

D.C.D



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 28, 2000

Beckman and Associates, Inc.  
Attn: Vicki Beckman  
1071 State Route 136  
Belle Vernon, PA 15012

SUBJECT: TASK ORDER NO. 074, "D.C. COOK ENGINEERING FOLLOW-UP TEAM INSPECTION" UNDER CONTRACT NO. NRC-03-98-021

Dear Ms. Beckman:

In accordance with Section G.5, Task Order Procedures, of the subject contract, this letter definitizes the subject task order. The effort shall be performed in accordance with the enclosed Statement of Work.

Task Order No. 074 shall be in effect from January 28, 2000, through March 10, 2000, with a total cost ceiling of \$127,385.67. The amount of \$123,375.95 represents the estimated reimbursable costs and the amount of \$4,009.72 represents the fixed fee.

Accounting data for Task Order No. 074 is as follows:

|              |                |
|--------------|----------------|
| B&R No.:     | 020-15-103-105 |
| Job Code:    | J-2548         |
| BOC:         | 252A           |
| APPN No.:    | 31X0200.020    |
| FFS#:        | NRR98021074    |
| Oblig. Amt.: | \$127,385.67   |

The following individuals are considered to be essential to the successful performance of work hereunder: Mr. John Chiloyan, Mr. Raymond Cooney, Mr. Richard Ely, and Mr. Charles Jones. The Contractor agrees that such personnel shall not be removed from the effort under the task order without compliance with Contract Clause H.4, Key Personnel.

The issuance of this task order does not amend any terms or conditions of the subject contract.

AOM-001  
~~ML993160330~~  
JF02

Your contacts during the course of this task order are:

Technical Matters: Edmund Kleeh  
Project Officer  
(301) 415-2964

Contractual Matters: Mona Selden  
Contract Specialist  
(301) 415-7907

Acceptance of Task Order No. 074 should be made by having an official, authorized to bind your organization, execute three copies of this document in the space provided and return two copies to the Contract Specialist. You should retain the third copy for your records.

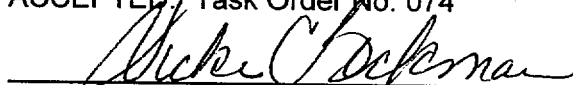
Sincerely,



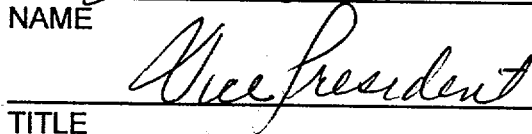
Sharon D. Stewart, Contracting Officer  
Contract Management Branch 2  
Division of Contracts and Property Management  
Office of Administration

Enclosure: Statement of Work

ACCEPTED: Task Order No. 074



NAME



TITLE

2-2-00

DATE

## STATEMENT OF WORK

Task Order 074

TITLE: D. C. Cook Engineering Follow-up Team Inspection

DOCKET NUMBER: 50-315/316 B&R NUMBER: 020-15-103-105 JOB CODE: J-2548  
INSPECTION REPORT NUMBER: 50-336/NRC PROJECT OFFICER: E. A. Kleeh, NRR (301) 415-2964  
TECHNICAL MONITOR: Mel Holmberg, RIII (630) 829-9748

PERFORMANCE PERIOD: January 28, 2000 - March 10, 2000

BACKGROUND

An NRC design (AE) inspection completed in September 1997, identified issues that resulted in operability concerns for safety related systems and components. The licensee voluntarily shutdown both units of the D. C. Cook plant and identified required corrective actions in a letter to the NRC. CAL 97-011 dated September 19, 1997 formalized the commitment for the licensee to remain shutdown until compensatory actions were undertaken. Subsequently the licensee by self-assessments and the NRC by additional inspections identified more performance issues that were incorporated into a pre-startup checklist attached to a letter sent from NRC to licensee on July 30, 1998. The items on that checklist had to be resolved by licensee as prerequisites to startup of either D.C. Cook unit. This inspection is being performed to determine the status of licensee corrective actions for those issues contained on that checklist and to verify their acceptability; to evaluate if licensee is maintaining its design basis; and to ensure the operability of selected safety systems in accordance with maintained design basis.

OBJECTIVE

The objective of this task order is to obtain expert technical assistance in the areas of electrical and mechanical design. Four specialists (two electrical and two mechanical) are needed to assist the NRC inspection team in the resolution of design, performance, and programmatic issues identified in **Confirmative Action Letters (CALs), inspection reports, and LERs (hereafter all three referred to as inspection reference documents ) and the D.C. Cook Restart Action Matrix**. Each of the four specialists (electrical and mechanical) should primarily have a design background in his area of expertise, such as from an architect-engineer firm with experience in design and system operational requirements. The specialists should also be familiar with the installation and surveillance testing of equipment; and how the engineering, operations, and corrective-action programs normally function and internally improve themselves. The specialists should be thoroughly familiar with NRC regulations, closure of CALs, resolution of engineering followup and evaluation items, and overall NRC inspection methodology.

