

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

BPA NO.

1 CONTRACT ID CODE

PAGE

OF PAGES

1

3

2. AMENDMENT/MODIFICATION NO.

M003

3. EFFECTIVE DATE

08-14-2007

4. REQUISITION/PURCHASE REQ. NO.

RES-04-062-T005M004 in AAMS dtd 7/10/07

5. PROJECT NO. (If applicable)

6. ISSUED BY

CODE

3100

7. ADMINISTERED BY (If other than Item 6)

CODE

3100

U.S. Nuclear Regulatory Commission
Div. of Contracts
Attn: H. (Eddie) Colón, Jr.
Mail Stop T-7-I-2
Washington, DC 20555

U.S. Nuclear Regulatory Commission
Div. of Contracts
Mail Stop T-7-I-2
Attn: H. (Eddie) Colón, Jr.
Washington, DC 20555

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

INFORMATION SYSTEMS LABORATORIES

ATTN.: MR. JAMES F. MEYER,
MANAGER

11140 ROCKVILLE PIKE STE 500

ROCKVILLE MD 208523106

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.

NRC-04-04-062 TASK ORDER 005

10B. DATED (SEE ITEM 13)

05-24-2006

CODE DUNS # 150135445

FACILITY CODE

X

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

76015111201

Y6912

252A

31X0200.760

OBLIGATE: \$179,709.00

FFS Commitment Number: RES-C07-269

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority) 52.243-2 CHANGES-COST REIMBURSEMENT (AUG 1987)
ALTERNATE 1 (APR 1984)

X

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return two (2) copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

See pages 2-3 for a description of this modification.

Period of Performance: May 24, 2006 - December 31, 2007 (Unchanged)

Ceiling Amount: \$544,326.00 (Changed)

Obligated Amount: \$544,326.00 (Changed)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

James F. Meyer, Senior V.8.

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

Heriberto Colón, Jr.
Contracting Officer

15B. CONTRACTOR OFFEROR

(Signatures of person authorized to sign)

15C. DATE SIGNED

9/7/07

16B. UNITED STATES OF AMERICA

BY

(Signature of Contracting Officer)

16C. DATE SIGNED

9/6/07

NSN 7540-01-152-9070
PREVIOUS EDITION NOT USABLE

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

SEP 12 2007

STANDARD FORM 10-83
Prescribed by GSA FPMR (41 CFR) 101-11.6

ADM002

The purpose of this modification is to:

- (1) increase the ceiling of Task Order No. 5 by **\$169,647.00**, from \$365,300.00 to **\$534,947.00**, to allow ISL, Inc. to provide the NRC with technical support in developing a draft combined operating licenses (COL) template Safety Evaluation Report (SER) for security and the Regulatory Guide for security ITAAC, and support the staff in both reviewing the ACRS report and meeting with the ACRS to discuss their views. In addition, as a result of the review of the ACRS report and meeting with the Committee, ISL shall support the staff in preparing a technical report that documents and describes in detail the policy and technical issues raised by the ACRS that will require resolution if an approach as formulated in NUREG-1860 were to be implemented in the future.

This modification confirms the email authorization provided to ISL, Inc. via email dated 8/13/2007, to commence work under this effort, effective August 14, 2007, with a temporary cost ceiling not-to-exceed \$50,000.00. Reference is made to ISL, Inc.'s proposal dated 8/9/2007, as revised 8/13/2007, in response to this effort.

- (2) per your letter request dated March 22, 2007, the NRC hereby accepts ISL's proposed increase in the estimated cost for Task Order No.5 in the amount of **\$9,379.00**, thereby increasing the ceiling from \$534,947.00 to **\$544,326.00**. This increase is a result of the increased overhead rate (54% vs. 44%) experienced by ISL, Inc. during CY2006. By signing this modification both parties agree this increase will allow ISL, Inc. to successfully complete the work under this task order.
- (3) provide funds in the amount of **\$179,709.00**, thereby increasing the obligated amount from \$364,617.00 to **\$544,326.00**, and fully funding this task order.
- (4) change the NRC Project officer from Ronald Emrit to "**Erulappa Chelliah**".

Accordingly, the Task Order No. 5 is modified as follows:

1. The last paragraph of OPTION FORM 347 - Order for Supplies of Services starting with "Task Order No. 5 shall be effective..." is DELETED entirely REPLACED with the following:

"Task Order No. 5 shall be effective May 24, 2006 through December 31, 2007, with a total cost ceiling of **\$544,326.00**. The amount of **\$504,753.00** represents the reimbursable costs, and the amount of **\$39,573.00** represents the fixed fee."

