ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES: 1 | 3

IMPORTANT: Mark all packages and papers with contract and/or order numbers. BPA NO.

1. DATE OF ORDER: 9/8/2009	2. CONTRACT NO. (If any): NRC-42-07-036
3. ORDER NO.: 0086 MODIFICATION NO.:	4. REQUISITION/REFERENCE NO.: 42-07-036T086 09703686160

5. ISSUING OFFICE (Address correspondence to)
U.S. Nuclear Regulatory Commission
Div. of Contracts
Attn: Jeffrey R. Mitchell, 301-492-3639
Mail Stop T-7-I-2
Washington, DC 20555

6. SHIP TO:
a. NAME OF CONSIGNEE: U.S. Nuclear Regulatory Commission
b. STREET ADDRESS: Attn: Min Lee
Mail Stop: T9-F29
c. CITY: Washington | d. STATE: DC | e. ZIP CODE: 20555

7. TO:
a. NAME OF CONTRACTOR
INFORMATION SYSTEMS LABORATORIES, INC
ISL
b. COMPANY NAME
ATTN: DR. JAMES F. MEYER
c. STREET ADDRESS
11140 ROCKVILLE PIKE, SUITE 500
d. CITY: ROCKVILLE | e. STATE: MD | f. ZIP CODE: 20852

f. SHIP VIA

8. TYPE OF ORDER
[ ] a. PURCHASE
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.
[X] b. DELIVERY
Except for billing instructions on the reverse, this delivery 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.

9. ACCOUNTING AND APPROPRIATION DATA
B&R:925-15-171-103; JC:Q4160; BOC 252A; 31X0200.925
Obligate: $45,000.00
Contractor DUNS: 107928806

10. REQUISITIONING OFFICE: NRO

11. BUSINESS CLASSIFICATION (Check appropriate box(es))
[ ] a. SMALL [X] b. OTHER THAN SMALL [ ] c. DISADVANTAGED [ ] g. SERVICE-DISABLED VETERAN-OWNED
[ ] d. WOMEN-OWNED [ ] e. HUBZone [ ] f. EMERGING SMALLBUSINESS

12. F.O.B. POINT: Destination

13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	16. DISCOUNT TERMS
a. INSPECTION	b. ACCEPTANCE			

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)
	Issuance of Task Order No.86 under Contract No. NRC-42-07-036 Title: "Review of Design Certification Document (DCD) Seismic Systems Analysis and the Use of Incoherency SRP 3.7" Period of Performance: Day of Award - March 31, 2010 Estimated Reimbursable Cost: $67,053.00 Fixed Fee: $3,397.00 Total Cost Plus Fixed Fee: $70,450.00 Funds in the amount of $45,000.00 is provided. See Continuation Pages					

18. SHIPPING POINT	19. GROSS SHIPPING WEIGHT	20. INVOICE NO.	17(h) TOTAL (Cont. pages)

SEE BILLING INSTRUCTIONS ON REVERSE

21. MAIL INVOICE TO:
a. NAME: Department of Interior / NBC
NRCPayments@nbc.gov
b. STREET ADDRESS (or P.O. Box): Attn: Fiscal Services Branch - D2770
7301 W. Mansfield Avenue
c. CITY: Denver | d. STATE: CO | e. ZIP CODE: 80235

17(i). GRAND TOTAL

22. UNITED STATES OF AMERICA
BY (Signature)

23. NAME (Typed)
Jeffrey R. Mitchell
Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE
TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

SEP 15 2009

OPTIONAL FORM 347 (REV. 6/2006)
PRESCRIBED BY GSA/FAR 48 CFR 53.213(f)
ADM002

TASK ORDER TERMS AND CONDITIONS

NOT SPECIFIED IN THE CONTRACT

A.1 2052.216-71 INDIRECT COST RATES (JAN 1993)

(a) Pending the establishment of final indirect rates which must be negotiated based on audit of actual costs, the contractor shall be reimbursed for allowable indirect costs as follows:

