

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 8

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

BPA NO.

1. DATE OF ORDER AUG 04 2006		2. CONTRACT NO. (If any) NRC-03-03-038		6. SHIP TO:	
3. ORDER NO. TO27		MODIFICATION NO.		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission Office of Nuclear Reactor Regulation	
4. REQUISITION/REFERENCE NO. NRR-03-03-038-027		b. STREET ADDRESS Attn: Bernard L. Grenier, 301-415-2726 Mail Stop: 09-E3		c. CITY Washington	
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Jeffrey R. Mitchell, 301-415-6465 Mail Stop T-7-I-2 Washington, DC 20555		d. STATE DC		e. ZIP CODE 20555	
7. TO:		f. SHIP VIA		8. TYPE OF ORDER	
a. NAME OF CONTRACTOR INFORMATION SYSTEMS LABORATORIES, INC		<input type="checkbox"/> a. PURCHASE		<input checked="" type="checkbox"/> b. DELIVERY	
b. COMPANY NAME ATTN: DR. JAMES F. MEYER		Reference your _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		Except for billing instructions on the reverse, this delivery/task order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
c. STREET ADDRESS 11140 ROCKVILLE PIKE, SUITE 500		d. CITY ROCKVILLE		e. STATE MD	
f. ZIP CODE 20852		10. REQUISITIONING OFFICE NRR		12. F.O.B. POINT Destination	
9. ACCOUNTING AND APPROPRIATION DATA 620-15-111-113 J-3238 252A 31x0200.620 Obligate \$17,276.00 Contractors DUNS: 107928806		11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. EMERGING SMALL BUSINESS <input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED		13. PLACE OF a. INSPECTION b. ACCEPTANCE	
14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS Net 30	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
	<p>Issuance of Task Order No. 27, Under Contract No. NRC-03-03-038</p> <p>Title: *EVALUATION OF UNCERTAINTY ISSUES PERTAINING TO THE TRACG CALCULATIONS CONTAINED IN REVISION 1 TO LICENSING TOPICAL REPORT NEDE-33147P, "DSS-CD TRACG APPLICATION"</p> <p>Period of Performance: Day of Award through 11/15/2006 Estimated Reimbursable Cost: \$15,998.00 Fixed Fee: \$1,278.00 TOTAL COST AND FEE: \$17,276.00</p> <p>Funding in the amount of \$17,276.00 is being provided.</p> <p>See attached pages for a description of the Task Order No.27</p>					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME U.S. Nuclear Regulatory Commission Payment Team, Mail Stop T-9-H-4						
	b. STREET ADDRESS (or P.O. Box) Attn: (NRC-03-03-038 Task Order No. 27)						
	c. CITY Washington		d. STATE DC	e. ZIP CODE 20555		17,276.00	17(i). GRAND TOTAL

22. UNITED STATES OF AMERICA
BY (Signature)

Donald A. King

23. NAME (Typed)
Donald A. King
Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR RELEASE
PREVIOUS EDITIONS NOT OBSOLETE

SUNSI REVIEW COMPLETE

OPTIONAL FORM 347 (REV. 2/2005)
PRESCRIBED BY GSA FPMR (41 CFR) 101-11.6

ADM002

In accordance with Section G.4, Task Order Procedures, of contract no. NRC-03-03-038, this definitizes Task Order No. 027. The effort shall be performed in accordance with the attached Statement of Work.

Task Order No. 027 shall be in effect from the Day of Award through November 15, 2006, with a cost ceiling of \$17,276.00. The amount of \$15,998.00 represents the estimated reimbursable costs, and the amount of \$1,278.00 represents the fixed fee.

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

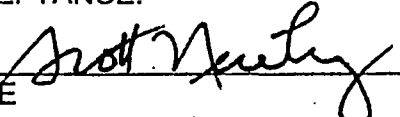
Your contacts during the course of this task order are:

Technical Matter: Bernard L. Grenier
Project Officer
301-415-2726

Contractual Matters: Jeffrey R. Mitchell
Contract Specialist
301-415-6465

Acceptance of Task Order No. 027 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 at the address identified in Block No. 5 of the OF 347. You should retain the third copy for your records.

ACCEPTANCE:


NAME

VP
TITLE

8/4/06
DATE

RECEIVING REPORT

SHIPMENT NUMBER	PARTIAL		DATE RECEIVED	SIGNATURE OF AUTHORIZED U.S. GOV'T REP.	DATE
	FINAL				
TOTAL CONTAINERS		GROSS WEIGHT	RECEIVED AT	TITLE	

[illegible]

DELIVERY ORDER TERMS AND CONDITIONS NOT SPECIFIED IN THE CONTRACT

A.1 NRC Acquisition Clauses - (NRCAR) 48 CFR Ch. 20

A.2 Other Applicable Clauses

☐ See Addendum for the following in full text (if checked)

☐ 52.216-18, Ordering

☐ 52.216-19, Order Limitations

☐ 52.216-22, Indefinite Quantity

☐ 52.217-6, Option for Increased Quantity

☐ 52.217-7, Option for Increased Quantity Separately Priced Line Item

☐ 52.217-8, Option to Extend Services

☐ 52.217-9, Option to Extend the Term of the Contract

A.3 SEAT BELTS

Contractors, subcontractors, and grantees, are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.