The specialists should be familiar with the regulatory process, and should be able to determine relevant regulatory commitments from docketed licensee correspondence for their assigned review areas. The specialists should be able to verify implementation of the licensee's commitments, assess the effectiveness and adequacy of the licensee's corrective-actions which includes detailed reviews of design and facility modifications, determine if licensee is maintaining the appropriate design basis taking into account design changes and modifications, and evaluate the overall performance and acceptability of broad programmatic areas like the engineering, operations, and corrective-action programs. The inspection will be conducted in accordance with IP 37550 "Engineering," IP 37551 "Onsite Engineering," IP 37700 "Design Changes and Modifications," IP 37701 "Facility Modifications," IP 37702 "Design Changes and Modifications Program," IP 37828 "Installation and Testing of Modifications," 40500 "Effectiveness of Licensee Process to Identify, Resolve, and Prevent Problems," IP 92700 " Onsite Followup of Written Reports of Nonroutine Events At Power Reactor Facilities," and IP 92903 "Followup - Engineering."

It shall be the responsibility of the contractor to assign technical staff, employees, and subcontractors, who have the required combination of educational background and experience to meet both the technical and regulatory objectives of the work specified in this Statement Of Work (SOW). The NRC will rely on representation made by the contractor

concerning the qualifications of the personnel proposed for assignment to this task order including assurance that all information contained in the technical and cost proposals, including resumes and conflict of interest disclosures, is accurate and truthful.

## WORK REQUIREMENTS AND SCHEDULE

The contractor shall provide the qualified specialists, and the necessary facilities, materials, and services to assist the NRC staff in preparing for, conducting, and documenting the inspection activities and findings. The contractor shall provide the latest rad-worker training and MMPI test dates of the specialists to the Project Officer. The Technical Monitor/Team Leader for this task is Mel Holmberg. The Technical Monitor may issue technical instructions during the duration of this task order that are in accordance with the SOW, and they shall not constitute new assignments of work, or changes in cost or period of performance. The contractor shall refer to the basic contract for further information and guidance on any technical directions issued under this task order.

Modifications to the scope of work, costs, or period of performance of this task order must be issued by the Contracting Officer and will be coordinated with the NRR Project Officer.

### Specific Tasks

#### 1. Prepare for the Engineering Corrective Action Team Inspection

a. Each specialist will review the CALs issued to the licensee, NRC inspection reports, and LERs for the last thirty months; and the D. C. Cook Restart Action Matrix for the inspection area assigned to him by the Technical Monitor.

b. Determine the documents associated with the specific design problems identified in inspection reference documents relevant to specialist's assigned area of review or assigned by Technical Monitor.

c. Request copies of all inspection reference documents for the last 30 months for the assigned inspection area; licensee's programmatic requirements for identifying and addressing problems; and documents that indicate corrective actions taken for design problems stated in any inspection reference documents including those self-identified by licensee in determining the true scope of conditions.

#### 2. Perform the inspection

a. Make queries to the licensee on design and programmatic issues stated in inspection reference documents consistent with the intent of the inspection and assigned inspection area.

### Schedule Completion

1. Prepare for the inspection of D.C. Cook at Region III headquarters in Lisle, Illinois on or about January 31 - February 04, 2000.

2. Specialists will perform on-site inspection at D. C. Cook on or about February 07 - 11, 2000 and on or about February 22 - 25, 2000. Review of documentation, licensee inquiries, and other inspection-related activities will be conducted in specialist's home offices during

week of February 14 - 18, 2000.

b. Review design change packages, facility modifications, and setpoint change packages to determine if licensee's corrective actions for specific design problems are appropriate and resolve the issues.

c. Monitor the performance of actual design modifications and setpoint changes including the functional testing of hardware changes.

d. Evaluate thoroughly licensee corrective actions for design and programmatic issues outlined in inspection reference documents in assigned area of review.

1.) Effectiveness of corrective actions overall.

2.) Adequacy of root-cause analyses.

3.) Determine if licensee's analyses have effectively identified and addressed all similar issues.

4.) Has licensee performed functional tests where corrective actions involved hardware changes or additions. 5.) Has design requirements been translated correctly into vendor/design specifications for post modification testing.