APPLIES ONLY TO TASK ORDER NO. 86, UNDER NRC-42-07-036

INDIRECT COST POOL	RATE	BASE	PERIOD
Fringe Benefits		Direct Labor	Task Order 86 Period of Performance
Overhead		Direct Labor	Task Order 86 Period of Performance
G&A		Total Value Added Cost Input	Task Order 86 Period of Performance
Material Handling		Materials and Subcontractor Costs	Task Order 86 Period of Performance

(b) The contracting officer may adjust these rates as appropriate during the term of the contract upon acceptance of any revisions proposed by the contractor. It is the contractor's responsibility to notify the contracting officer in accordance with FAR 52.232-20, Limitation of Cost, or FAR 52.232-22, Limitation of Funds, as applicable, if these changes affect performance of work within the established cost or funding limitations.

NRC-42-07-036 0086

In accordance with Section G.4, Task Order Procedures, of Contract No. NRC-42-07-036, this definitizes Task Order No. 86. The effort shall be performed in accordance with the attached Statement of Work.

Task Order No. 86 shall be in effect from Day of Award through March 31, 2010, with a cost ceiling of $70,450.00. The amount of $67,053.00 represents the estimated reimbursable costs, and the amount of $3,397.00 represents the fixed fee.

The amount obligated by the Government with respect to this task order is $45,000.00, of which $42,830.00 represents the estimated reimbursable costs, and the amount of $2,170.00 represents the fixed fee.

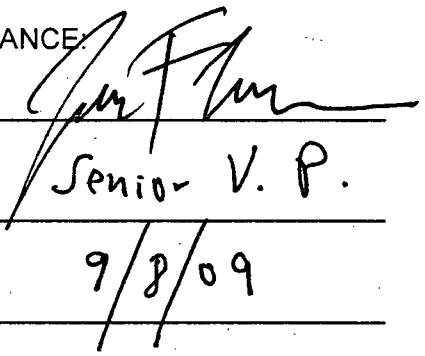
The issuance of this task order does not amend any terms or conditions of the subject contract.

Your contacts during the course of this task order are:

Technical Matter: Min Lee
Project Officer
301-415-0502

Contractual Matters: Jeffrey R. Mitchell
Contract Specialist
301-492-3639

Acceptance of Task Order No. 86 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

Senior V. P.

TITLE

9/8/09

DATE

TASK ORDER STATEMENT OF WORK

JCN	Contractor	Task Order No.
Q-4160	Information Systems Laboratories (ISL)	NRC-42-07-036 Task 86
Applicant	Design/Site	Docket No.
Westinghouse Electric Co.	AP1000/ ...	
Title/Description		
Review of Design Certification Document (DCD) Seismic Systems Analysis and the Use of Incoherency (SRP 3.7.2)		
TAC No.	B&R Number	SRP or ESRP Section(s)
RX0	925-15-171-103	3.7.2
NRC Task Order Project Officer (PO)		
Richard Daniel	301-415-6319	Richard.Daniel@nrc.gov
NRC Technical Monitor (TM)		
Bret Tegeler	301-415-6793	Bret.Tegeler@nrc.gov

1.0 BACKGROUND

Combined Operating License (COL) Applications are submitted pursuant to Part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR 52), "Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants." The U.S. Nuclear Regulatory Commission (NRC) reviews COL Applications based on information furnished by electric utility companies pursuant to 10 CFR 52.79, "Contents of Applications Technical Information."

A Standard Review Plan (NUREG-0800) is prepared for the guidance of staff reviewers in the Office of New Reactors in performing safety reviews of applications to construct or operate nuclear power plants and the review of applications to approve standard designs and sites for nuclear power plants. The principal purpose of the SRP is to assure the quality and uniformity of staff safety reviews.

An Environmental Safety Review Plan (NUREG-1555) is prepared for the guidance of staff reviewers in performing environmental reviews of applications related to nuclear power plants. The ESRPs are companions to regulatory guides that address siting and environmental issues. As with NUREG-0800 the purpose of the ESRP is to assure the quality and uniformity of environmental reviews.

