

SOLICITATION, OFFER AND AWARD		1. CERTIFIED FOR NATIONAL DEFENSE UNDER BDSA REG 2 AND/OR DMS REG 1		PAYING		PAGE OF 1 37 PAGES	
2. CONTRACT NO.		3. SOLICITATION NO. RS-RES-86-120		4. TYPE OF SOLICITATION <input type="checkbox"/> ADVERTISED (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 5/29/86	
7. ISSUED BY U.S. Nuclear Regulatory Commission Division of Contracts Washington, D.C. 20555		8. ADDRESS OFFER TO (If other than Item 7) All proposals should be addressed as indicated in Block 7, however, handcarried proposals (this includes Express Mail and all commercial delivery services) must be delivered to the address in Block 9.		6. REQUISITION/PURCHASE NO. RES-86-120			

NOTE: In advertised solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and three (3) copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the Depository listed in Rm. 2223, 4550 Montgomery Avenue until 10:00AM local time 6/27/86
Bethesda, MD 20814 (Hour) (Date)

CAUTION - LATE Submissions, Modifications, and Withdrawals See Section I, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation

10. FOR INFORMATION CALL: A. NAME Joyce P. Bazin	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (301) 492-4279
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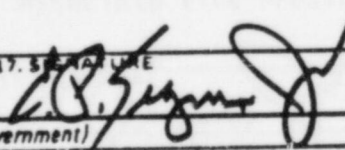
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OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions in 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within 90 calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)	10 CALENDAR DAYS 0 %	20 CALENDAR DAYS 0 %	30 CALENDAR DAYS 0 %	CALENDAR DAYS 0 %
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO	DATE	AMENDMENT NO	DATE

15A. NAME AND ADDRESS OF OFFEROR Memphis State University Memphis, TN 38152 DUN # 055688857	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) E.P. Segner, Jr. Associate Vice President for Research
15B. TELEPHONE NO. (Include area code) 901/454-2590	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE <input type="checkbox"/>		17. SIGNATURE 
			18. OFFER DATE 6/27/86

AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
22. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)		23. NEGOTIATED PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(a) () <input type="checkbox"/> 41 U.S.C. 252(c) ()
24. ADMINISTERED BY (If other than Item 7) 8610020379 860917 PDR CONTR NRC-04-86-120 PDR		25. PAYMENT WILL BE MADE BY CODE
26. NAME OF CONTRACTING OFFICER (Type or print)		27. UNITED STATES OF AMERICA (Signature of Contracting Officer)
		28. AWARD DATE

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

Section B - Supplies or Services and Prices/Costs

B.1 Brief Description of Work

To continue monitoring the seismic activity of the southern New Madrid area; to evaluate earthquake hazard potential, obtain and analyze information and provide better criteria for hazard evaluation.

B.2 (Offeror should provide Cost information)

A. Total Estimated Cost.....\$120,628

B.3 Remittance Address

If item 15c. of the Standard Form 33 has been checked, the offeror shall enter the remittance address below.

Name: Mr. Dave Whipple

Address: Grants & Contracts Accounting

Memphis State University

Memphis, TN 38152

Section C - Description/Specifications/Work StatementC.1 Statement of WorkC.1.1 Background

Appendix A, 10 CFR Part 100 established requirements applicable to nuclear power plant license applications for seismic and geologic site investigations for nuclear power plants and associated nuclear facilities necessary for evaluation of the site and for providing information needed for engineering designs. Paragraph (6), Section IV of Appendix A requires that, where possible, epicenters of historically reported earthquakes be correlated with tectonic structures, any part of which are within 200 miles of the site.

In December 1811, January and February 1812, the New Madrid, Missouri area was the site of the largest earthquakes recorded in the United States east of the Rocky Mountain front. They were felt over an area of approximately two million square kilometers, and were estimated to have had a modified Mercalli intensity of XXII in the epicentral region. Hence, it is vitally important to define the structural setting and tectonic history of the area in order to permit NRC to realistically evaluate the earthquake risk in the siting of nuclear facilities.

