

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 30

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

1. DATE OF ORDER 06/06/2016		2. CONTRACT NO. (If any) NRC-HQ-50-14-E-0001		6. SHIP TO:	
3. ORDER NO. NRC-HQ-20-16-T-0005		4. REQUISITION/REFERENCE NO. NRR-16-0177		a. NAME OF CONSIGNEE BERNARD GRENIER	
5. ISSUING OFFICE (Address correspondence to) US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-5E03 WASHINGTON DC 20555-0001				b. STREET ADDRESS US NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION MAIL STOP OWFN-10C15	
				c. CITY WASHINGTON	e. ZIP CODE 20555
7. TO:				f. SHIP VIA	
a. NAME OF CONTRACTOR S W R I				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 6220 CULEBRA RD				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.	
d. CITY SAN ANTONIO		e. STATE TX	f. ZIP CODE 782385166	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 See Schedule				10. REQUISITIONING OFFICE OFFICE OF NUCLEAR MATERIAL	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					12. F.O.B. POINT
<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. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
a. INSPECTION Destination		b. ACCEPTANCE Destination		16. DISCOUNT TERMS 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)
	The contractor shall provide services in accordance to the Statement of Work (SOW) entitled "Review of the Cooper Nuclear Station, License Amendment Request (LAR) Pertaining to Risk-Informed (RI) Technical Specifications Task Force (TSTF) Initiative Continued ...					

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:						
a. NAME US NUCLEAR REGULATORY COMMISSION		\$0.00				17(i) GRAND TOTAL
b. STREET ADDRESS (or P.O. Box) ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE MAILSTOP 03-E17A						
c. CITY ROCKVILLE		d. STATE MD	e. ZIP CODE 20852-2738		\$28,892.00	

22. UNITED STATES OF AMERICA BY (Signature) 		23. NAME (Typed) SHARLENE M. MCCUBBIN TITLE: CONTRACTING/ORDERING OFFICER	
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OPTIONAL FORM 347 (Rev. 2/2012)
Prescribed by GSA/FAR 48 CFR 53.213(f)

SUNSI REVIEW COMPLETE

TEMPLATE - ADMIN

JUN 14 2016

AGM002

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO

2

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

DATE OF ORDER

CONTRACT NO.

06/06/2016

NRC-HQ-50-14-E-0001

ORDER NO.

NRC-HQ-20-16-T-0005

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	5b, "Risk-Informed Method for Control of Surveillance Frequencies," TSTF-425." Total Ceiling Amount: \$28,892.00 Total Obligated Amount: \$28,892.00 Accounting Info: 2016-X0200-FEEBASED-20-20D007-11-4-149-1030- 253A Period of Performance: 06/06/2016 to 02/28/2017					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

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OPTIONAL FORM 348 (Rev. 4/2006)

Prescribed by GSA FAR (48 CFR) 53.213(f)

NRC-HQ-50-14-E-0001
NRC-HQ-20-16-T-0005

CONTRACTOR ACCEPTANCE OF TASK ORDER NRC-HQ-20-16-T-0005

Acceptance of Task Order No. NRC-HQ-20-16-T-0005 under contract no. NRC-HQ-50-14-E-0001 should be made by having an official, authorized to bind your organization, execute two copies of this document in the space provided and return one copy to the Contracting Officer. You should retain the other copy for your records.

Accepted Task Order No. NRC-HQ-20-16-T-0005:



Name R. B. Kaimbach

Executive Director, Contracts

Title

June 3, 2016

Date

SECTION B - Supplies or Services/Prices**NRCB010 BRIEF PROJECT TITLE AND WORK DESCRIPTION**

- (a) Title: *Review of the Cooper Nuclear Station, License Amendment Request (LAR) Pertaining to Risk-Informed (RI) Technical Specifications Task Force (TSTF) Initiative 5b, "Risk-Informed Method for Control of Surveillance Frequencies," TSTF-425*
- (b) Summary work description: The objective of this task order is to obtain technical expertise to assist the staff in determining the acceptability of the Cooper Nuclear Station RI-TSTF Initiative 5b/TSTF-425 License Amendment Request.

PRICE/COST SCHEDULE

GLIN NO.	DESCRIPTION OF SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL CPFF
00001	Review of the Cooper Nuclear Station RI-TSF Initiative 5b/TSTF-425 License Amendment Request			
Total				\$28,892.00

NRCB040A CONSIDERATION AND OBLIGATION—COST-PLUS-FIXED-FEE ALTERNATE I

(a) The total estimated cost to the Government for full performance of this contract is \$28,892.00 of which the sum of [REDACTED] represents the estimated reimbursable costs, and of which [REDACTED] represents the fixed-fee.

(b) There shall be no adjustment in the amount of the Contractor's fixed fee.