The staff publishes the results of these reviews in a Safety Evaluation Report (SER).

2.0 OBJECTIVE

The objective of this task order is to obtain technical expertise from the contractor to assist the NRC staff in determining whether or not the use of seismic wave motion incoherency has been properly implemented by the DCD applicant.

Specifically, developing a simplified SASSI-AS model and then performing confirmatory incoherent analysis is required to support the review of SRP subsection 3.7.2 and is required to insure that the seismic analyses and design meet the applicable requirements of 10 CFR 50,

Appendix A, General Design Criterion (GDC) 2, 10 CFR Part 100, Subpart A and Subpart B, 10 CFR Part 20, and 10 CFR Part 50, Appendix S. Guidance set forth in NUREG-0800 and ISG-1, "Interim Staff Guidance on Seismic Issues Associated with High-Frequency Ground Motion in Design Certification and Combined License Applications" will serve as the basis for the evaluation.

The level of effort for this task order is based on the expectation that the contractor is familiar with the review procedures of the SRP Sections in the work scope and the technical reviewer has the required knowledge and experience in the subject matter as outlined in Section 5.

The primary deliverable, or output of this regulatory review, shall be the Technical Evaluation Report (TER). The TER will serve as input to the NRC staff's Safety Evaluation Report (SER) which will document the NRC's technical, safety, and legal basis for approving the COL application. The TER must provide sufficient information to adequately explain the NRC staff's rationale for why there is *reasonable assurance* that public health and safety is protected. The TER, and ultimately the SER, should be written in a manner whereby a person with a technical (non-nuclear) background and unfamiliar with the applicant's request could understand the basis for the staff's conclusions. The TER format will be provided by the NRC technical monitor.

The specific work and schedule required for this task order is provided in Section 5.

3.0 WORK REQUIREMENTS, SCHEDULE AND DELIVERABLES

Tasks/Standards	Scheduled Completion	Deliverables
1. REQUIREMENT: Develop simplified building model using SASSI-AS and compare dynamic response with more detailed model (used in the DCD) STANDARD: Reasonable model correlation (w/r/t frequency response) is achieved.	* Two (2) weeks after authorization of work	N/A
2. REQUIREMENT: Perform incoherent analyses using SASSI-AS with identical time history inputs (used in the DCD). STANDARD: Compare dynamic response to DCD at basemat and key locations	*Four (4) weeks after authorization of work	N/A
3. REQUIREMENT: Provide technical support to NRC staff on the execution and comparison of results with ACS-SASSI (to be run by staff). STANDARD: Respond to questions from staff on SASSI model development and provide support for a possible 2 day site visit	* As-needed basis	N/A

Tasks/Standards	Scheduled Completion	Deliverables
4. REQUIREMENT: Perform coherent and incoherent analyses using CLASSI with identical time history inputs (used in the DCD). STANDARD: Compare dynamic response at basemat and key locations	Six (6) weeks after authorization of work	N/A
5. REQUIREMENT: Summarize technical approach,results, and conclusions from Tasks 1,2, and 4 above. STANDARD: Complete evaluation as defined in Task. Submit Trip Report within 2 weeks of site review.	*Twelve (12) weeks after authorization of work	Summary Report

* These Work Schedules are subject to change by the NRC Contracting Officer (CO) to support the needs of the NRC Licensing Program Plan.

The Technical Monitor may issue technical instruction from time to time throughout the duration of this task order. Technical instructions must be within the general statement of work delineated in the task order and shall not constitute new assignments of work or changes of such a nature as to justify an adjustment in cost or period of performance. The contractor shall refer to Section G.1 of the base 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 CO and will be coordinated with the NRO Project Officer.

