

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

1111

JUL 0 3 1990

International Technical Services, Inc. ATTN: Dr. Hideko Komoriya 420 Lexington Avenue New York, New York 10170

Dear Dr. Komoriya:

Subject: Contract No. NRC-D3-90-D27, Task Order No. 4 Entitled "Review of Duke Power Company's Use of VIPRE Code for Transient Application" (FIN L-1318)

You are hereby authorized to commence work under Task Order No. 4 effective July 2, 1990 with an established ceiling of \$13,971.00.

In accordance with Section G.5, Accelerated Task Order Procedures, of the subject contract, this letter definitizes Task Order No. 4. This effort shall be performed in accordance with the enclosed Statement of Work and the Contractor's proposal dated June 21, 1990, incorporated herein by reference.

The period of performance for Task Order No. 4 is July 2, 1990 through October 15, 1990. The total cost ceiling is \$13,971.00. The amount of \$12,747.00 represents the total reimbursable costs and the amount of \$1,224.00 represents the fixed fee.

Accounting data for Task Order No. 4 is as follows:

| B&R No.:          | 020-19-15-02-0 |  |
|-------------------|----------------|--|
| FIN No.:          | L-1318-0       |  |
| Appropiation No.: | 31X0200.200    |  |
| Obligated Amount: | \$13,971.00    |  |

The following individuals are considered by the Government to be essential to the successful performance of the work hereunder:

Hideko Komoriya Paul Abramson

The contractor agrees that such personnel shall not be removed from the effort under this 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.

9008270146 900709 PDR CONTR NRC-03-90-027 PDC Dr. Hideko Komoriya

NRC-03-90-027 Task Order No. 4 Page 2 of 2

Acceptance of Task Order No. 4 should be made by executing three copies of this document in the space provided and returning two copies to the Contract Administrator. You should retain the third copy for your records.

Should you have any questions regarding this matter, please feel free to contact Brenda DuBose, Contract Management Assistant on (301) 492-7442.

Sincerely.

Timothy F/ Hagan, Contracting Officer Contract Administration Branch No. 1 Division of Contracts and Property Management Office of Administration

Enclosure: As stated

| ACCEPTED: | Task Order No. 4 | 1 |
|-----------|------------------|---|
| NAME      | hotomorga        | / |
| TITLE     | udent            |   |
| DATE      | 9, 1990          |   |

## STATEMENT OF WORK FOR TASK ORDER 004

Review of Duke Power Company's Use of VIPRE Code for Transient TITLE: Application - L-1318

L - 1318FIN:

B&R NUMBER: 020-19-15-02-0

PROJECT MANAGER: Wayne C. Walker (FTS 492-1232)

LEAD ENGINEER: Don Katze (FTS 492-1815)

ESTIMATED LEVEL OF EFFORT: 1 person-month

July 2, 1990 through October 15, 1990 PERIOD OF PERFORMANCE:

TAC NO.: 66580

PRIORITY NO.: 3

### BACKGROUND

The Duke Power Company submitted the topical report DPC-NE-3000, "Thermal-Hydraulic Transient Analysis Methodology" which describes thermal hydraulic simulation models of the Oconee, McGuire, and Catawba Nuclear Station. The purpose of the submittal is to demonstrate per Generic Letter 83-11, that Duke has the technical competence, to perform non-LOCA transient systems analysis for these plants, with the RETRAN-02 and VIPRE-01 codes.

### OBJECTIVE

The objective of this Task Assignment is to obtain technical expertise from ITS to assist the staff in determining the acceptability of the referenced Topical Report especially as it relates to the use of the VIPRE code intransient applications.

#### WORK REQUIREMENTS

#### Tasks

#### Projected Completion

· > ...

1. Based on the contractors review of the Duke Power Company Topical Report DPC-NE-3000, "Thermal-Hydraulic Transient Analysis Methodology" dated July 1987. An evaluation in accordance with VIPRE SER of Duke Power Company's method for use of the VIPRE computer code in transient application will be performed.

a. Draft TER

final TER

b.

incorporate NRC comments and prepare the

August 15, 1990 October 15, 1990

# LEVEL OF EFFORT

The level of effort is estimated to be 1.0 professional staff months.

## TECHNICAL REPORTING REQUIREMENTS

- A. At the completion of Task 1, submit a technical letter report to the Lead Engineer with a copy provided to the Project Manager that contains the request for additional information.
- B. At the completion of Task 2, submit a TER, draft and final as appropriate, original and three copies, to the Lead Engineer with a copy to the Project Manager that contains as executive summary, a discussion of the work performed, results attained, and findings/conclusions regarding the acceptability of the Topical Report.
- C. A monthly business letter report is to be submitted by the 15th of the month to the NRC Project Manager. The report will contain the following:
  - A listing of any efforts completed during the period, including milestones reached.
  - \* The amount of funds expinded for manpower and computer services, both during the period and cumulative to date.
  - \* Any problems or delays encountered or anticipated.
  - A summary of the progress to date.
  - \* Plans for the next reporting period.

# MEETINGS AND TRAVEL

One trip of one or two people to the NRC headquarters in Rockville, MD should be planned and budgeted for a meeting to resolve open issues. If used, this meeting will be one or two days duration. Dates will be mutually agreed upon between the NRC Project Manager and the contractor.

# APPLICABLE SPECIAL PROVISIONS

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

It shall be the responsibility of the contractor to assign technical staff employees, subcontractors, or consultants who have the required educational background, experience, or combination thereof, to meet both the technical and regulatory objectives of the work specified in this SOW. The NRC will rely on representations made by the contractor conterning the qualifications of the personnel proposed for assignment to this task order including assurance that

- A ...

all information contained in the technical and cost proposals, including resumes and conflict of interest disclosures, is accurate and truthful. The use of particular personnel is subject to NRC approval.

### NRC FURNISHED MATERIALS

The NRC will provide all necessary materials to facilitate successful completion of this project. This will include topical report DPC-NE-3000, and other relevant materials.