



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FEB 5 1981

George Robertson, Colonel
U.S. Department of the Army
Corps of Engineers
Executive Director of Civil Works
DAEN-CWE-S
Washington, DC 20314

Dear Colonel Robertson:

Subject: Interagency Agreement No. NRC-03-81-122 Entitled "Geotechnical Engineering Review of Systematic Evaluation Program Plants"

Pursuant to the authority contained in the Economy Act of 1932, as amended, 31 USC 686, the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Army Corps of Engineers (COE) desire to enter into a cooperative agreement whereby COE will provide support in geotechnical engineering for non-reactor facilities.

Accordingly, the above Parties hereto mutually agree to the following terms of this agreement:

I. Period of Performance

The period of performance shall be from the effective date of the agreement through thirteen (13) months thereafter.

II. Statement of Work

Work performed under this agreement shall be in accordance with Attachment I which is attached and made a part hereof.

III. Estimated Cost & Obligation of Funds

- A. The estimated cost of the work to be performed under this agreement is \$60,500.00.
- B. The amount presently obligated for the performance of work under this agreement is \$37,000.00.
- C. Funds obligated to this agreement are chargeable to the following appropriation data:

B&R Symbol: 20-19-02-12 FIN No. B-6883

- D. Additional obligation of funds will be made for Fiscal Year 1982, subject to availability of funds, by unilateral modification to this agreement, until obligations for the period of Agreement reach \$60,500.00.

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IV. Billing Instructions

COE, to receive reimbursement for costs incurred, shall submit invoices in accordance with Attachment II, Billing Instructions for NRC Cost-Type Contracts, which is attached and made a part hereof.

V. Advanced Notification

It is estimated that the total cost to the NRC for the performance of this contract will not exceed the estimated cost set forth in ARTICLE III and COE agrees to use its best efforts to perform the work specified in ARTICLE II and all obligations under this contract within such estimated costs. If, at any time, COE has reason to believe that the costs which it expects to incur in the performance of this contract in the next succeeding 60 days, when added to all costs previously incurred, will exceed 75 percent of the estimated cost then set forth in ARTICLE III, or if, at any time, COE has reason to believe that the total cost to the NRC for the performance of this contract will be greater or substantially less than the then estimated cost hereof, COE shall notify the Contracting Officer in writing to that effect, giving the revised estimate of such total cost for the performance of this contract.

VI. Project Officer

The following individual will represent the Government as the Project Officer for this contract:

George Lear -- (301) 492-8085

The Project Officer is responsible for: (1) Monitoring the Contractor's technical progress, including the surveillance and assessment of performance and recommending to the Contracting Officer changes in requirements; (2) interpreting the statement 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 preview of this authority, the representative is authorized to approve payment vouchers 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 this 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; (4) not constitute a basis for any increase in the contract price.

If the Contractor receives guidance from the Project Officer which the Contractor feels is not valid under the criteria cited above, the Contractor shall immediately notify the Project Officer. If the two are not able to resolve the question within 5 days, the Contractor shall notify the Contracting Officer.

ARTICLE VII TECHNICAL DIRECTION

- A. Performance of the work under this contract shall be subject to the technical direction of the HRC Project Officer named in Article VIII 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.

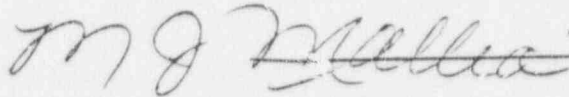
The Contractor shall proceed promptly with the performance of technical directions duly issued by the Project Officer in the manner prescribed by this article and within such person's authority under the provisions of this article.

VIII. NRC Contacts

Contracts Contact: The NRC contact is Allen F. Glanola, telephone number (301) 427-4480. Mr. Glanola will handle all contractual/administrative actions.

If this agreement is acceptable to COE, please so indicate by signing in the space below and returning two (2) signed copies to me. The third signed copy is for your records.