The amount currently obligated by the Government with respect to this task order is **\$544,326.00**. The amount of **\$504,753.00** represents the obligated funds earmarked for reimbursement of costs, and **\$39,573.00** represents the obligated funds earmarked for reimbursement of the fixed fee."

2. The SOW is DELETED entirely and REPLACED with **ATTACHMENT #1** (Revisions to the SOW are highlighted.)

- (3) The provisional OH rate applicable to Task Order No. 5 for CY2006 only is hereby changed from 44% to "54%", subject to final audit and acceptance by DCAA.

A summary of NRC obligations and Cost Recovery Funds under this contract, from date of the award through this modification, is given below:

Total FY 06 obligations.....	\$ 274,617.00
Total FY 07 obligations.....	<u>\$ 269,709.00</u>
Cumulative Total of NRC Obligations:	\$ 544,326.00

This modification **obligates** FY2007 funds in the amount of **\$179,709.00**.
All other terms and conditions remain unchanged.

**STATEMENT OF WORK
NRC-04-04-062 TASK ORDER NO. 5
(MODIFICATION NO. 3)
JOB CODE Y6912**

TITLE: "Assistance for Developing and Integrating Security into Regulatory Structure for New Plant Licensing"

I. BACKGROUND

The Commission, in its Policy Statement on Regulation of Advanced Nuclear Power Plants, stated its intention to "improve the licensing environment for advanced nuclear power reactors to minimize complexity and uncertainty in the regulatory process."

The staff noted in its Advanced Reactor Research Plan to the Commission, that a risk-informed regulatory structure applied to license and regulate advanced (new) reactors, regardless of their technology, could enhance the effectiveness, efficiency, and predictability (i.e., stability) of new plant licensing.

The NRC's past LWR experience, especially the recent efforts to risk-inform and performance-base the regulations, has shown the potential value of a top-down approach to developing a regulatory structure. Such an approach could facilitate the implementation of performance-based regulation, as well as ensure a greater degree of coherence among the resulting regulations than found among current regulations.

The objective of this program is to develop and implement a risk-informed performance-based regulatory structure that can be applied to new reactor technologies. In developing the regulatory structure, the first part is development of the technical basis, and the second part is development and implementation of the associated regulations. In performing the technical basis, a framework which is risk-informed and performance-based, has been developed.

The objective of the framework is to provide an approach that will (1) enhance the regulatory structure effectiveness and efficiency, and (2) reduce unnecessary regulatory burden. The framework will provide the necessary guidance and criteria for developing a risk-informed performance-based regulatory structure that can be applied to any reactor technology. Therefore, insights gained from this regulatory structure can be applied to enhance the effectiveness and efficiency of the current regulatory structure and identify areas for potential reduction in unnecessary regulatory burden. To meet this objective, an integrated approach has been used. It is essential that this effort is coherently integrated with the other applicable parts of the current regulatory structure. A major interface is security.

Further, the Commission has requested the staff to integrate security and safety throughout the effort as noted in Staff Requirements Memorandum (SRM) SECY-05-0120, "Security Design Expectations for New Reactor Licensing Activities," SRM-COMSECY 05-0058, "Schedules and

Resources for Security Rulemaking,” and SECY 06-0019, “Semiannual Update of the Status of New Reactor Licensing Activities and Future Planning for New Reactors.”

The NRC’s strategic plan identifies goals to ensure protection of public health and safety and the environment, and to ensure the secure use and management of radioactive materials. One of the strategies employed to meet these goals is the use of relevant intelligence information and security assessments to determine realistic and practical security requirements and mitigation measures. In implementing the strategies, the NRC staff will continue to assure the validity of the design basis threat (DBT), complete the assessments of security and mitigation strategies at licensed facilities, and revise requirements for additional protection where needed.

II. OBJECTIVE

The objective of this task is to develop a regulatory structure where safety and security are integrated throughout which requires development of security expectations and guidance.