Seismic hazard evaluation in the midcontinent is a complex problem because of the shortness of the historical seismic record, which only goes back about 200 years, and because of insufficient knowledge of neotectonic processes active there. Thus, earthquake risk evaluation in the greater New Madrid, Missouri region, which includes the Anna, Ohio area, is dependent upon a seismotectonic approach incorporating the available seismic record and knowledge of the geologic structures and contemporary stress field. Significant progress in seismic hazard evaluation has been made over the past 10 years by the New Madrid Seismotectonic Program utilizing this approach. However, several critical questions concerning neotectonic processes, tectonic boundaries, regional stress patterns, microseismicity and the like remain to be answered before the study can be brought to a satisfactory conclusion. Thus, a program of continuing research is proposed which builds upon the results of previous investigations. This program should focus on the remaining questions by applying new concepts and experimental approaches, but it also should include continuation of current investigations on a more detailed level.

The NRC has contracted with several organizations to operate a seismographic monitoring network in the southeastern United States. This network comprises about 55 stations. This research is directed towards the determination of local seismicity and the possible identification of associated geologic and tectonic features. Results to date indicate that the monitoring should be continued in order to provide a longer time base and concentrate in some instances on areas not regarded as significant previous to the present monitoring efforts.

C.1.2 Contract Objective

The objective of this contract is to continue monitoring the seismic activity of the southern New Madrid section of the New Madrid/Anna, Ohio region as an integral part of the overall research program to evaluate the earthquake hazard potential of the region and to obtain pertinent analytical information based on the collected data with the broad objective of providing better criteria for hazard evaluations.

C.1.3 Scope of Work

The Contractor shall provide all personnel, materials, transportation, services, equipment and facilities necessary to perform the following:

The Contractor shall be responsible for obtaining all necessary permits or licenses and abide by all applicable laws, regulations, and ordinances of the United States and the State, territory, and political subdivision in which this project is performed.

The Contractor shall monitor the seismic activity in the Tennessee, Arkansas and Mississippi areas and contribute data to the Central Mississippi Valley regional bulletin. Correlate current and past observations and conduct topical studies based

on available information, i.e., make plane analyses, identify active geologic features, determine recurrence rates, etc. Contribute data and analyses conducive to the development of criteria for establishing earthquake hazard potential in the New Madrid/Anna, Ohio region. The Contractor shall have the network or subnetwork installed and fully operating within 60 days of contract award.

C.1.4 Delineation of Contractor Tasks

- a. Install or provide about 10 short-period seismograph stations deployed in Tennessee, Arkansas, and Mississippi. The final configuration must be approved by the NRC Project Officer. This network is to be operated with a maximum of 5% downtime.

The network configuration presently in place is shown in Attachment 6. (Attachment 6 is provided as a guide, and is not necessarily the final configurations).

- b. Obtain and/or reaffirm use permits and telemetry service to convey the data to a central recording point.
- c. Provide all seismic phase readings and hypocenter locations to the following organization responsible for assembling the data from the New Madrid/Anna, Ohio region and for publishing the Central Mississippi Valley Network Bulletin:

St. Louis University
Attn: Dr. Robert Herrmann
Department of Earth Sciences
P. O. Box 8900 - Laclede Station
St. Louis, Missouri 63156

- d. Provide a recording medium with on-line digital recording at the Memphis, Tennessee Central Recording Facility or analog recording with conversion available off-line. An acceptable alternative to recording the analog or digital data transmitted in real time to a central recording facility is digitization and temporary recordings of seismic data at the seismograph site with the ability to transfer data to the central facility without a personnel visit to the remote sites. Transfer can be initiated by either an on-site capability or by inquiry from the central facility. If such a recording scheme is selected, the accuracy of the time put on the remote data string is to be corrected daily to approximately 20 milliseconds.
- e. Report any significant earthquake within the study region to the Nuclear Regulatory Commission within 24 hours. A list of NRC contacts will be provided to the Contractor at time of award.
- f. Relocate and/or establish seismograph stations as it becomes necessary after approval of the NRC Project Officer.

- g. Study the spatial and temporal distributions, including earthquake recurrence rates, of seismicity and relate them to structural features.
- h. Identify parameters that influence seismic processes within the network area and use these in defining seismogenic/tectonic provinces.
- i. Study crustal and upper mantle velocity structure in the southeastern United States based on the current data from the network correlation with historic seismicity.
- j. Study the magnitudes of historic events using magnitude-felt area relationships and thus derive and magnitude-frequency relationships for the network area.
- k. Evaluate the relative significance of the results obtained in each of the above analyses as they impact the determination of seismic hazards in the area.