6.) Refer to IPs 37550, 37551, 37700, 37701, 37702, 37828, 40500, 92700, and 92903 for additional insights.

e. Respond in a timely manner to licensee's responses to queries made in 2.a.

f. Identify and develop findings or concerns as appropriate in accordance with the intent of inspection and IPs 37550, 37551, 37700, 37701, 37702, 37828, 40500, 92700, and 92903.

g. Evaluate that any licensee corrective actions undertaken indicate corresponding changes in plants' design basis and even licensing basis dependent on the relevance of the issues involved.

h. Assess the effectiveness of licensee's controls for engineering program in approving plant design modifications; revising design and licensing basis; determining relevant preventive maintenance; and declaring the systems in which design changes were incorporated as operational.

i. Each specialist should verify that licensee has appropriately addressed all items in inspection reference documents and most especially any design problems identified in the D.C. Cook Restart Action Matrix for his assigned inspection area during the course of the inspection.

3. Prepare the inspection report.

a. Follow the guidelines of NRC INSPECTION MANUAL, Manual Chapter 0610, "Inspection Reports," unless otherwise directed by Technical Monitor.

b. Feeder report should discuss inspection activities, be concise, and focus on safety significant findings based on facts and regulatory requirements.

3. Documentation of inspection will take place on or about February 28 - March 03, 2000, in specialists' home offices. Final feeder report input is due on or about March 06, 2000.

NOTE: Prior to the start of either in-office inspection preparation in Region III headquarters or on-site inspection activities, the contractor's staff is required to be available to coordinate inspection aspects, such as travel logistics, with the Team Leader/Technical Monitor.

## REPORT REQUIREMENTS

### Technical Report

At the completion of Task 1, the contractor's specialists shall provide an inspection plan to the NRC Team Leader. The format and scope of this input shall be as directed by the NRC Team Leader.

During Task 2, the contractor's specialists shall provide daily reports to the NRC Team Leader. The format and scope of this report shall be as directed by the NRC Team Leader.

At the completion of Task 2 (prior to the inspection team's debriefing the licensee), the contractor's specialists shall provide a summary of their inspection findings to the NRC Team Leader. The format and scope shall be as directed by the NRC Team Leader. Typically, this input will consist of an electronic version (WordPerfect file on diskette) of the specialist's inspection findings.

**At the completion of Tasks 3, the contractor shall send a copy of the final inspection report input (feeder report)**

to the NRC Project Officer and the original and one computer diskette version (WordPerfect 6.1 or other IBM PC compatible software acceptable) to the NRC Team Leader. The format and scope of the final report inputs shall be in accordance with the guidance in NRC Inspection Manual Chapter 0610 or as directed by the NRC Team Leader.

A specialist's feeder report will serve as documentation of the specialist's inspection activities, effort, and findings, and will be used by the NRC Team Leader for the preparation of the NRC's inspection report. The form and scope of the final report input shall be in accordance with the guidance in NRC Inspection Manual Chapter 0610 or as directed by the NRC Team Leader. As a minimum, each specialist's report input shall include the following:

- Identity of the individuals (name, company, and title) that provided information to the specialists during the inspection.
- For each area inspected, a description of the activities and general findings and conclusions reached regarding the adequacy of the area.
- For each area with a concern or findings, a discussion of the concerns or findings with technical bases.

NOTE: The contractor is not required to undertake any further efforts toward report finalization except as directed by Technical Monitor and as stated in the SOW. For example, management review of the feeder report beyond its submittal to the NRC Team Leader and Project Officer is not needed.

#### Business Letter Report

The contractor shall provide monthly progress reports in accordance with the requirements of the basic contract.

#### MEETINGS AND TRAVEL

For estimating purposes, the following meetings and travel are anticipated:

One, four-person, 5 day trip to Region III headquarters in Lisle, Illinois to prepare for the inspection on or about January 31 - February 04, 2000.

Two, four-person, 5 day trips to the D. C. Cook site near Benton Harbor, Michigan to conduct the onsite phase of the inspection on or about February 07-11, 2000 and February 22 -25, 2000.

NOTE: The contractor's staff shall coordinate all travel arrangements in advance with the NRC Team Leader.

#### NRC FURNISHED MATERIAL

Documents required to prepare for the inspection will be provided by the NRC Team Leader.

#### OTHER APPLICABLE INFORMATION

The work specified in this SOW is 100% licensee fee recoverable. The contractor shall provide fee recovery information in the monthly progress reports in accordance with the requirements of the basic contract.

The contractor's specialists assigned to this task order will have to be badged for unescorted access privilege at the plant site. The contractor shall provide all documentation required for badging (as identified by the NRC Team Leader) at the plant site. Questions concerning badging and the plant site access shall be addressed to the NRC Technical Monitor.