



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

T.P.

NOV 15 1978

Department of the Army
Waterways Experiment Station,
Corps of Engineers
P. O. Box 631
Vicksburg, MS 39180

Gentlemen:

AGREEMENT WES-79-07

Subject: Interagency Agreement No. NRC-01-79-001

Pursuant to the authority of the Economy Act of 1932, as amended, 31 U.S.C. 686, the U.S. Nuclear Regulatory Commission (NRC) desires to enter into an agreement whereby the Waterways Experiment Station (WES), U.S. Army Corps of Engineers, will study the problem of siting and investigating foundations of nuclear facilities in areas having karst features or other geologic or man-made openings that might lead to ground collapse. The objective of the study will be to evaluate the present state of the art and to present information that can be used for the guidance of nuclear license applicants in dealing with these problems.

Accordingly, the parties hereto mutually agree to the following terms of this agreement.

I. Scope of Work

The WES shall perform the specific work as outlined in the enclosed "Statement of Work" and as provided for in WES's letter, Brown/Beratan, dated 26 September, 1978, both of which are attached hereto and made a part of this agreement.

II. Period of Performance

The period of performance for the work required hereunder shall commence as of the date of acceptance of this agreement and shall continue for a period of eighteen (18) months to completion.

III. Reports

A typewritten, reproducible original and two (2) copies of all reports shall be submitted directly to the Contracting Officer. The type of reports and schedule for submission thereof are provided below.

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- A. The WES shall submit progress reports to the NRC in letter form on a quarterly basis using the date of acceptance of this agreement as the starting date of the first quarter. These reports shall include, but are not limited to, a description of effort expended, i.e., time and cost, and shall be submitted within ten (10) working days after the end of each quarter.
- B. A draft copy of the final report shall be submitted to the NRC for review sixty (60) days prior to the completion date of the contract.
- C. The final report submitted to the NRC shall be camera-ready and in a format suitable for publication as an NRC Regulatory Guide (NUREG) report.

IV. Estimate of Cost and Obligation of Funds

- A. The estimated cost of the work to be performed under this agreement is \$90,800.00.
- B. The amount presently obligated for the performance of work under this agreement is \$60,000.00.
- C. NRC Accounting Data:

B&R Symbol: 10-19-03-02
FIN No.: B10869

V. Billing Instructions

All requests for payment shall be submitted on Standard Form 1081 in an original and three (3) copies to the following :

U.S. Nuclear Regulatory Commission
Office of the Controller
Washington, D.C. 20555

One (1) additional copy of Standard Form 1081 shall be submitted simultaneously with the above copies to the following address:

U.S. Nuclear Regulatory Commission
Division of Contracts
Research Contracts Branch
Washington, D.C. 20555

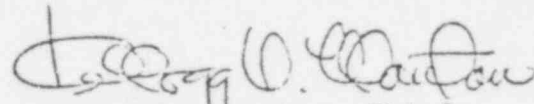
NOV 15 1978

VI. NRC Contacts

- A. Technical: Edward O'Donnell
Office of Standards Development
Phone: (301) 443-5976
- B. Contracts: Raymond P. Gustave
Division of Contracts
Phone: (301) 427-4365

Please indicate your concurrence with the provisions of this agreement by executing and returning three (3) copies to the undersigned. The fourth copy is to be retained for your files.

Sincerely,

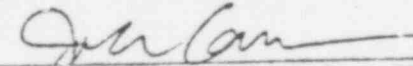


Kellogg V. Morton, Chief
Research Contracts Branch
Division of Contracts
Office of Administration

Enclosures: As stated

Accepted:

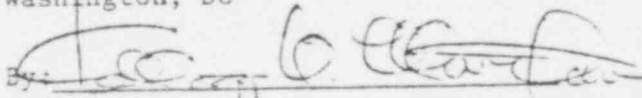
Department of the Army
Waterways Experiment Station,
Corps of Engineers

By: 
JOHN L. CANNON, Col., CE
Title: Commander and Director

Date: '79 JUL 5

Accepted:

U. S. Nuclear Regulatory Commission
Research Contract Branch
Washington, DC

By: 
Title: Chief, Research Contracts Branch

Date: 7-7-79

STATEMENT OF WORK

The scope of work under this contract is unclassified and shall consist of technical assistance for a study titled: "Siting of nuclear facilities in karst and other areas susceptible to ground collapse."

The contractor is to perform work which will consist of a study of the problem of siting and investigating foundations of nuclear facilities in areas having karst features or other geologic or man-made openings that might lead to ground collapse. The objective of the study will be to evaluate the present state of the art and to present information that can be used for the guidance of nuclear license applicants in dealing with these problems. The effort will include the performance of the study and the preparation of a report of findings in the form of a NUREG report.

A brief topical outline of the work is contained in the letter from the Waterways Experiment Station, U.S. Army Corps of Engineers to the Site Safety Standards Branch, NRC, dated September 26, 1978 (see Attachment 3).