C.2 Meetings and Travel

Prior to any of the following trips taken during the period of performance under this contract, the Contractor shall obtain verbal or written approval of the NRC Project Officer.

At the discretion of the NRC Project Officer, the Contractor shall attend and participate in one day briefings at the NRC facilities in Silver Spring, Maryland, following submission of the quarterly and annual reports, for the purpose of reviewing progress to date, anticipated future work activities, and NRC comments. Such briefings shall involve the Contractor's principal investigators, NRC technical staff assigned to this contract, and others to be designated at NRC's discretion. Such briefings will be arranged at the convenience of NRC, but will occur within 30 days of NRC's receipt of the above reports. There shall be a maximum of one meeting per year required.

Section D - Packaging and Marking

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

Section E - Inspection and Acceptance

The Contractor shall refer to Section I, Clause No. 52.252-2 for citations incorporated by reference.

Section F - Deliveries and Performance

F.1 Reports, Documentation and Other Deliverable End Items.

F.1.1 Monthly Business Letters

The Contractor shall submit a written monthly business letter report, in two (2) copies to the Project Officer and one (1) copy to the Contracting Officer, by the 15th of the following month which shall identify the title of the project, the contract number, principal investigator, the contract period of performance, and the reporting period. Each report shall include the following two sections:

1. A Project Status Section, which shall consist of:
 - 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, a separate letter should be submitted to the Contracting Officer.)
 - c. A summary of progress to date; and
 - d. Plans for the next reporting period.
2. A Financial Status Section, which shall consist of:
 - a. The total estimated cost (value) of the project as reflected in the contract, the amount of funds available in the contract to date, and the balance of funds required to complete the work.
 - b. Detail of all direct and indirect costs incurred during the reporting period of each task.
 - c. Balance of total expenditures during the reporting period and cumulative balance of total expenditures during contract period.

F.1.2 Quarterly Reports

The Contractor shall submit a written quarterly letter progress report, in 16 copies to the NRC Project Officer and 1 copy to the NRC Contracting Officer, within 30 days after the end of each quarter period of the contract and shall contain, as a minimum, a technical report of progress, describing results and findings to date, problems incurred and solutions proposed, plans for the ensuing quarter, and a graphical representation of the operational status of the network.

F.1.3 Quarterly Preliminary Earthquake Bulletin

The Contractor shall submit a written quarterly preliminary earthquake bulletin in sixteen (16) copies to the NRC Project Officer, and (1) copy to the NRC Contracting Officer and (1) copy to Dr. Robert Herrmann at the following address:

St. Louis University
Department of Earth Sciences
P. O. Box 8900-Laclede Station
St. Louis, Missouri 63156

The bulletin shall be in the format of an informal letter report and shall be due within 30 days after each quarter period. The bulletin shall include phase data, hypocentral coordinates, magnitude, and a station and epicenter map. (See Section C.1.4(c)).

F.1.4 Significant Earthquake Incidents Report

Any interesting or significant earthquakes within the study area shall, within 24 hours, be reported orally (by telephone) to the Branch Chief of the Earth Science Research Branch, RES, or to the NRC Duty Officer. A written informal letter report shall be submitted within 1 week to the Branch Chief of the Earth Science Research Branch, RES. The name and addresses of the Branch Chief will be submitted to the Contractor by the NRC Project Officer upon award of contract.

F.1.5 Annual Report

An annual report summarizing the year's activities, results and findings shall be submitted within 30 days of the end of each twelve-month period, in one camera-ready copy and two copies to the NRC Project Officer and one copy to the NRC Contracting Officer. (NOTE: The annual report will eliminate the need for a quarterly progress report for the fourth quarter of each twelve-month period.

F.1.6 Draft Final and Final Report

The reports listed below are to be prepared in accordance with NRC Manual Chapter 3202 (Attachment 3).