(c) The amount currently obligated by the Government with respect to this contract is \$28,892.00, of which the sum of \$[REDACTED] represents the estimated reimbursable costs, and of which [REDACTED] represents the fixed-fee.

(d) In accordance with FAR 52.216-8 - Fixed Fee, it is the policy of the NRC to withhold payment of fee after payment of 85 percent of the fee has been paid in order to protect the Government's interest. The amount of fixed-fee withheld from the contractor will not exceed [REDACTED] percent of the total fee or [REDACTED] whichever is less. Accordingly, the maximum amount of fixed-fee that may be held in reserve is [REDACTED]

**SECTION C - Description/Specifications
Statement of Work**

Project Title: Review of the Cooper Nuclear Station, License Amendment Request (LAR) Pertaining to Risk-Informed (RI) Technical Specifications Task Force (TSTF) Initiative 5b, "Risk-Informed Method for Control of Surveillance Frequencies," TSTF-425

Cost Center: 1030

Cost Activity Code (CAC) Number: MF7498 Fee Billable

Technical Reviewer: Adrienne.Driver@nrc.gov, 301/415-3764
Ray.Gallucci@nrc.gov, 301/415-1255

1. BACKGROUND

In 1992, the NRC issued the improved Standard Technical Specifications (STS) to clarify the content and form of requirements necessary to ensure safe operation of nuclear power plants in accordance with Section 50.36 of Title 10 of the Code of Federal Regulations (10 CFR 50.36). As the STS mature, necessary improvements are identified. One process used to initiate changes to the STS involves the industry-sponsored Technical Specifications Task Force (TSTF) submitting a proposed change or Traveler to the NRC for review, approval, and subsequent incorporation into the next revision of the STS. The NRC reviews the proposed change, with the end product being a model application, a model safety evaluation, and a review plan which licensees may use in subsequent LARs. Licensees applying to incorporate these proposed changes into their Technical Specifications must provide a plant-specific justification acceptable to the staff in their LAR.

In 2007, the NRC issued the final safety evaluation (SE) for the Nuclear Energy Institute (NEI) Topical Report (TR) 04-10, Revision 1, "Risk-Informed Technical Specification Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies." This STS change provides a risk-informed methodology to identify, assess, implement, and monitor proposed changes to frequencies of surveillance requirements (SRs) of technical specifications (TSs). The initiative is intended to maintain and improve safety through incorporation of risk assessment and management techniques in the TSs, while reducing unnecessary burden.

The Office of Nuclear Reactor Regulation (NRR) is currently reviewing several risk-informed LARs and expects additional risk-informed LARs in fiscal years 2015 and 2016. The Cooper Nuclear Station has submitted a RI-TSTF Initiative 5b LAR. The PRA Licensing Branch (APLA) is responsible for reviewing the Probabilistic Risk Assessment (PRA) portion of the LAR to make an independent assessment regarding PRA technical adequacy and the acceptability of the proposed amendment. Due to heavy workload in APLA, contractor assistance is required to support APLA so as to complete the technical review and develop input to the safety evaluation report (SER) for these LARs in a timely manner.

2. OBJECTIVE

The objective of this task order is to obtain technical assistance from the Southwest Research Institute's (SwRI) Center for Nuclear Waste Regulatory Analyses (CNWRA) to assist the staff in determining the acceptability of the Cooper Nuclear Station LAR.

3. SCOPE OF WORK

The scope of the work includes review of the Cooper Nuclear Station, RI-TSTF Initiative 5b/TSTF-425 LAR for PRA quality and technical adequacy and preparation of the technical evaluation report (TER).

4. SPECIFIC TASKS (WORK REQUIREMENTS AND SCHEDULE)

<u>Tasks</u>	<u>Scheduled Completion</u>
1. Evaluate the technical adequacy of all applicable PRA models ¹ . Identify the method by which the licensee is addressing other hazard groups. Confirm that the method 1) requires a peer-reviewed PRA model or that qualitative or bounding analyses will be considered, 2) considers the current as-built, as-operated plant and 3) is consistent with the NRC approved revision of TSTF-425, referenced in the LAR. Identify the need for additional Information or clarification (RAIs). Prepare a Technical Evaluation Report (TER); see section 5 below.	Four weeks after authorization of work.
2. Review the RAI response(s) and supplement(s) to the LAR, as applicable, and determine if the response adequately addresses the RAI. If the response(s) is not acceptable, discuss the RAI response(s) with the COR/Technical Reviewer who may determine that a conference call is needed to discuss the RAI response(s) with the licensee in which case the PI will be notified and expected to participate in the conference call. If the clarification call does not adequately address the RAI, prepare a technical letter report of recommended follow-up RAI(s). If the RAI responses adequately address all of the open items, update the TER.	Two weeks from COR notification.
3. Upon notification by the COR and/or receipt of final comments from the COR, update the TER utilizing the template and guidance supplied by the NRC.	Two weeks after notification by the COR.

