



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

PDR P1-37

MAR 07 1994

Parameter, Inc.
ATTN: Richard A. Lofy
13380 Watertown Plank Road
Elm Grove, Wisconsin 53122

Dear Mr. Lofy:

Subject: Task Order No. 13 "Vendor Inspection of Siemens Power Corporation," under Contract No. NRC-03-89-029

This confirms verbal authorization to Parameter, Inc. on February 18, 1994 to commence work under the subject task order on February 21, 1994, with a temporary ceiling of \$2,000.

In accordance with Section G.4, Task Order Procedures, of the subject contract, this letter definitizes Task Order No. 13. The effort shall be performed in accordance with the enclosed Statement of Work and Parameter Inc.'s technical proposal dated February 17, 1994 incorporated herein by reference.

Task Order 13 shall be in effect from February 21, 1994 through April 15, 1994 with a cost ceiling of \$11,619.59, which includes the \$2,000 temporary ceiling above. The amount of \$11,306.25 represents the estimated reimbursable costs, the amount of \$51.04 represents the facilities capital cost of money, and the amount of \$262.30 represents the fixed fee. The amount presently obligated for this task order is \$11,619.59.

Accounting data for Task Order No. 13 are as follows:

B&R No.:	320-19-14-05-0
FIN No.:	L1351-4
BOC:	252A
RFPA No.:	20 94 109A
APPN No.:	31X0200.420
Obligated Amount:	\$11,619.59

The following individual is considered to be essential to the successful performance for work hereunder: R. Cilimberg. The Contractor agrees that such personnel shall not be removed from the effort under the task order without compliance with Contract Clause H.1, Key Personnel.

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

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[Handwritten signature]

Your contacts during the course of this task order are:

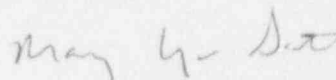
Technical Matters: Leta Brown, Project Officer
(301) 504-1232

Contractual Matters: Sharlene McCubbin, Contract Administrator
(301) 492-7764

Acceptance of Task Order No. 13 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 above Contract Administrator. You should retain the third copy for your records.

Should you have any questions regarding the subject document, please call Sharlene McCubbin, Contract Administrator on (301) 492-7764.

Sincerely,



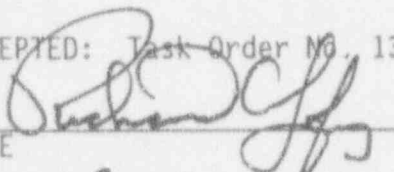
Mary Lynn Scott, Contracting Officer
Contract Administration Branch No. 1
Division of Contracts and
Property Management
Office of Administration

ACCEPTED: Task Order No. 13

NAME

TITLE

DATE


PRES.

3/4/94

STATEMENT OF WORK TASK ORDER NO. 13: FIN L-1351

TITLE: Vendor Inspection of Siemens Power Corporation

B&R NUMBER: 320-19-14-05

JOB CODE: L-1351

NRC PROJECT MANAGER: Leta A. Brown, DRIL/NRR, (301) 504-1232

TECHNICAL MONITOR/TEAM LEADER: Steven M. Matthews, VIB/DRIL, NRR,
(301) 504-3191

INSPECTION REPORT NO.: 99900081/94-01

NRR PRIORITY: 2

PERIOD OF PERFORMANCE: February 21, 1994 - April 15, 1994

Background

Siemens Power Corporation - Nuclear Division (SPC-ND) is a fuel supplier for both BWR and PWR technology. Beginning with the conversion of UF_6 gas to UO_2 powder, through the fabrication of fuel pellets and fuel rods, SPC-ND's engineering and fuel fabrication activities culminate in BWR and PWR fuel assemblies for US and foreign customers. SPC-ND's computerized fuel fabrication process accommodates a variety of fuel designs utilizing multiple enrichments, burnable neutron absorbers, and other custom features. SPC-ND's engineering methodologies perform computerized fuel management tasks for core design, safety analysis, startup analysis, and operations support.