The Contractor shall submit fifteen (15) copies of a draft version of the final report to the NRC Project Officer within thirty (30) calendar days prior to the contract expiration date. The NRC Project Officer shall review and provide any comments on the draft report to the Contractor within one (1) week after receipt of the draft report. This report shall contain a comprehensive recapitulation of the entire contract effort and shall be suitable for use as a press release. The format of the final report shall permit users to obtain useful geophysical, geological and seismic guidance from it. The Contractor shall submit one (1) camera-ready copy and two copies of the final report to the NRC Project Officer and one copy to the NRC Contracting Officer on or before the expiration date of the contract.

NOTE: Should the option to extend the term of the contract be exercised at the conclusion of the first, second, third and/or fourth year of the contract, the final report shall be due at the end of the extended period.

F.1.7 Microfiche Copies

In addition to the reporting requirements delineated above, one (1) master and ten (10) microfiche copies of the NRC-approved final report shall be provided to the NRC Project Officer on or before the contract expiration date. Such microfiche shall conform to the following specifications:

1. Microfiche containing source documentation shall conform to the NMA Type 1 format (ANSI/NMS MS.5) consisting of 98 frames arranged in 7 rows and 14 columns.
2. The reduction ratio shall be 24:1 for all microfiche.
3. The microfiche shall be standard 148mm x 105mm.
4. The microfiche shall be one (1) silver-halide master and one (1) diazo placed in individual acid-free envelopes.
5. Diazo duplicates may be either blue/black or black.
6. The microfiche shall be titled in the following manner:

FIN No.	Title of Report	Date
Contract No.		
NUREG/CR No.		
Fiche No.		

Fiche number refers to 1 of 2, 2 of 2 etc., information.

7. Title information shall be eye-readable on a clear background.
8. The submittal of microfiche containing proprietary material shall be coordinated with the Document Management Branch, Division of Technical Information and Document Control, U.S. Nuclear Regulatory Commission, to set format and procedures for submittal.
9. Foldouts, if any, shall be segmented and filmed in logical order.
10. The first frame shall be blank, and the second frame shall contain the resolution target (NBS 1010A).

11. Questions on microfiche specification should be submitted in writing to:

Document Management Branch
Division of Technical Information and Document Control
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

F.2 Place of Delivery

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

1. Copies (as specified herein) to Project Officer:

U.S. Nuclear Regulatory Commission
Attn: Dr. Andrew Murphy
Office of Nuclear Regulatory Research
Division of Health, Siting and Waste Management
Mail Stop: 1130-SS
Washington, D.C. 20555

2. Copies (as specified herein) to Contracting Officer:

U.S. Nuclear Regulatory Commission
Attn: Contracting Officer
Division of Contracts
Mail Stop: AR-2223
Washington, D.C. 20555

F.3 Duration of Contract Period

This contract shall become effective on either the date of award or the effective date as otherwise specified, and shall continue to completion thereof, within twelve months after said contract is effective. Estimated completion date is September 1987.

F.4 Option to Extend the Term of the Contract -- Services

- a. There are hereby created in the Government four options to require the Contractor to continue performance of the efforts specified in the Statement of Work herein on a yearly basis for each option, at the amount and for the period of performance to be specified at such time as the requirements arise.
- b. The Contracting Officer may exercise any one or a combination of options at various times when the need arises by giving written notice to the Contractor provided, that the Government shall give the Contractor a preliminary written notice of its intent at least 60 days before the contract expires. The preliminary notice does not commit the Government to exercise the option.
- c. The options may be exercised at any time after the effective date of the contract.

- d. Upon exercise of any of the option, the following modifications will be made to the contract:
 - i. the Statement of Work in Section C will be modified to incorporate the applicable Phase, as set forth herein and as further defined at such time.
 - ii. the duration of the contract period in Section F.3 will be modified accordingly.
 - iii. Section G.1, Consideration, will be modified accordingly.
- e. The Contracting Officer shall require the Contractor to submit a Cost Proposal, in the same format as detailed under Section L.2 of the Solicitation, for the option efforts for the Government's consideration.
- f. Pending exercise of the option for continuance of effort under this contract, the Contractor is not authorized to commence continuation of work and the total obligation of the Government, pursuant to Clause 52.232-21, "Limitation of Costs," shall not exceed the amount set forth in this contract.
- g. If the Government exercises this option, the extended contract shall be considered to include this option provision.
- h. The total duration of this contract, including the exercise of any options under this clause, shall not exceed five (5) years.
- i. Level of effort anticipated for each option year is 1 staff year per year. The option will be exercised in accordance with Contract Clause 52.217-9.

