Forschung Und Technologie of the Federal Republic of Germany in the Field of Reactor Safety Research and Development
2	NRC Manual Chapter 3202
3	Billing Instructions