APPLICABLE DOCUMENTS AND STANDARDS

- Technical Specifications Task Force, letter and enclosure to U.S. Nuclear Regulatory Commission, Transmittal of TSTF-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b," dated March 18, 2009 (Agency-Wide Documents Access and Management System (ADAMS) Accession No. ML090850642).
- Nuclear Energy Institute, NEI 04-10, Revision 1, "Risk-Informed Technical Specifications Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies," April 2007 (ADAMS Accession No. ML071360456).

¹ See Item 3 under "Assumptions and Understanding" in Section 12, "Other Considerations."/"Assumptions and Understandings."

- Letter from H. Nieh (NRC) to A. Pietrangelo (NEI), "Final Safety Evaluation for Nuclear Energy Institute (NEI) Industry Guidance Document NEI 04-10, Revision 0, 'Risk-Informed Technical Specifications Initiative 5B, Risk-Informed Method for Control of Surveillance Frequencies'," dated September 28, 2006 (ADAMS Accession No. ML062700012).
- Letter from H. Nieh, (NRC), to B. Bradley (NEI), "Final Safety Evaluation for Nuclear Energy Institute (NEI) Topical Report (TR) 04-10, Revision 1, 'Risk-Informed Technical Specifications Initiative 5B, Risk-Informed Method for Control of Surveillance Frequencies'," dated September 19, 2007 (ADAMS Accession No. ML072570267).
- U.S. Nuclear Regulatory Commission, Regulatory Guide 1.174, Revision 2, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," May 2011 (ADAMS Accession No. ML100910006).
- U.S. Nuclear Regulatory Commission, Regulatory Guide 1.177, Revision 1, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," May 2011 (ADAMS Accession No. ML100910008).
- U.S. Nuclear Regulatory Commission, Regulatory Guide 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," March 2009 (ADAMS Accession No. ML090410014 and ML090410018).
- U.S. Nuclear Regulatory Commission, NUREG-0800, Standard Review Plan, Section 16.1, Revision 1, "Risk-Informed Decision Making: Technical Specifications," March 2007 (ADAMS Accession No. ML070380228).
- U.S. Nuclear Regulatory Commission, NUREG-0800, Standard Review Plan, Section 19.1, Revision 3, "Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," September 2012 (ADAMS Accession No. ML12193A107).

5. DELIVERABLES AND DELIVERY SCHEDULE

Technical Reporting Requirements

SEE ATTACHMENTS BELOW FOR GUIDANCE ON THE DEVELOPMENT OF RAIs AND FOR GUIDANCE FOR WRITING THE TER

1. At the completion of Task 1, submit a technical evaluation report (TER) in accordance with the format, outline, and content provided by the NRC COR. The report must also contain a record of review which discusses the PRA technical adequacy for the resolution of each F&O and for the PRA model, as a whole. Include the methods used to address external events and shutdown events and whether the method considers the current as-built, as-operated plant, and any deviations from the approved revision of TSTF-425 referenced by the licensee in the LAR. Include the need for additional or clarification information (RAIs).

2. At the completion of Task 2 and/or Task 3, if Task 3 is applicable, submit either a technical letter report (TLR) or a TER depending on whether or not there are any follow-up RAIs. If there are follow-up RAIs, submit the recommended RAIs along with the bases for the RAIs; also submit the updated TER with a "place-holder" for where the RAI information is required. If there are no follow-up RAIs, submit the TER to include the bases for acceptance of all RAI responses following the guidance provided in the attachment.

Technical Progress and Financial Status Report

Reports will be prepared in accordance with the base EWC contract.

NOTE: If no work is done during the current reporting period, a PMPR is not required until work has resumed.

The reports must contain a License Fee Recovery Reporting Section which lists the CAC number(s) for each plant and the associated costs against those CAC numbers for the reporting period.

Address the report to the COR with copies to the alternate COR, if any, the Chief of APLA, DRA and to the technical reviewer(s).

6. REQUIRED LABOR CATEGORIES (Except for Information Technology Services)

One Senior Risk Analyst to act as the Principal Investigator who is knowledgeable in U.S. nuclear power plant systems and operations, and who possesses in-depth knowledge and experience in nuclear power plant probabilistic risk assessment.

One staff-level Nuclear Engineer or Risk Analyst who possesses in-depth knowledge of U.S. nuclear power plant systems and operations.

Note: More than two staff personnel may be assigned to cover the technical qualification areas, but assignments must be within the allotted level of effort.

7. GOVERNMENT-FURNISHED PROPERTY/MATERIALS

The ADAMS Accession No. for the Cooper Nuclear Station TSTF-425 LAR is ML16110A425.