Section G - Contract Administration Data

G.1 Consideration

Estimated Cost and Obligation

- 1. It is estimated that the total cost to the Government for full performance of this contract will be \$ * .
- 2. Total funds currently available for payment and allotted to this contract are \$ * .
- 3. It is estimated that the amount currently allotted will cover performance of the * of this contract.

* To be incorporated into any resultant contract.

G.2 Overhead/General and Administrative Rates

- A. Pending the establishment of final overhead rates which shall be negotiated based on audit of actual costs, the Contractor shall be reimbursed for allowable indirect costs hereunder at the provisional rate of * percent of * .
- B. Pending the establishment of final general and administrative rates which shall be negotiated based on audit of actual costs, the Contractor shall be reimbursed for allowable indirect costs hereunder at the provisional rate of * percent of * .
- C. Notwithstanding A. and B. of this Section, said provisional overhead and G&A rates may be adjusted as appropriate during the term of the contract upon the acceptance of such revised rates by the Contracting Officer.

*To be incorporated into any resultant contract.

G.3 Technical Direction

- A. Performance of the work under this contract shall be subject to the technical direction of the NRC Project Officer named in Section G. of this contract. 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, requires pursuit of certain lines of inquiry, fills in details or otherwise serves to accomplish the contractual scope of work.
 - 2. Providing assistance 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.
- B. Technical direction must be within the general scope 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 clause of the General Provisions, entitled "Changes."
 - 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.

- C. 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 submitted to the Contracting Officer.

The Contractor shall proceed promptly with the performance of technical directions duly issued by the Project Officer in the manner prescribed by this article and within such person's authority under the provisions of this article.

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 B(1) through (4) 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.

- D. 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.
- E. 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 the provisions of the contract clause entitled "Disputes."

G.4

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 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: *
- Office Address: *
- Telephone Number: *

* To be incorporated into any resultant contract

G.5

Travel Reimbursement

Total expenditure for domestic travel shall not exceed \$ * without the prior approval of the Contracting Officer. The Contractor will be reimbursed for the following reasonable domestic travel costs incurred directly and specifically in the performance of this contract and accepted by the Contracting Officer:

1. Per diem shall be reimbursed at a daily rate not to exceed \$50.00. The per diem amount is comprised of lodging expense plus \$23.00 for meals and miscellaneous expense, the total of which shall not exceed the daily rate.
2. When travel is to one of the high-rate geographical areas listed below, actual subsistence costs shall be reimbursed at a daily rate not to exceed the rates indicated:

Area

Daily Rate

*

*

3. The cost of travel by privately owned automobile shall be reimbursed at the rate of 20.5¢ per mile.
4. The cost of travel by rented automobile shall be reimbursed on a reasonable actual expense basis.

* To be incorporated into any resultant contract,

5. All common carrier travel reimbursable hereunder shall be via economy class rates when available. If not available, reimbursement vouchers will be annotated that economy class accommodations were not available. First-class air travel is not authorized.
6. Receipts are required for common carrier transportation, lodging and miscellaneous items in excess of \$25.00.
7. The rates provided shall remain in effect until such time as a unilateral contract modification is issued by the Contracting Officer reflecting changes (increases or decreases) in the Federal Travel Regulations (FTR).

G.6

Payment Due Date

- (a) Payments under this contract will be due 30 calendar days after the later of:
 - (1) The date of actual receipt of a proper invoice (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
 - (2) The date the final deliverable product/service is accepted by the Government.
- (b) For the purpose of determining the due date for payment and for no other purpose, acceptance will be deemed to occur 30 calendar days after the date of delivery of the final deliverable product/service performed in accordance with the terms of the contract.
- (c) If the final product/service is rejected for failure to conform to the technical requirements of the contract, the provisions in paragraph (b) of this clause will apply to the new delivery of the final product/service.
- (d) The date of payment by wire transfer through the Treasury Financial Communications System shall be considered the date payment is made for individual payments exceeding \$25,000. The date a check is issued shall be considered the date payment is made for individual payments of \$25,000 or less.

G.7 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.

