



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

JUL 24 1980

Parameter, Inc.  
Attn: Mr. Richard A. Lofy, President  
13545 Watertown Plank Road  
Elm Grove, WI 53122

Gentlemen:

SUBJECT: CONTRACT NO. NRC-05-80-251, Task Order No. 2

Pursuant to the pertinent provisions of this contract, I hereby authorize the expenditure of \$50,000.00 of the funds currently obligated under this contract to provide assistance as a technical consultant in the review of (1) concrete deficiencies, known as "honeycombing," found at the Marble Hill facility through visual observation, (2) the program to determine if internal voids exist, (3) the repair procedures, (4) the completed repairs, and (5) the evaluation of the affected structure to determine whether they meet the original design intent.

If you believe that the total ceiling price is inadequate for the purposes of this task order, you must so notify me within ten (10) business days after its receipt. Said notification shall contain your estimate of the required total ceiling cost. Within ten (10) business days after receipt of such notification, the Contracting Officer shall either ratify the total ceiling cost or adopt the proposed revised estimate or some combination of the two and revise or confirm the task order accordingly.

This letter, executed on behalf of the Commission, is forwarded to you in quadruplicate. Please acknowledge receipt on three (3) copies hereon and return them to me as soon as possible. The fourth copy is for your retention.

Sincerely,

A handwritten signature in dark ink, appearing to read "Kellogg V. Morton".

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

Enclosure: Task Order No. 2 (4)

8009110003

Received:

Parameter, Inc.

Agree

Disagree

Notification will be submitted by \_\_\_\_\_ Date

BY: Richard J. Joffe

TITLE: PRES.

DATE: 7/30/80

PARAMETER, INC.  
CONTRACT NO. NRC-05-80-251

TASK ORDER NO. 2

1. Scope of Work:

Provide NRC-IE assistance as a technical consultant in the review of 1) concrete deficiencies, known as "honeycombing," found at the Marble Hill facility through visual observation, 2) the program to determine if internal voids exist, 3) the repair procedures, 4) the completed repairs, and 5) the evaluation of the affected structures to determine whether they meet the original design intent.

The effort will involve a review of the techniques used to locate voids, discontinuities, etc., to determine if all significant deficiencies have in all probability been detected. These techniques included coring and pulse echo. The repair procedures and repairs made as a result of the findings of the investigations are also to be reviewed for adequacy. The main basis of the consultant's review effort will be the report submitted by the licensee and its references as prepared by Sargent & Lundy, Report SL-3753, 11/20/79, "Evaluation of In-Place Concrete, Marble Hill Generating Station, Units 1 and 2," dated November 20, 1979.

2. Objectives of Tasks:

- a. To provide an independent assessment of the type and extent of deficiencies in concrete construction, defined as honeycombing, and/or voids that could have safety significance;
- b. to provide an independent assessment of any needed repairs or remedial actions;
- c. to provide independent conclusions regarding the capability of the affected structures to perform the intended design functions.

3. Statement of Work:

- a. Determine that any structurally significant honeycombing and/or voids visually detectable have been located and identified.
- b. Evaluate the need for and adequacy of the nondestructive techniques used by the licensee in the investigation of possible internal voids. If other techniques or additional investigation are necessary to assure structural adequacy, recommendations should be provided. This evaluation and any necessary recommendations should consider sample location and size.
- c. Review and evaluate the repair procedures the licensee has used or plans to use to correct deficiencies which have safety significance. If other techniques are more advantageous or will result in better assurance of restoration of the structure, recommendations should be provided.

- d. Review and evaluate typical areas requiring repair, if any, to determine whether procedures are or have been followed. If any repaired areas are subject to question, recommendations for additional investigation or repair are to be provided.
  - e. Utilize the facts and engineering experience to evaluate the adequacy of the affected structures to meet the safety requirements defined in the original design criteria or any revised criteria as approved by the NRC.
  - f. In the course of completing items a-e above, it is to be understood that travel may be necessary to make observations in the field at the Marble Hill site, to meet with the licensee and his consultants, and to meet with the NRC. It is also possible that the effort may include providing expert testimony in public hearings and/or providing responses to Congressional committees. NRC representatives will accompany consultants.
4. Report Requirements:
- a. Weekly contact should be maintained with Region III James G. Keppler, Director (AC 312/932-2500), or his designee regarding the progress of work, schedules, arrangements needed with the licensee and any other details. This contact can be by telephone.
  - b. For each 120 hours of effort associated with this task, a brief written summary (1-2 pages) should be provided noting all significant items in the effort that have been completed during the reporting period. Any significant problems which could affect resumption or continuation of concrete work by the licensee, shall be included. This shall be completed within (5) working days after end of the period.
  - c. At the completion of each of the steps 3a-3e, a written report shall be provided with the supported conclusions. This report shall be submitted in draft form within (10) ten working days after the specific work step is completed. The final report for each step is to be completed (7) seven working days after any NRC comments are provided.
  - d. At the completion of all steps, 3a-3e, a draft report encompassing all aspects of the independent assessment will be provided. This report shall be submitted within (10) ten working days after the completion of the final report on the last step. The final report for the task is to be completed (7) seven working days after any NRC comments are provided.
  - e. All written reports are to be provided in (20) twenty copies with ten (10) each being sent to the following:

Mr. James G. Keppler, Director  
Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyr, Illinois 60137



Mr. Harold D. Thornburg, Director  
Division of Reactor Construction Inspection  
Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

- f. At the outset the consultants may agree to a consolidated report format with each signing in total or noting their specific view or each may submit separate reports. Once the pattern is set, all reporting will continue in that pattern.

5. Desired Completion Date: (ALL STEPS)

December 31, 1980.

6. Special Instructions:

- a. Initiate task effort with a review of Vols. I & II of a report by Sargent and Lundy Engineers, entitled, "Evaluation of In-Place Concrete - Marble Hill Nuclear Generating Station, Units 1 and 2," dated November 20, 1979 (copy to be provided).
- b. It is imperative that all steps in this independent assessment be adequately documented and supported. Photographs, dictated tapes, such as one might use in the field, as well as written notes are recommended.

7. Places of Performance:

- a. Marble Hill Nuclear Generating Station construction site near Madison, Indiana.
- b. Sargent and Lundy offices in Chicago, Illinois.
- c. Public Service of Indiana offices in Plainfield, Indiana.
- d. Region III offices in Glen Ellyn, Illinois.
- e. NRC offices in Bethesda, Maryland and Washington, DC

8. Cost Ceiling

\$50,000