NOTE: Some of these documents contain proprietary information and must be safeguarded against unauthorized disclosure. After completion of work, the documents shall either be destroyed or returned to NRC. If they are destroyed, please confirm this in an E-mail to the COR and include the date and manner in which the documents were destroyed.

The NRC COR will provide those NRC documents related to licensing activities (for example, any Non-Publicly available SERs, audit reports, and related documents) that are readily available. The NRC COR will provide access to training material pertinent to the

LAR reviews or other NRC documents and docketed correspondence on related issues. The CNWRA staff shall identify any additional NRC documentation that is needed and the COR will determine whether these will be provided by the NRC or obtained directly by the CNWRA from ADAMS, NRC public document room or the NRC website at www.nrc.gov.

8. PLACE OF PERFORMANCE

This work will be performed at the contractor's site.

9. SPECIAL CONSIDERATIONS

Assumptions and Understanding

1. It is understood that the level of effort for each Task contains sufficient effort to conduct telephone conference calls with the NRC staff. Such phone calls, for example, might be arranged by the NRC COR with the Licensing Project Manager and other NRC staff to discuss the RAIs and to reach an understanding with the licensee. Comments may be provided to the contractor such that the RAIs may have to be resubmitted by the contractor; if that is the case, a mutually acceptable date for the deliverable will be agreed upon.
2. If the licensee is proposing to use detailed quantitative analysis or modeling (i.e., NEI 04-10, Revision 1, Step 11) to evaluate the impact of external events or fire risk on the surveillance test interval extension, it is understood that the associated external events PRA F&Os are within scope of the NRC review. The impact of the External Event PRA F&Os on the application will be considered on whether to pursue further information. If the licensee is proposing to use qualitative or bounding analyses (i.e., NEI 04-10, Revision 1, Step 10), then it is understood that external events PRA F&Os do not need to be reviewed for a typical TSTF-425 application.
3. It is anticipated that there will be one round of RAIs for a typical TSTF-425 review; however, Task 2 is structured to allow for two or more rounds. If there is only one round of RAIs and the responses are acceptable, then it is understood that Task 3 will not be required.
4. It is understood that the Cooper LAR does not contain a seismic PRA.
5. It is understood that the COR monitors all technical aspects of the contract/task order and assists in its administration. The COR is authorized to perform the following functions: assure that CNWRA performs the technical requirements of the contract/task order; perform inspections necessary in connection with contract/task order performance; maintain written and oral communications with the CNWRA concerning technical aspects of the contract/task order; issue written interpretations of technical requirements; monitor the CNWRA's performance and notify the CO of any deficiencies; coordinate availability of NRC-furnished material.

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10. TRAVEL

None.

11. SECURITY

This work will be UNCLASSIFIED; it will only contain proprietary information.

Guidance for Preparing Requests for Additional Information (RAIs)

Additional information necessary to resolve open or unresolved items identified during the review of the information associated with the LAR needs to be requested in a manner that is unambiguous, has an adequate basis, and is necessary for the safety review. RAIs shall be developed using the following guidance:

1. An RAI shall include the appropriate basis for requesting the information. The basis shall explain why the information is needed, including how it will be used to help make a reasonable assurance finding.
2. Judgmental language shall be avoided.
 - a. Questions shall not make adequacy determinations.
 - b. Words like "unacceptable" or "deficient" and "deviation" shall be avoided. Likewise, avoid using phrases like "*the staff will require*" since it is premature to require anything when asking questions.
3. Questions shall be focused, not open-ended.
 - a. The RAI shall be in the form of a question or an imperative to provide what is needed to complete the review. When the reviewer needs specific information or the underlying issue may not be apparent, the RAI shall clearly identify the information requested and/or the underlying issue.
 - b. "If ... then" questions (questions that could lead to follow-on questions) shall provide both parts of the question.

After the RAIs have been forwarded to the applicable NRC Project Manager, teleconferences and/or public meetings may be held before issuing the RAIs:

- a. These discussions prevent misunderstandings of the intent of the questions.
- b. If a draft RAI is clarified or resolved before issuance, the NRC staff will prepare a documented record of the resolution (i.e., minutes of a public meeting or a teleconference summary).

After the RAIs have been issued, the applicant may request a telephone conference and/or a public meeting:

- a. The teleconferences and/or meetings provide additional clarification of the intent of the RAIs and will help the licensee prepare satisfactory responses.
- b. To ensure that the response appropriately addresses the RAI, the licensee may submit a draft response (which the NRC docket in the ADAMS) and may request a follow-up teleconference and/or meeting.