Statement of Work for Task Order 27
under ISL Contract No. NRC-03-03-038 (J3238)

Title: Evaluation of Uncertainty Issues Pertaining to the TRACG Calculations Contained in Revision 1 to Licensing Topical Report NEDE-33147P, "DSS-CD TRACG Application"

Technical Monitor: Tai Huang, 301-415-2867; E-mail = TLH1@NRC.GOV

TAC Number: MC1967

BACKGROUND

On February 27, 2004, General Electric (GE) submitted Licensing Topical Report (LTR) NEDE-33147P, DSS-CD TRACG Application, which supports the Detect and Suppress Solution - Confirmation Density (DSS-CD) LTR, for staff approval. The staff completed its review, with the assistance of ISL under Task Order 33, contract number NRC-03-00-003, in March 2006. However, there remained some outstanding issues pertaining to DSS-CD TRACG uncertainties to reflect the latest revision to the DSS-CD LTR that needed to be addressed by GE. On May 23, 2006, GE submitted Revision 1 to DSS-CD TRACG Application that provides the necessary technical basis for the approval of DSS-CD.

OBJECTIVE

The objective of this task order is to obtain expert technical assistance from ISL to assist the staff in determining the safety adequacy of the uncertainty issues pertaining to the TRACG calculations contained in Revision 1 to Licensing Topical Report NEDE-33147P, "DSS-CD TRACG Application."

TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

One Expert-level Reactor Physicist/Engineer on a part-time, intermittent basis who is knowledgeable of and experienced with the TRAC-BF1/TRAC-BD1 1-D and 3-D integration scheme, the implicit coupled fluid flow and conduction solver and the TRAC-BF1/TRAC-BD1 physics model.

WORK REQUIREMENTS AND SCHEDULE

Tasks

1. Perform a thorough evaluation of Revision 1 to the DSS-CD TRACG Application LTR and determine if it can be concluded with high confidence that the TRACG code can conservatively calculate the power oscillation amplitude and MCPR. Identify the need for any additional information or clarification (RAIs). Participate in conference calls to assist in clarifying the RAIs. Prepare a technical letter report.

Completion Schedule

Two weeks from authorization of work or receipt of Revision 1 to the LTR.

WORK REQUIREMENTS AND SCHEDULE (CONTINUED)

Tasks

Completion Schedule

2. Evaluate the responses to the RAIs and determine their acceptability. Participate in telephone conference call with GE to discuss the responses and assist in resolving any open items. Prepare a technical letter report.

- a. Draft.

Two weeks from receipt of the RAI responses.

- b. Incorporate NRC comments and prepare the final report.

Two weeks from receipt of NRC comments.

PERIOD OF PERFORMANCE

The period of performance shall start on Day of Award and expire on November 15, 2006.

DELIVERABLES

Technical Reporting Requirements

1. At the completion of Task 1, submit a technical letter report that contains a detailed technical evaluation of GE's proposed methodology and the bases for the conclusions using the outline and content specified in Attachment 1. Provide a list of any outstanding issues and requests for additional information and the basis or bases clearly articulated.
2. At the completion of Task 2, submit a technical letter report, draft and final as appropriate, that contains the results of the evaluation of additional information including the bases for the determination as an attachment to the Task 1 report and update the technical letter report completed under Task 1.

MEETINGS AND TRAVEL

None.

NRC FURNISHED MATERIALS

A copy of Revision 1 to Licensing Topical Report NEDE-33147P, "DSS-CD TRACG Application" will be provided to the Principal Investigator upon authorization of work.

NOTE:

This document contain proprietary information and must be safeguarded against unauthorized disclosure. After completion of work, the document should either be destroyed or returned to NRC. If it is destroyed, please confirm this in an E-mail to the Technical Monitor with a copy to the Project Officer and include the date and manner in which the document was destroyed.

OTHER APPLICABLE INFORMATIONLicense Fee Recovery

The work to be performed under this task order is licensee fee recoverable.

Assumptions and Understandings

For Task 2, the level of effort is based on the assumption that there will be on ly one RAI.

Outlines and format for the SER Input

Introduction

Summary of Work Performed

Safety Evaluation Input

1. Background

Summarize (a) the proposed uncertainties used in the original DSS-CD TRACG Application LTR and in its Revision 1, (b) the impact on its applications to the DSS-CD LTR, and (3) the basis to evaluate the proposed uncertainty and its acceptability.

2. Evaluation of the Revision 1 to DSS-CD TRACG Application LTR

Describe the evaluation of the proposed uncertainty with respect to the impact on the thermal-hydraulic modeling, transient 3D neutronics modeling, and coupling between thermal-hydraulic and neutronics models. Indicate open or unresolved items in the appropriate location in the text in bold type.

3. Conclusion

Summarize the conclusion from the results of the evaluation of the revision 1 to the DSS-CD TRACG Application LTR.

Request for Additional Information (RAIs)

Additional information necessary to resolve open or unresolved items identified during the review of the information associated with the proposed uncertainty needs to be requested in a manner that is unambiguous, has an adequate basis, and is necessary for the safety review. The technical letter report should provide a list of RAIs using the following guidance:

1. An RAI should include the appropriate basis for requesting the information. The basis should explain why the information is needed, including how it will be used to help make a reasonable assurance finding.
2. Judgmental language should be avoided.
 - a. Questions should not make adequacy determinations.
 - b. Words like "unacceptable" or "deficient" and "deviation" should be avoided. Likewise, avoid using phrases like "the staff will require" since it is premature to require anything when asking questions.