4.0 TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

As specified in the base contract, the contractor shall provide individuals who have the required educational background and work experience to meet the objectives of the work specified in this task order. Specific qualifications for this effort include:

Knowledge and experience in random vibration analyses, development of seismic ground motion spectra and consistent time histories, soil-structure interaction analyses, development of

in-structure floor design response spectra, dynamic and seismic analysis of systems, structures and components of nuclear power plants using SASSI-AS, SASSI-2000, ACS-SASSI, and CLASSI computer codes.

The contractor shall provide a contractor project manager (PM) to oversee the effort and ensure the timely submittal of quality deliverables so that all information is accurate and complete as defined in the base contract.

The NRC will rely on representations made by the contractor concerning the qualifications of the personnel assigned to this task order, including assurance that all information contained in the technical and cost proposals, including resumes, is accurate and truthful. The resume for each professional proposed to work under this task order (contractor, subcontractor, or consultant) shall describe the individual's experience in applying his or her area of engineering specialization to work in the proposed area. The use of particular personnel on this contract is subject to the NRC technical monitor's (TM's) approval. This includes any proposed changes to key personnel during the life of the task order.

5.0 REPORTING REQUIREMENTS

Task Order Progress Report

The contractor shall provide a bi-weekly progress report summarizing accomplishments, expenditures, contractor staff hours expended, percent completed for each task under this task order, and any problems encountered by the contractor. The report shall be sent via e-mail to the NRC TM, Task Order Project Officer (PO) and CO.

Please refer to Section F of the basic contract award document for contract reporting requirements.

Technical reporting requirements

Unless otherwise specified above, the contractor shall provide all deliverables as draft products. The NRC TM will review all draft deliverables (and coordinate any internal NRC staff review, if needed) and provide comments back to the contractor. The contractor shall revise the draft deliverable based on the comments provided by the TM, and then deliver the final version of the deliverable. When mutually agreed upon between the contractor and the TM, the contractor may submit preliminary or partial drafts to help gauge the contractor's understanding of the particular work requirement.

The contractor shall provide the following deliverables in hard copy and electronic formats. The electronic format shall be provided in MS Word or other word processing software approved by the TM. For each deliverable, the contractor shall provide one hard copy and electronic copy to both the PM and the TM. The schedule for deliverables shall be contained in the approved project plan for the task order effort.

In all correspondence, include identifying information: JCN No.:_____; Technical Assignment Control No. (TAC), if applicable, _____ Task Order No.:_; the licensee:_____; and, the site: _____.

6.0 MEETINGS AND TRAVEL

Kick-off meeting to be conducted via telephone.

One 2 -person, 2 -day working meeting at NRC headquarters to discuss project results.

*At the discretion of the NRC TM, meeting may be conducted via telephone or video conference.

7.0 NRC FURNISHED MATERIAL

The following NRC furnished materials will be provided to the contractor together with SOW:

a. CD-ROM containing relevant model input data

8.0 PERIOD OF PERFORMANCE

The period of performance is from Day of Award through March 31, 2010.

9.0. OTHER APPLICABLE INFORMATION

a. License Fee Recovery

All work under this task order is fee recoverable and must be charged to the appropriate TAC number(s).

b. Assumptions and Understandings:

The level of effort for Tasks 1,2, and 4 is based on the assumption that the contractor is familiar with the review procedures of (SRP) Section 3.7.2.

It is assumed that the contractor has access to the NRC furnished material available on the Internet.

It is understood that the scope of the review consists of conference calls with the NRC staff, and with the NRC staff and the applicant, to discuss open items in an attempt to obtain additional information or reach resolution.

During the course of the review, the Technical Monitor, and possibly other NRC personnel, may travel to the contractor site to discuss the status of the review and participate in the resolution of open items. It is assumed that the level of effort covers such a meeting.
The primary deliverable, or output of this regulatory review, shall be the Technical Evaluation Report (TER). The TER will serve as input to the NRC staff's Safety Evaluation Report (SER) which will document the NRC's technical, safety, and legal basis for approving the COL application. The TER must provide sufficient information to adequately explain the NRC staff's rationale for why there is *reasonable assurance* that public health and safety is protected.