Guidance for Preparing Requests for Additional Information (RAIs) (Continued)

After receiving RAI response from the licensee, the NRC may hold a teleconference and/or a public meeting:

- a. The purpose of discussing a response with the licensee is to better understand the response and/or clarify areas of disagreement. If the resolution of a response relies on information not submitted to the NRC, the licensee should submit the information on the docket. The submission is not intended to be another RAI or a means to minimize the number of SER open items, but frequently reduces the number of SER open items.
- b. If the areas of disagreement remain, the unresolved RAI becomes an SER open item.

NOTE THE REQUIREMENT FOR ANY FOLLOW-UP RAIs:

For follow-up RAIs, reference the original RAI, the date of the letter in which the licensee responded to the RAI, and the ADAMS Accession Number of the letter.

"In a letter dated _____ (ADAMS Accession No. MLXXXXXXXX), the licensee responded to _____ RAI _____ and stated _____."

References

Guidance for Writing the Technical Evaluation Report (TER)

TERs are to be developed with placeholders for all RAIs based on the example provided below. Simply putting in "RAI X" is not sufficient. A sample relating to the review of a NFPA 805 LAR is as follows:

NFPA 805, Section 3.4.1(c) requires that the brigade leader and at least two brigade members have sufficient training in or knowledge of nuclear safety systems to understand the effects of fire and fire suppressants on NSPC. In FPE RAI X, the NRC staff requested that the licensee (insert text from RAI here). In its response to FPE RAI X, the licensee stated _____. The NRC staff concludes the licensee's response to the RAI is acceptable because the licensee demonstrated/showed/used, etc. that

For Technical Specifications Task Force Initiatives 4b, 5b, and other risk-informed technical specifications LARs, the TER must refer to RG 1.200 and ASME/ANS RA-Sa-2009.

When writing the TER involving PRA, there is to be a summary paragraph for each fact and observation (F&O) deemed to be significant by the NRC Technical Reviewer based on ASME/ANS RA-Sa-2009 PRA Standard. Normally, conclusions are: "the NRC staff finds this to be acceptable for this program because" followed by a discussion of why it is acceptable in relation to the question that was asked. The F&O identification number and corresponding Supporting Requirement (SR) from the PRA Standard (ASME/ANS RA-Sa-2009), the licensee's disposition, any RAIs, RAI responses and staff conclusions must be summarized in a paragraph or two. An example would be:

The peer review team created F&O [...], which corresponds to SR [...], because the licensee did not do [whatever the licensee is deficient on]. The licensee dispositioned the F&O by stating [summarize what the licensee said in the submittal]. The NRC staff, in letter dated XX, requested that the licensee [write out the sentence from the RAI where we say “explain, provide, etc.”]. The licensee replied in letter dated XX that it [explain what the licensee said in a sentence or two]. The NRC staff finds this acceptable because:

- a. *the licensee can demonstrate that the disposition of the F&O itself has no impact to the program; or,*
- b. *the disposition has been incorporated into the PRA and supports a conclusion that the technical adequacy of the SR is sufficient to support the proposed program; or,*
- c. *the disposition is included as an Implementation Item that will be included in the PRA prior to self-approval.*

Use "resolution" "resolve" etc. Only use "disposition" for PRA F&Os.

The same can be done with an RAI if it includes more than one F&O. Summarize the RAI (normally include the last sentence or the request), the response (summarize what the licensee said to answer said request), and staff conclusion (why their response is acceptable). Always include a "because." The staff concludes this because of _____ and it is acceptable for use in the TSTF-425 program.

Guidance for Writing the Technical Evaluation Report (TER) (Continued)

Every RAI needs to have a regulatory basis to a regulation; or, in the case of PRA, reference to F&O disposition or the licensee's application to Guidance Document, e.g., PRA Standard (ASME/ANS RA-Sa-2009).

Every RAI needs to be closed out through an acceptability statement. Acceptability is usually because the licensee did something.

The NRC does not "note" anything. Use a different term such as "described" "found" etc.

All modifications and implementation items must include an acceptability statement, i.e., "This action is included in LAR Attachment S, Table S-2, Implementation Item 10, and the NRC staff concludes this is acceptable because the action will incorporate the provisions of NFPA 805 in the FPP and would be required by the proposed license condition."

Be clear about who is stating what, normally either the "NRC staff" or the "licensee".

Do not paraphrase the LAR or licensee submittals. State it exactly as it was written and include "the licensee stated...."

Do not copy from the LAR or a licensee submittal without attributing the text to the licensee. "The licensee stated...."

The NRC staff does not "verify" anything. Use the term "confirm".

Use acronyms for common terms. There is no need to spell out everything. The NRC will resolve any issues regarding acronyms during the SE development phase.

Regulations require something. Guidance documents such as regulatory guides, NUREGs, FACs, etc. only recommend something; they are not requirements.