From November 20 through December 6, 1993, an Augmented Inspection Team (AIT) performed special inspections at H.B. Robinson Unit 2 (HBR) and SPC-ND to determine the scope and the causes of the events observed during the Cycle-16 core, post refueling startup of HBR. With HBR's reactor at an indicated power of 20-percent, a heat balance, performed in response to questions about diverse power indications, showed that the actual power was 30-percent. Flux mapping indicated core peaking factor problems. HBR and SPC-ND discovered that six fuel assemblies had been misconstructured in that asymmetrically loaded, integral gadolinia burnable neutron absorbers were incorrectly positioned in the core. The six misconstructured fuel assemblies resulted from inadequate fabrication controls.

Objective

The objective of this task order is to obtain technical expertise from Parameter to assist the staff in an inspection of the SPC-ND quality program, fuel design, fuel fabrication, fuel services, and evaluate the compensatory actions taken by SPC-ND to address the HBR event and the recommendations of SPC-ND's Incident Review Boards and self assessment teams.

Technical and Special Qualifications Required

Parameter shall provide one qualified specialist (i.e., Mechanical and/or Metallurgical Engineer) who is required to possess knowledge of and experience with (a) Appendix B to 10 CFR Part 50, and the standard quality assurance requirements used by fuel manufacturers, (b) 10 CFR Part 21 and its applicability to fuel manufacturers, (c) VIB/DRIL inspection practices, procedures, and NRC report writing, (d) fuel manufacturers, (e) fuel fabrication processes, and (f) zirconium-based alloys for fuel cladding.

It is the responsibility of the contractor to assign technical staff, employees, subcontractors, or specialists who have the required educational background, experience, or combination thereof to meet both the technical and regulatory objectives of the work specified in this Statement of Work. The NRC will rely on Parameter to ensure the accuracy and truthfulness of the representations it makes to the NRC concerning (a) the resumes and qualifications of the personnel assigned to this Task Order No. 13, (b) any technical and cost proposals, and (c) any disclosures of conflict of interest.

Work Requirements and Schedule

Parameter's specialist shall assist the NRC staff in an inspection at the facilities of SPC-ND in Richland, Washington. Parameter's specialist will meet the Team Lead and prepare for the inspection, assist the staff during the inspection, and document the inspection results. The inspection will generally consist of the following:

- Review licensee purchase orders, characteristic specifications, requirements, and associated SPC-ND documents.
- Review the fuel design engineering methodology, and the implementation and documentation of the computerized fuel management tasks for core design, safety analysis, startup analysis, and operations support.
- Review the computerized fuel fabrication process and the associated quality controls and oversight activities.
- Review the fuel services process and the associated quality controls.
- Review and evaluate SPC-ND's compensatory actions taken to address the HBR event and the recommendations of SPC-ND's Incident Review Boards (IRBs) and self assessment team.
- The inspection of SPC-ND is scheduled for February 28 through March 4, 1994.

Tasks	Scheduled Completion
1. Prepare for inspection by reviewing SPC-ND's compensatory actions taken to address the HBR event and its investigation, the recommendations of SPC-ND's IRBs and self assessment teams, NRC requirements, and the background information provided by the Team Leader.	February 23, 1994
2. Participate in the inspection at SPC-ND located in Richland, Washington.	February 28, 1994 through March 4, 1994
3. Prepare informal exit meeting input and outline of activities and submit to the Team Leader.	1:00 pm March 4, 1994
4. Prepare and submit inspection report input to the Team Leader in WordPerfect 5.1 format in accordance with the instructions provided by the Team Leader.	March 21, 1994

Estimated Level of Effort

For planning purposes, the level of effort is estimated at 120 Professional Staff Hours (PSH).

Deliverables

1. Parameter's specialist shall provide to the Team Leader informal exit meeting input and an outline of activities in a format specified by the Team Leader.
2. Parameter's specialist shall provide to the Team Leader formal inspection report input in a format specified by the Team Leader.
3. Parameter's specialist shall submit all reports and documents in draft form to the Team Leader. Parameter's specialist shall incorporate NRC's comments on the draft and submit the final report input to the Project Manager, with a copy to the Team Leader, in a format specified by the Team Leader.

Meetings and Travel

The following meetings and travel are anticipated:

- Pre-inspection preparation meetings at NRC Headquarters in Rockville, Maryland on February 22 and 23, 1994.
- One one-person five-day trip to Richland, Washington, to perform the subject inspection.

NRC Furnished Materials

All necessary background information will be provided by the Team Leader.

Other Applicable Information

The work specified in this Statement of Work is not licensee fee recoverable.