This work will support the agency’s security goal of establishing expectations that encourage the use of innovative security approaches at the reactor design and combined operating license. By setting expectations for future applicants as early as possible in the licensing process, the proposed actions will provide timely feedback to reactor designers and the staff on design-related security issues. Such early feedback is consistent with the intent of the Commission Policy Statement on the Regulation of Advanced Nuclear Power Plants, and is intended to improve the effectiveness, efficiency, and predictability of the review process. These actions will also ensure that the industry considers security appropriately when moving from previously certified designs to the first of a kind engineering (FOAKE) design stage, when submitting design certification (DC) and combined operating licenses (COL) applications, and when constructing new facilities. Early consideration of design-related security issues is expected to be cost-beneficial because it would reduce reliance on operational security programs to ensure the security of new reactors.

III. SCOPE OF WORK

SUBTASK 1: Security Assessments

Subtask 1-1: Plan

The contractor shall support the staff in developing guidance on security assessments such that new plant designers and applicants will be required to assess and incorporate security aspects in the DC and COL stage, instead of postponing to the construction stage. Early consideration is expected to result in a more effective and efficient regulatory process. This guidance is expected to be developed in three stages (as described in the following three subtasks):

1. Establish the high level security expectations
2. Identify and define the necessary performance standards for meeting the expectations
3. Develop the guidance to be used to accomplish the defined performance standards.

To ensure that the overall work in developing the security guidance proceeds in an efficient manner, in this first task, the contractor shall develop their approach to be followed in performing the work described in the next three tasks (Subtasks 1-2 thru 1-4). The plan developed by the contractor shall also describe the objectives, scope, approach, key milestones that need to be accomplished for each subtask, products to be produced, and due dates for each milestone. The due date for each milestone shall be consistent with the overall schedule required to complete the development of the guidance (see Section V).

In developing the plan and performing Subtasks 1-2 thru 1-4, the contractor shall use NUREG-1345, "Nuclear Power Plant Design Concepts for Sabotage Protection" as one of the references. NUREG-1345 shall be furnished as governmental furnished information.

The contractor shall schedule a "kick-off" meeting with the NRC staff technical manager within 10 days of contract placement. The contractor shall present a proposed "outline" or "strawman" plan at this meeting. A draft plan is to be submitted to the NRC technical manager within 10 business days of the kickoff meeting and a final plan within 5 business days of receipt of comments on the draft plan from the NRC technical manager.

The plan must be approved in writing by the NRC staff technical manager before any work can proceed on the other subtasks (1-2 thru 1-4).

Subtask 1-2: Security Expectations

The contractor shall support the staff in defining the Commission's security expectations. This definition will establish, at a high level, what expectations need to be met in order to ensure the physical protection system shall be designed to protect against the DBT of radiological sabotage as stated in 10 CFR 73.1(a). It is envisioned that these expectations, based on Commission approval, will ultimately be codified in a revision to the Commission Policy Statement on the Regulation of Advanced Nuclear Power Plants (59 FR 45461; July 12, 1994) which will explicitly encourage design and construction of new reactors that result in enhanced security.

Specifically, the contractor shall support the staff in:

- Defining, at a high level, the security expectations that need to be met for new reactors. These expectations will provide the goal for the level of security needed for the physical protection strategy and defense-in-depth principle.
- Identify issues (policy or technical) where public input is particularly needed.
- Reviewing public input.
- Developing final recommendation for Commission approval.

Subtask 1-3: Security Standards

The contractor shall support the staff in developing security performance standards for integrating security into the DC and COL aspects of future reactors. These standards define the criteria that establish how the security expectations (developed above) are met. Further, these performance standards will establish the necessary attributes and characteristics for acceptable

security assessments.

Specifically, the contractor shall support the staff in:

- Establishing security performance standards. These standards will address scope of the security assessment, the elements of the assessment, and the attributes and characteristics of each element.
- Identify issues (policy or technical) where public input is particularly needed.
- Reviewing public input.
- Developing final recommendation for Commission approval.

Subtask 1-4: Security Guidance

The contractor shall support the staff in developing guidance for security assessments. The guidance document will implement the expectations and standards defined in the above tasks, and meet the expectations in the revised Policy Statement. It should also provide criteria for the NRC to use in evaluating decisions for DC and COL applications that are in the regulatory approval process prior to completion of the rulemaking. Applicants and prospective applicants would be requested to identify and describe design features or built-in capabilities that would substantially improve a reactor design's ability to cope with or mitigate potential consequences of loss of large portions of the plant due to explosions or fires. This is consistent with the Commission's Policy Statement on Severe Accidents regarding "The issues of both insider and outsider sabotage threats will be carefully analyzed and, to the extent practicable, will be emphasized as special consideration in the design and in the operating procedures developed for new plants." The contractor shall deliver a security assessment format and content guide that has three sections: 1) high assurance against the design basis threat, 2) mitigation measures and, 3) cyber assurance. The contractor shall also deliver a standard review plan (SRP) for an applicant's submittal of a completed security assessment. Both the format and content guide and the SRP shall be delivered in May of 2007 as final draft documents.