Sincerely,

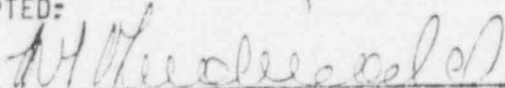


Mary Jo Mattia, Acting Chief
Technical Assistance Contracts Branch
Division of Contracts
Office of Administration

U.S. DEPARTMENT OF THE ARMY

ACCEPTED:

BY:



Colonel, Corps of Engineers

TITLE: Executive Director of Civil Works

DATE:

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Geotechnical Engineering Reviews of
Systematic Evaluation Program
(SEP) Plants

Purpose of Program

The NRC staff has developed the Systematic Evaluation Program (SEP) to examine many safety related aspects of eleven of the older light water reactors. The purposes of the SEP are to ascertain the degree to which these reactors comply with current safety criteria and standards and to evaluate the need for backfitting. The program in the Geotechnical Engineering area is aimed at assessing the adequacy of the geotechnical features (earth dams, foundation, etc.) of the plant including earthquake engineering and foundation performance aspects. As part of this review, the staff is examining all available geotechnical information concerning these sites and plants.

The advice of the U. S. Army Corps of Engineers is needed to supplement the staff's efforts and to provide review of specialized studies and analyses beyond the resources available to the staff.

Task 1 - LaCrosse Nuclear Power Plant

Estimated Manpower: FY 80 - 0.3 my

Background:

In the past year, the Corps of Engineers has provided Consultant and Advisory services to the NRC Geotechnical Engineering staff regarding the adequacy of foundations and soils supporting the LaCrosse Nuclear Power Plant operated by Dairyland Power. In a December, 1978, report the Corps

identified a potential liquefaction problem at the LaCrosse site. The licensee has performed investigations and submitted reports on the liquefaction potential. The purpose of this task is to provide resources to evaluate the liquefaction problem at the LaCrosse site.

Work Requirements

1. Review geotechnical engineering reports provided by the Licensee
2. Review the Licensee plans for remedial foundation treatment
3. Provide review letter reports containing evaluations of the geotechnical features of the remedial foundation treatment
4. Prepare for and attend meetings with Staff and Licensee

Estimated Completion Date

Three (3) months after effective date of agreement

Five (5) months after effective date of agreement

Eight (8) months after effective date of agreement

Thirteen (13) months after effective date of agreement

Meetings and Travel

It is estimated that Corps personnel will be required to attend three review meetings in Bethesda and one site visit to the plant over the next year.

Task 2 - Yankee Rowe Nuclear Power Plant

Estimated Manpower: FY 80 - 0.2 my

Background:

Staff review of the Yankee Rowe Nuclear Power Plant has identified potential hazards to the plant which could be caused by the failure of Harriman Dam, an old upstream earth fill dam. The licensee is conducting studies of the stability of this dam (both static and dynamic) to assess its likely future performance. Corps of Engineer expertise will be needed to supplement staff

reviews of the geotechnical engineering analyses of this dam, and any other geotechnical features associated with the Yankee Rowe plant.

<u>Work Requirements</u>	<u>Estimated Completion Date</u>
1. Review geotechnical engineering reports provided by the Licensee	Three (3) months after effective date of agreement
2. Review reference material regarding stability of Harriman Dam	Five (5) months after effective date of agreement
3. Provide review letter reports containing evaluations of the geotechnical reports and reference material	Eight (8) months after effective date of agreement.
4. Prepare for and attend meetings with Staff and Licensee	Thirteen (13) months after effective date of agreement.

Meetings and Travel

It is estimated that Corps personnel will be required to attend one review meeting in Bethesda and one site visit to the plant during the next year and an ACRS full committee meeting in Washington, D.C.

Reporting Requirements

1. Upon completion of each task or site visit the Corps will submit a letter report which satisfies the work requirements.
2. A business letter report containing resource expenditure information shall be submitted within one month after the completion of each task.
3. A business letter report shall be submitted one month before the end of each fiscal year containing the following:
 - a. a listing of resource expenditure by task, and
 - b. a summary of completed efforts.

COE shall distribute the aforementioned reports as follows:

- 1 copy Mr. Dennis J. Dougherty, Contracting Officer
 U.S. Nuclear Regulatory Commission
 Division of Contracts
 Washington, DC 20555

1 copy Mr. B.L. Grenier, Director
U.S. Nuclear Regulatory Commission
Division of Systems Safety
Washington, DC 20555

2 copies Mr. George E. Lear, Project Officer
U.S. Nuclear Regulatory Commission
Division of Site Safety and Environmental Analysis
Washington, DC 20555

1 copy Mr. Richard Vollmer, Director
U.S. Nuclear Regulatory Commission
Division of Engineering
Washington, DC 20555

NRC Furnished Materials

Documents needed for review will be forwarded to the Corps of Engineers under separate cover. Some of this material may contain proprietary information, as marked, and must be kept in confidence.