G.8 Interest on Overdue Payments

- (a) The Prompt Payment Act, Public Law 97-177 (96 STAT. 85, 31 USC 1801) is applicable to payment of the expiration invoice under this contract and requires the payment of interest to Contractors on overdue payments of the expiration invoice or improperly taken discounts.
- (b) Determinations of interest due will be made in accordance with the provisions of the Prompt Payment Act and Office of Management and Budget Circular A-125, Vol. 47 Federal Register 37321, August 25, 1982. Among other considerations, OMB Circular A-125 provides that:
 - (1) Interest penalties are not required when payment is delayed because of a disagreement over the amount of payment or other issues concerning compliance with the terms of the contract.

- (2) Whenever a proper invoice is paid after the due date plus 15 days, interest will be included with the payment at the interest rate applicable on the payment date. Interest will be computed from the day after the due date through the payment date.
- (c) For purposes of this clause, an expiration invoice is defined as a claim submitted for costs incurred for performance through the expiration date of a Cost Type contract.

Section H - Special Contract Requirements

H.1 Key Personnel

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

*

* To be incorporated into any resultant contract

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 or his authorized representative, 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 must contain a complete resume for the proposed substitute, and other information requested by the Contracting Officer or needed by him to approve or disapprove the proposed substitution. The Contracting Officer or his authorized representative will evaluate such requests and promptly notify the Contractor of his approval or disapproval thereof in writing.

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

H.2 Consultant or Other Comparable Employment Services of Contractor Employees (OMB Clearance Number 3150-0112)

The Contractor shall require all employees who are employed full-time (an individual who performs work under the cost-type contract on a full-time annual basis) or part-time (50 percent or more of regular annual compensation received under terms of a contract with the Commission) on the contract work to disclose to the Contractor all consultant or other comparable employment services which the employees proposed to undertake for others. The Contractor shall transmit to the Contracting Officer all information obtained from such disclosures. The Contractor will require any employee who will be employed full-time on the contract to agree, as a condition of his participation in such work, that he will not perform consultant or other comparable employment services for another Commission cost-type Contractor under its contract with the Commission except with the prior approval of the Contractor.

H.3 Safety, Health, and Fire Protection

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 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 said 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.

H.4 Dissemination of Contract Information (OMB Clearance Number 3150-0112)

The Contractor shall not publish, permit to be published, or disseminate to the public any information, oral or written, concerning the work performed under this contract without the prior written consent of the Contracting Officer. Two copies of any information proposed to be published or disseminated shall be submitted to the Contracting Officer. Failure to comply with this clause shall be grounds for termination of this contract.

H.5

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.

H.6 Private Use of Contract Information and Data

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

H.7 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.8 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.9

Method of Payment

- (a) Payment under this contract will be made by wire transfer through the Treasury Financial Communications System for each individual payment in excess of \$25,000 and by Treasury check for each individual payment of \$25,000 or less.
- (b) Within seven days after the effective date of the contract, the Contractor shall forward the following information in writing to the Contracting Officer to facilitate wire transfer of contract payments. In the event that the Contractor's financial institution has access to the Federal Reserve Communications System, Contractor shall complete all items except items 7 - 9. In the event the Contractor's financial institution does not have access to the Federal Reserve Communications System, Contractor shall complete all items except item 4.
 - 1. Name and address of organization
 - 2. Contact person and telephone number
 - 3. Name and address of financial institution
 - 4. Contractor's Financial institutions's 9-digit ABA identifying number for routing transfer of funds
 - 5. Telegraphic abbreviation of Contractor's financial institution
 - 6. Account number at Contractor's financial institution if it receives electronic funds transfer messages through the Federal Reserve Communications System
 - 7. Name and address of the correspondent financial institution if the Contractor's financial institution does not receive electronic funds transfer messages through the Federal Reserve Communications System
 - 8. Correspondent financial institution 9-digit ABA identifying number for routing transfer of funds
 - 9. Telegraphic abbreviation of correspondent financial institution
 - 10. Signature and title of person supplying this information
- (c) Any changes to the information furnished under paragraph (b) of this clause shall be furnished to the Contracting Officer in writing. It is the Contractor's responsibility to furnish these changes promptly to avoid payments to erroneous bank accounts.

PART II - CONTRACT CLAUSES

Section I - Contract Clauses

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT--SERVICES. (APR 1984)

(a) The Government may extend the term of this contract by written notice to the Contractor within the time specified in the Schedule; 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 five (5) years.