Specifically, the contractor shall support the staff in:

- Developing draft guidance
- Reviewing public input
- Finalizing the draft guidance for issuance
- Developing a draft COL template Safety Evaluation Report (SER) for security
- Developing Regulatory Guide for security ITAAC

Subtask 1-5: Overall Technical Support

As the associated security rulemakings are further developed, the contractor shall attend the technical meetings and participate in technical discussions. As a result of the meetings and discussions, the contractor may be assigned action items that are related to and in support of the above tasks. The contractor shall only work on items authorized in writing by the technical manager.

SUBTASK 2: Regulatory Structure

The framework, using a hierarchical approach, provides the guidance and criteria to be used to develop a risk-informed, performance-based regulatory structure that can be applied to any reactor technology. In developing the framework, safety, security and preparedness are integrated throughout. The TNF, at the highest level, defines the safety, security and preparedness expectations that are to be met in order to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment. A defense-in-depth approach is established to ensure an adequate treatment of uncertainties. Safety fundamentals are defined for which requirements for design, construction and operation are established. Risk criteria are defined so that there is a focus on the risk significant concerns. Since risk and security are integrated throughout, criteria for acceptable risk assessments and security assessments are a fundamental aspect of the framework.

Subtask 2-1: Framework

The contractor has assisted the staff in developing a framework that provides high level decision criteria to be applied on reactor technology-specific basis. As part of this assistance, the contractor has tested the risk criteria (licensing basis event (LBE) identification and selection and safety classification of structures, systems and components (SSCs)) of the framework against a current operating LWR. The insights from this test have been factored into the framework and will be used in applying the framework on a technology-specific basis for a new reactor.

Subtask 2-1a: The contractor shall assist staff in completion of the draft framework in the following areas:

- support stakeholders meetings,
- assist in the resolution of stakeholder comments,
- assist in issuance of Revision 0 of the framework working
- As a result of previous meetings with the Advisory Committee on Reactor Safeguards' (ACRS) full and sub-committee, the NRC staff plans to have additional meetings in May and June 2007 to discuss technical issues. The contractor shall provide the NRC with support during these meetings, and assist the NRC with the resolution of the ACRS' comments.

The staff met with the Advisory Committee on Reactor Safeguards (ACRS) in March and May of 2007 to discuss the Committee's views on several technical issues. Based on the input received from the ACRS and input received from stakeholders (in response to the Advance Notice of Proposed Rulemaking (ANPR)), the framework was revised, where appropriate, to address the comments. Further, in two subsequent letters, the ACRS recommended that the staff continue to work on the framework and that it should not be finalized until the Committee reaches a

position on the issues and discusses them with the staff. In the staff response, the staff noted that (1) the objectives of the framework would be accomplished with its publication and planned to publish in 2007, and (2) any future work on the issues should be addressed as part of any potential future development of regulatory guidance that would be needed to implement an approach akin to the framework. In addition, the ACRS briefed the Commission on June 7, 2007, and noted that they planned to issue a report in July 2007, providing the Committee's views on the technical issues. The staff has agreed to meet again with the ACRS and to address their July report prior to publication of NUREG-1860.

The framework objective of demonstrating the feasibility of a possible risk-informed and performance-based approach that could serve as the technical basis for licensing reactors of diverse designs has been met, and as such, the framework document is complete and is being prepared for publication. ISL shall support the staff in both reviewing the ACRS report and meeting with the ACRS to discuss their views. As a result of the review of the ACRS report and meeting with the Committee, ISL shall support the staff in preparing a technical report that documents and describes in detail the policy and technical issues raised by the ACRS that will require resolution if such an approach (as formulated in NUREG-1860) were to be implemented in the future.

Subtask 2-1b: The contractor shall also assist the staff is applying the lessons learned from the test case to develop technology-specific guidance for the identification and selection of LBEs and SSC safety classification for a new technology-specific reactor. The reactor technology is to be specified by the NRC Technical Manager. The contractor shall not start work on Subtask 2-1b until authorized in writing by the NRC Technical Manager.