Buildings, rooms, systems, are not capitalized.

Avoid using the terms "was" and "were" for licensee actions. Instead of: the licensee stated that the existing fire pump installations and control circuits were evaluated....: say: the licensee indicated that it evaluated the existing fire pump installation sand control circuit. **Use active voice where possible.**

Avoid over use of the plant name. There is no reason to excessively repeat the plant name since the TER is only for one plant. Use the term "licensee" or "it" to refer to the licensee.

Use two spaces after a period that ends a sentence.

Use semi-colons in bulleted lists. In the next to last item include the word "and" after the semicolon. End the last item with a period.

Do say "see SE Sections 3.1.1.5 and 3.1.4.11...." Do not say "see Sections 3.1.1.5 and 3.1.4.11 of this Safety Evaluation..."

SECTION D - Packaging and Marking

NRCD020 BRANDING

The Contractor is required to use the statement below in any publications, presentations, articles, products, or materials funded under this contract/order, to the extent practical, in order to provide NRC with recognition for its involvement in and contribution to the project. If the work performed is funded entirely with NRC funds, then the contractor must acknowledge that information in its documentation/presentation.

Work Supported by the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Reactor Regulation, under Contract/order number NRC-HQ-50-14-E-0001/ NRC-HQ-20-16-T-0005.

(End of Clause)

NRCD010 PACKAGING AND MARKING

(a) The Contractor shall package material for shipment to the NRC in such a manner that will ensure acceptance by common carrier and safe delivery at destination. Containers and closures shall comply with the Surface Transportation Board, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.

(b) On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

(c) Additional packaging and/or marking requirements are as follows: None.

(End of Clause)

SECTION E - Inspection and Acceptance

CONTRACTING OFFICER'S REPRESENTATIVE (COR) AUTHORITY

(a) The contracting officer's authorized representative hereinafter referred to as the COR for this contract is:

Contracting Officer's Representative

Name: Bernard Grenier
Mail Stop: OWFN-10C15
Phone: 301-415-2726
E-mail: Bernard.Grenier@nrc.gov

(b) Performance of the work under this contract is subject to the technical direction of the NRC project officer. The term technical direction is defined to include the following:

(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work or changes to specific travel identified in the Statement of Work), fills in details, or otherwise serves to accomplish the contractual statement of work.

(2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.

(3) Review and, where required by the contract, approve technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

(c) Technical direction must be within the general statement of work stated in the contract. The project officer does not have the authority to and may not issue any technical direction which:

(1) Constitutes an assignment of work outside the general scope of the contract.

(2) Constitutes a change as defined in the "Changes" clause of this contract.

(3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions, or specifications of the contract.

(5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

(d) All technical directions must be issued in writing by the project officer or must be confirmed by the project officer in writing within ten (10) working days after verbal issuance. A copy of the written direction must be furnished to the contracting officer. A copy of NRC Form 445, Request for Approval of Official Foreign Travel, which has received final approval from the NRC must be furnished to the contracting officer.

(e) The contractor shall proceed promptly with the performance of technical directions duly

issued by the project officer in the manner prescribed by this clause and within the project officer's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the project officer is within one of the categories defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working days after the receipt of any instruction or direction and shall request that contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

(g) Any unauthorized commitment or direction issued by the project officer may result in an unnecessary delay in the contractor's performance and may even result in the contractor expending funds for unallowable costs under the contract.

(h) A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect to the instruction or direction is subject to 52.233-1 - Disputes.

(i) In addition to providing technical direction as defined in paragraph (b) of the section, the project officer shall:

- (1) Monitor the contractor's technical progress, including surveillance and assessment of performance, and recommend to the contracting officer changes in requirements.
- (2) Assist the contractor in the resolution of technical problems encountered during performance.
- (3) Review all costs requested for reimbursement by the contractor and submit to the contracting officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

(End of Clause)

SECTION F - Deliveries or Performance

NRCF032 TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (SEP 2013)

This order shall commence on date of award and will expire on February 28, 2017.

(End of Clause)

NRCF010 PLACE OF DELIVERY-REPORTS

The items to be furnished hereunder shall be delivered, with all charges paid by the Contractor, to:

- a. Contracting Officer's Representative (COR) (1 Electronic Copy)
Address: Refer to Section E, subsection CONTRACTING OFFICER'S REPRESENTATIVE (COR) AUTHORITY
- b. Name: Contract Specialist (CS), (1 Electronic Copy)

(End of Clause)

SECTION G - Contract Administration Data

NRCG030 ELECTRONIC PAYMENT (SEP 2014)

The Debt Collection Improvement Act of 1996 requires that all payments except IRS tax refunds be made by Electronic Funds Transfer. Payment shall be made in accordance with FAR 52.232-33, entitled "Payment by Electronic Funds-Central Contractor Registration".

