



NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

JAN 04 2001

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

SUBJECT: "TASK ORDER NO. 083 "BRAIDWOOD SAFETY SYSTEM DESIGN AND PERFORMANCE CAPABILITY INSPECTION (SSDPCI)" 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. 083 shall be in effect from January 12, 2001, through February 28, 2001, with a cost ceiling of \$40,636.94. The amount of \$39,357.81 represents the estimated reimbursable costs, the amount of \$1,279.13 represents the fixed fee.

Accounting data for Task Order No. 083 is as follows:

B&R No.:	120-15-103-105
Job Code:	J-2548
BOC:	252A
APPN No.:	31X0200.120
FFS#:	NRR98021083
Oblig. Amt.:	\$40,636.94

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...and any terms or conditions of the subject contract.

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Your contacts during the course of this task order are:

Technical Matters: Donald P. Norkin  
Project Officer  
(301) 415-2954

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

Acceptance of Task Order No. 083 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. 083

  
\_\_\_\_\_  
NAME

  
\_\_\_\_\_  
TITLE

  
\_\_\_\_\_  
DATE

CONTRACT NRC-03-98-021

STATEMENT OF WORK  
Task Order 83

TITLE: Braidwood Safety System Design and Performance Capability Inspection (SSDPCI)

DOCKET NUMBER: 50-456, B&R NUMBER: 120-15-103-105 JOB CODE: J-2548  
INSPECTION REPORT NUMBER:

NRC PROJECT OFFICER: D.P. Norkin, NRR (301) 415-2954  
TECHNICAL MONITOR: Patricia Loughheed, RIII (630) 829 -9760

PERFORMANCE PERIOD: January 12 - February 28, 2001

BACKGROUND

A Safety System Design and Performance Capability Inspection (SSDPCI) will be conducted for the Braidwood nuclear plant near Joliet, Illinois. The SSDPCI will assess the operational performance capability of selected safety system(s) to verify that the system is capable of performing its intended safety function. The inspection will assess the licensee's engineering effectiveness through an in-depth review of calculations, analysis, and other engineering documents used to support system performance during normal and accident or abnormal conditions. The inspection will also verify completed actions for regulatory commitments that the licensee made in conjunction with the safety systems. NRC Inspection Procedure 71111-21 "Safety System Design and Performance Capability" will provide the primary basis for the review conducted during this inspection.

OBJECTIVE

The objective of this task order is to obtain expert technical assistance in the area of instrumentation and control (I&C) design. The specialist is needed to assist the NRC inspection team in the performance of the SSDPCI. The specialist should primarily have a design background, such as from an architect-engineer or consulting firm, with experience in design, analysis, installation, and testing of both AC and DC generating and distribution systems with expertise in instrumentation and controls for monitoring, providing status, regulating, and controlling nuclear power plant safety systems. The specialist should have a thorough understanding of the design, implementation, and maintenance of instrumentation for safety setpoints and the setpoints themselves. In addition, the specialist must understand the regulatory basis for those setpoints that monitor and control safety systems. It is preferred that the specialist have prior experience on NRC inspections that specifically reviewed design basis and detailed design of nuclear plant safety systems. The specialist should be thoroughly familiar with NRC regulations, inspection methodology, and current NRC risk-informed inspection program in order to be eligible for participation in this inspection. It is preferred that specialist have prior experience on NRC inspections that specifically reviewed design basis and detailed design of nuclear plant safety systems.

It shall be the responsibility of the contractor to assign technical staff, employees, and subcontractors, who have the required educational background, experience, or combination thereof,

Attachment

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 specialist, 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 Minnesota Multiphase Personality Inventory (MMPI) test dates of the specialist to the NRC project officer with the proposal. The Technical Monitor may issue technical instructions from time to time during the duration of this task order. Technical instructions must be within the general statement of work stated in this task order and shall not constitute new assignments of work or changes of such nature as to justify an adjustment 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.

Any modifications to the scope of work, cost 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 under this task order are:

1. Prepare for the inspection at the Region III office in Lisle, Illinois on or about January 16-19, 2001 (4 days).
  - a. Obtain a thorough understanding of the selected system(s) by review of licensee provided documentation. Annotate the provided preparation checklist as necessary.
  - b. Develop a list of questions or areas of concern, including the reason for the question. This list is to be shared with NRC team members for training purposes.
  - c. Inspection preparation will include both individual work and team meetings, including discussion of review techniques with team members.
2. On-site inspection is to take place on or about January 22-26 and on or about February 5-9, 2000. Review of documentation, licensee inquiries, and other inspection-related activities will be conducted in the Region III office on or about January 29-February 2, 2001.
  - a. Review the documentation requested from licensee and make queries in line with the intent of the inspection.
  - b. Evaluate thoroughly the design and licensing basis, lineups during normal and emergency operation, functional requirements for system, the agreement between surveillance test procedures and design/licensing basis, and other areas that may contain potential

discrepancies so as to complete a thorough assessment of the assigned review area. Discuss evaluation methods and results with NRC team members.

c. Any potential observations or findings shall be discussed with the Technical Monitor or an inspector trained in the NRC risk-informed inspection program.

3. Document the inspection on or about February 12-16, 2001 in contractor's home office. Final inspection report input is due on or about February 20, 2001.

a. Follow the guidelines of NRC Inspection Manual Chapter 0610\*, "Inspection Reports" as 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.

NOTE: Prior to the start of the on-site preparation, the contractor's staff is required to coordinate inspection aspects, such as travel logistics, with the Technical Monitor.

## REPORT REQUIREMENTS

### Technical Report

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

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

At the completion of Task 2 (prior to the inspection team's exit meeting with the licensee), the contractor's specialist shall provide a draft inspection report input to the NRC Technical Monitor. The format and scope shall be as directed by the NRC Technical Monitor. Typically, this input will consist of a summary of the specialist's inspection findings.

At the completion of Task 3, the contractor shall deliver a copy of final inspection report input (feeder report) to the NRC Project Officer, with one hard copy and one electronic version (WordPerfect, Revision 8 with proper font or other IBM PC compatible software acceptable to the NRC Technical Monitor) to the NRC Technical Monitor. The format and scope of the final report inputs shall be in accordance with the guidance in NRC Inspection Manual Chapter 0610\* as directed by the NRC Technical Monitor.

The feeder report documents the specialist's inspection activities and findings, and will be used by the Technical Monitor for the preparation of the inspection report. The contractor is not required to undertake any further efforts toward report finalization, such as management review of the feeder report.

### 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 only, the following meetings and travel are anticipated:

Two trips (4 days and 5 days each) to the Region III office.

Two 5 day trips to the Braidwood site.

Off-normal travel permitted up to half-day to ensure early arrival if required by Technical Monitor.

The contractor's staff shall coordinate all travel arrangements in advance with the NRC Technical Monitor.

### NRC FURNISHED MATERIAL

Documents required to prepare for the inspection will be provided by the NRC Tech Monitor.

### 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 specialist assigned to this task order will have to be badged for unescorted access privilege at the plant site. Questions concerning badging and plant site access shall be addressed to the NRC Technical Monitor.