Subtask 2-2: Integration of Security

Security (i.e., physical protection) is one of the protective strategies identified in the framework. Protective strategies are the safety, security and preparedness fundamentals identified for nuclear power plant design, construction, and operation and provide the foundation for developing the requirements for new reactor technologies. The physical protection strategy is integrated with the safety strategy to ensure a coherent approach to the safety and security of future reactors. Performance standards are established for security and are an integral part of the framework and the requirements to be developed for the design, construction, and operation of the next generation of reactors. The performance standards developed are based on the level of security expected for future reactors. The work performed under Subtasks 1-2 thru 1.4 is to be used in identifying the performance standards in the framework.

Specifically, the contractor shall assist the staff in incorporating the work developed above (Subtask 1) on defining security expectations, security performance standards and the associated security guidance into the framework.

IV. REPORTING REQUIREMENTS

Refer to Section F.5 "PLACE OF DELIVERYCREPORTS (JUNE 1988)" under the Contract and replace paragraph (a) with the following (applies only for this task):

- "(a) Erulappa Chellia
Division of Risk Analysis and Special Projects
Office of Nuclear Regulatory Research
Mail Stop: T-10-E50
Washington, DC 20555
- Mary Drouin
Division of Risk Analysis and Special Projects
Office of Nuclear Regulatory Research
Mail Stop: T-10-E50
Washington, DC 20555
- Albert Tardiff
Division of Security Policy
Office of Nuclear Security and Incident Response
Mail Stop: T-4-F25A
Washington, DC 20555"

NOTE: The NRC has implemented a new document management system, Agency wide Documents Access and Management System (ADAMS). For the present, contractors' mail will not be placed in ADAMS. All documents mailed to the NRC (e.g., letters, technical reports, monthly letter reports, and other mail) should have "Addressee Only" on the envelope to keep it from being entered into ADAMS. Send mail for the addressee and cc's as separate mailings.

V. DELIVERABLES AND DELIVERY SCHEDULE

At the completion of each subtask, when requested by the NRC Technical Monitor, the contractor shall submit to the NRC a letter report of the contractor's input.

The work shall meet the following schedule:

Subtask 1.4

- | | |
|---|------------------------------|
| o Draft security assessment guidance | May 2007 |
| o Draft technology-specific guidance | TBD |
| o Draft a COL template SER for security | 60 days from award of mod. 3 |
| o Draft a Regulatory Guide for security ITAAC | 90 days from award of mod. 3 |

Subtask 2-1a

- | | |
|---|---------------|
| o Security performance standards into framework | Completed |
| o Framework NUREG | December 2007 |

- o Written review of ACRS Report December 2007

VI. MEETINGS AND TRAVEL REQUIREMENTS

The contractor shall travel to NRC headquarters for the meetings, as needed. Technical meetings will include the following:

- (1) team meetings (average of 2-days per month)
- (2) public meetings (three 1-day meetings)
- (3) ACRS briefings (two half-day Full Committee and two 1-day Subcommittee meetings)

VII. PERIOD OF PERFORMANCE

The period of performance for this task order is from May 24, 2006 through December 31, 2007.

VIII. TECHNICAL DIRECTION

Technical direction will be provided by the following NRC staff:

Erulappa Chellia, 301-415-6186
Mary Drouin, 301-415-6675
Al Tardiff, 301-415-7015

IX. PUBLICATIONS

RES encourages the publication of the scientific results from RES-sponsored programs in refereed scientific and engineering journals as appropriate. If the laboratory proposes to publish in the open literature or present the information at meeting in addition to submitting the required technical reports, approval of the proposed article or presentation should be obtained from the NRC Technical Manager. The RES Technical Manager shall either approve the material as submitted, approve it subject to NRC suggested revisions, or disapprove it. In any event, the RES Technical Manager may disapprove or delay presentation or publication of papers on information that is subject to Commission approval that has not been ruled upon or which has been disapproved. Additional information regarding the publication of NRC sponsored research is contained in NRC Management Directives 3.7, "NUREG-Series Publications," and 3.9, "NRC Staff and Contractor Speeches, Papers, and Journal Articles on Regulatory and Technical Subjects."

If the presentation or paper is in addition to the required technical reports and the RES Technical Manager determines that it will benefit the RES project, the Technical Manager may authorize payment of travel and publishing costs, if any, from the project funds. If the Technical Manager determines that the article or presentation would not benefit the RES project, the costs

associated with the preparation, presentation, or publication will be borne by the contractor. For any publication or presentations falling into this category, the NRC reserves the right to require that such presentation or publication will not identify the NRC's sponsorship of the work.