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted on the payee's letterhead, invoice, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal – Continuation Sheet." The preferred method of submitting invoices is electronically to: NRCPayments@nrc.gov.

(End of Clause)

SECTION H - Special Contract Requirements

2052.215-70 KEY PERSONNEL (JAN 1993)

(a) The following individuals are considered to be essential to the successful performance of the work hereunder:

<u>Name</u>	<u>Title</u>
Nathan Hall	Principal Investigator, Senior Research Engineer
John Bickel	Risk Analyst
John Crosby	Reactor Engineer

The contractor agrees that personnel may not be removed from the contract work or replaced without compliance with paragraphs (b) and (c) of this section.

(b) If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding 30 work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, the contractor shall immediately notify the contracting officer and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

(c) Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the contracting officer to evaluate the proposed substitution. The contracting officer and the project officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

(d) If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

(End of Clause)

NRCH480 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS

The Debt Collection Improvement Act of 1996 requires that all Federal payments except IRS tax refunds be made by Electronic Funds Transfer. It is the policy of the Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system. Item 15C of the Standard Form 33 may be disregarded.

(End of Clause)

NRCH470 GREEN PURCHASING (SEP 2013)

(a) In furtherance of the sustainable acquisition goals included in Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," products and services acquired under this contract/order shall be energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, recycled content, and non-toxic or less toxic alternatives, to the maximum extent practicable in meeting NRC contractual requirements.

(b) See NRC's Green Purchasing Plan (GPP) at:
<http://pbadupws.nrc.gov/docs/ML1219/ML12191A130.pdf> and the General Service

Administration's (GSA) Green Procurement Compilation at:
<http://www.gsa.gov/portal/content/198257>.

(c) The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order.

(End of Clause)

NRCH410 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES

(a) The U.S. Nuclear Regulatory Commission (NRC) contractor and its subcontractor are subject to the Whistleblower Employee Protection public law provisions as codified at 42 U.S.C. 5851. NRC contractor(s) and subcontractor(s) shall comply with the requirements of this Whistleblower Employee Protection law, and the implementing regulations of the NRC and the Department of Labor (DOL). See, for example, DOL Procedures on Handling Complaints at 29 C.F.R. Part 24 concerning the employer obligations, prohibited acts, DOL procedures and the requirement for prominent posting of notice of Employee Rights at Appendix A to Part 24 entitled: "Your Rights Under the Energy Reorganization Act".

(b) Under this Whistleblower Employee Protection law, as implemented by regulations, NRC contractor and subcontractor employees are protected from discharge, reprisal, threats, intimidation, coercion, blacklisting or other employment discrimination practices with respect to compensation, terms, conditions or privileges of their employment because the contractor or subcontractor employee(s) has provided notice to the employer, refused to engage in unlawful practices, assisted in proceedings or testified on activities concerning alleged violations of the Atomic Energy Act of 1954 (as amended) and the Energy Reorganization Act of 1974 (as amended).

(c) The contractor shall insert this or the substance of this clause in any subcontracts involving work performed under this contract.

(End of Clause)

**NRCH400 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORT(S)
OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND
GRANTS**

Review and Approval of Reports

(a) Reporting Requirements. The contractor/grantee shall comply with the terms and conditions of the contract/grant regarding the contents of the draft and final report, summaries, data, and related documents, to include correcting, deleting, editing, revising, modifying, formatting, and supplementing any of the information contained therein, at no additional cost to the NRC. Performance under the contract/grant will not be deemed accepted or completed until it complies with the NRC's directions. The reports, summaries, data, and related documents will be considered draft until approved by the NRC. The contractor/grantee agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data, and related documents created under this contract/grant remain solely within the discretion of the NRC.

(b) Publication of Results. Prior to any dissemination, display, publication, or release of articles, reports, summaries, data, or related documents developed under the contract/grant, the contractor/grantee shall submit them to the NRC for review and approval. The contractor/grantee shall not release, disseminate, display or publish articles, reports, summaries, data, and related documents, or the contents therein, that have not been reviewed and approved by the NRC for release, display, dissemination or publication. The contractor/grantee agrees to conspicuously place any disclaimers, markings or notices, directed by the NRC, on any articles, reports, summaries, data, and related documents that the contractor/grantee intends to release, display, disseminate or publish to other persons, the public, or any other entities. The contractor/grantee agrees, and grants, a royalty-free, nonexclusive, irrevocable worldwide license to the government, to use, reproduce, modify, distribute, prepare derivative works, release, display or disclose the articles, reports, summaries, data, and related documents developed under the contract/grant, for any governmental purpose and to have or authorize others to do so.