(End of clause)
(R 7-104.27(c))
R 1-1.1508-2(d))

52.220-1 PREFERENCE FOR LABOR SURPLUS AREA CONCERNS. (APR 1984)

(a) This acquisition is not a set aside for labor surplus area (LSA) concerns. However, the offeror's status as such a concern may affect (1) entitlement to award in case of tie offers or (2) offer evaluation in accordance with the Buy American Act clause of this solicitation. In order to determine whether the offeror is entitled to a preference under (1) or (2) above, the offeror must identify, below, the LSA in which the costs to be incurred on account of manufacturing or production (by the offeror or the first-tier subcontractors) amount to more than 50 percent of the contract price.

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.....

(b) Failure to identify the locations as specified above will preclude consideration of the offeror as an LSA concern. If the offeror is awarded a contract as an LSA concern and would not have otherwise qualified for award, the offeror shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

(End of clause)
(R 7-2003.13 1978 JUN)

52.222-2 PAYMENT FOR OVERTIME PREMIUMS. (APR 1984)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed . In addition to this dollar ceiling, overtime is permitted only 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)

(R 7-203.27 1967 JUN)

52.228-7 INSURANCE LIABILITY TO THIRD PERSONS. (APR 1984)--Alternate II.
(APR 1984)

(a) The Government does not assume any liability to third persons, nor will the Government reimburse the Contractor for its liability to third persons, with respect to loss due to death, bodily injury, or damage to property resulting in any way from the performance of this contract or any subcontract under this contract.

(b) If any suit or action is filed, or if any claim is made against the Contractor, the cost and expense of which may be reimbursable to the Contractor under this contract, the Contractor shall immediately notify the Contracting Officer and promptly furnish copies of all pertinent papers received by the Contractor.

52.252-2 CLAUSES INCORPORATED BY REFERENCE. (APR 1984)

This contract incorporates the following 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

Section E

52.246-5 INSPECTION OF SERVICES--COST-REIMBURSEMENT. (APR 1984)

Section F

52.212-13 STOP-WORK ORDER.-- Alternate 1 (APR 1984)

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

Section I

52.202-1 DEFINITIONS. (APR 1984)

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

52.203-3 GRATUITIES. (APR 1984)

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

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

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

52.215-22 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA. (APR 1984)

52.215-24 SUBCONTRACTOR COST OR PRICING DATA. (APR 1985)

52.215-33 ORDER OF PRECEDENCE. (Jan 1986)

52.216-7 ALLOWABLE COST AND PAYMENT (APR 1984)

52.216-11 COST CONTRACT--NO FEE. (APR 1984)--Alternate I. (APR 1984)

- 52.216-15 PREDETERMINED INDIRECT COST RATES. (APR 1984)
- 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL
DISADVANTAGES BUSINESS CONCERNS (APR 1984)
- 52.219-13 UTILIZATION OF WOMEN-OWNED SMALL BUSINESSES. (APR 1984)
- 52.220-3 UTILIZATION OF LABOR SURPLUS AREA CONCERNS. (APR 1984)
- 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES. (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)
- 52.223-2 CLEAN AIR AND WATER. (APR 1984)
- 52.228-6 INSURANCE--IMMUNITY FROM TORT LIABILITY (APR 1984)
- 52.232-17 INTEREST. (APR 1984)
- 52.232-20 LIMITATION OF COST (APR 1984)

- 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)
- 52.233-1 DISPUTES. (APR 1984)--Alternate I (APR 1984)
- 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)
- 52.243-2 CHANGES--COST-REIMBURSEMENT (APR 1984)--Alternate I.
(APR 1984)
- 52.246-25 LIMITATION OF LIABILITY--SERVICES. (APR 1984)
- 52.249-5 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL
AND OTHER NONPROFIT INSTITUTIONS) (APR 1984)

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

Section J - List of Attachments

<u>Attachment Number</u>	<u>Title</u>
1	NRC Organization Chart
2	NRC Contractor Organizational Conflicts of Interest (41 CFR Part 20)
3	NRC Manual Chapter 3202
4	Standard Form 1411 with Instructions
5	Billing Instructions
6	Memphis Area Regional Seismic Network Station Map