NEW STANDARDS FOR CONTRACTORS WHO PREPARE NUREG-SERIES MANUSCRIPTS

The NRC will begin to capture its official records electronically on January 1, 2000. The NRC will capture each final NUREG-series publication in its native application. Therefore, commencing January 1, 2000, please submit your final manuscript that has been approved by your NRC Project Officer in both electronic and camera-ready copy.

All format guidance, as specified in NUREG-0650, Revision 2, will remain the same with one exception. You will no longer be required to include the NUREG-series designator on the bottom of each page of the manuscript. The NRC will assign this designator when we send the camera-ready copy to the printer and will place the designator on the cover, title page, and spine. The designator for each report will no longer be assigned when the decision to prepare a publication is made. The NRC's Publishing Services Branch will inform the NRC Project Officer for the publication of the assigned designator when the final manuscript is sent to the printer.

For the electronic manuscript, prepare the text in Microsoft Word, and use any of the following file types for charts, spreadsheets, and the like.

File Types to be Used for NUREG-Series Publications	
File Type	File Extension
Microsoft Word	.doc
Microsoft PowerPoint	.ppt
Microsoft Excel	.xls
Microsoft Access	.mdb
Portable Document Format	.pdf

This list is subject to change if new software packages come into common use at NRC or by our licensees or other stakeholders that participate in the electronic submission process. If a portion of your manuscript is from another source and you cannot obtain an acceptable electronic file type for this portion (e.g., an appendix from an old publication), the NRC can, if necessary, create a tagged image file format (file extension .tif) for that portion of your report. Note that you should continue to submit original photographs, which will be scanned, since digitized photographs do not print well.

If you chose to publish a compact disk (CD) of your publication, place on the CD copies of the manuscript in both (1) a portable document format (PDF); (2) a Microsoft Word file format, and (3) an Adobe Acrobat Reader, or, alternatively, print instructions for obtaining a free copy of Adobe Acrobat Reader on the back cover insert of the jewel box.

X. QUALITY ASSURANCE

Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) directs the Office of Management and Budget (OMB) to issue government-wide guidelines (Federal Register, Volume 67, No. 36, pp. 8452 - 8460) that "provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by federal agencies." NRC Information Quality Guidelines are provided in the Federal Register, Vol. 67, No. 190, pp. 61695 - 61699.

The quality of NRC research programs are assessed each year by the Advisory Committee on Reactor Safeguards. Within the context of their reviews of RES programs, the definition of quality research is based upon several major characteristics:

- Results meet the objectives (75% of overall score)
- Justification of major assumptions (12%)
- Soundness of technical approach and results (52%)
- Uncertainties and sensitivities addressed (11%)

- Documentation of research results and methods is adequate (25% of overall score)
- Clarity of presentation (16%)
- Identification of major assumptions (9%)

It is the responsibility of the contractor to ensure that these quality criteria are adequately addressed throughout the course of the research that is performed. The NRC Project Officer and technical monitor(s) will review all research products with these criteria in mind.

XI. NRC-FURNISHED MATERIAL

Materials to be furnished by the NRC during the performance of the work required by this Task Order include: NUREG-1345, "Nuclear Power Plant Design Concepts for Sabotage Protection."

XII. TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

Assigned individuals must satisfy the requirements of 10 CFR 73.21, 73.56, and 73.57 for authorized access to unclassified-sensitive Safeguards Information (SGI), prior to assignment of any duties or responsibilities associated with this statement of work for Subtask 1. Assigned individuals must be knowledgeable of security concepts and terms and be familiar with writing and editing security related regulatory guidelines for the nuclear power industry. Assigned individuals should be familiar with regulatory processes and requirements and have the ability to

become familiar with the requirements of the proposed rule.

The contractor shall provide personnel that have detailed knowledge and understanding of the NRC risk-informed regulatory structure, as applied to the licensing and regulation of advanced (new) reactors. It is the responsibility of the contractor to assign its technical staff, employees, subcontractors, or specialists who have the required educational background, experience, or combination thereof to meet both the technical objectives of the work specified in this Statement of Work. 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 proposal, including resumes, is accurate and truthful. In addition, the contractor and personnel assigned to this work must be approved for handling and working with proprietary information.