(c) Identification/Marking of Sensitive Unclassified Non-Safeguards Information (SUNSI) and Safeguards Information (SGI). The decision, determination, or direction by the NRC that information possessed, formulated or produced by the contractor/grantee constitutes SUNSI or SGI is solely within the authority and discretion of the NRC. In performing the contract/grant, the contractor/grantee shall clearly mark SUNSI and SGI, to include for example, OUC-Allegation Information or OUC-Security Related Information on any reports, documents, designs, data, materials, and written information, as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet (e.g., NRC Form 461 Safeguards Information) in maintaining these records and documents. The contractor/grantee shall ensure that SUNSI and SGI is handled, maintained and protected from unauthorized disclosure, consistent with NRC policies and directions. The contractor/grantee shall comply with the requirements to mark, maintain, and protect all information, including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954 as amended, its implementing regulations (10 CFR 73.21), Sensitive Unclassified Non-Safeguards and Safeguards Information policies, and NRC Management Directives and Handbooks 12.5, 12.6 and 12.7.

(d) Remedies. In addition to any civil, criminal, and contractual remedies available under the applicable laws and regulations, failure to comply with the above provisions, and/or NRC

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directions, may result in suspension, withholding, or offsetting of any payments invoiced or claimed by the contractor/grantee.

(e) Flowdown. If the contractor/grantee intends to enter into any subcontracts or other agreements to perform this contract/grant, the contractor/grantee shall include all of the above provisions in any subcontracts or agreements.

(End of Clause)

SECTION J - List of Documents, Exhibits and Other Attachments

**BILLING INSTRUCTIONS FOR
COST-REIMBURSEMENT TYPE CONTRACTS (JUL 2015)**

General: During performance and through final payment of this contract, the contractor is responsible for the accuracy and completeness of data within the System for Award Management (SAM) database and for any liability resulting from the Government's reliance on inaccurate or incomplete SAM data.

The contractor shall prepare invoices/vouchers for reimbursement of costs in the manner and format described herein. FAILURE TO SUBMIT INVOICES/VOUCHERS IN ACCORDANCE WITH THESE INSTRUCTIONS MAY RESULT IN REJECTION OF THE INVOICE/VOUCHER AS IMPROPER.

Standard Forms: Reimbursement requests shall be submitted on the payee's letterhead, invoice/voucher, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal--Continuation Sheet."

Electronic Invoice/Voucher Submissions: The preferred method of submitting invoices/vouchers is electronically to the U.S. Nuclear Regulatory Commission, via email to: NRCPayments@nrc.gov.

Hard-Copy Invoice/Voucher Submissions: If you submit a hard-copy of the invoice/voucher, a signed original and supporting documentation shall be submitted to the following address:

NRC Payments
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mailstop O3-E17A
Rockville, MD 20852-2738

Purchase of Capital Property: *(\$50,000 or more with life of one year or longer)*

Contractors must report to the Contracting Officer, electronically, any capital property acquired with contract funds having an initial cost of \$50,000 or more, in accordance with procedures set forth in NRC Management Directive (MD).

Agency Payment Office: Payment will continue to be made by the office designated in the contract in Block 12 of the Standard Form 26, or Block 25 of the Standard Form 33, whichever is applicable.

Frequency: The contractor shall submit requests for reimbursement once each month, unless otherwise authorized by the Contracting Officer.

Format: Invoices/Vouchers shall be submitted in the format depicted on the attached sample form entitled "Invoice/Voucher for Purchases and Services Other Than Personal". Alternate formats are permissible only if they address all requirements of the Billing Instructions. The

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instructions for preparation and itemization of the invoice/voucher are included with the sample form.

Task Order Contracts: The contractor must submit a separate invoice/voucher for each individual task order with detailed cost information. This includes all applicable cost elements and other items discussed in paragraphs (a) through (s) of the attached instructions. In addition, the invoice/voucher must specify the contract number, and the NRC-assigned task/delivery order number.

Billing of Costs after Expiration of Contract: If costs are incurred during the contract period and invoiced after the contract has expired, you must cite the period during which these costs were incurred. To be considered a proper expiration invoice/voucher, the contractor shall clearly mark it "EXPIRATION INVOICE" or "EXPIRATION VOUCHER".

Final invoices/vouchers shall be marked "FINAL INVOICE" or "FINAL VOUCHER".

Currency: Invoices/Vouchers must be expressed in U.S. Dollars.

Supersession: These instructions supersede previous Billing Instructions for Cost-Reimbursement Type Contracts.

**INVOICE/VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL
(SAMPLE FORMAT - COVER SHEET)**

1. Official Agency Billing Office

NRC Payments
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mailstop O3-E17A
Rockville, MD 20852-2738

2. Invoice/Voucher Information

- a. Payee's DUNS Number or DUNS+4. The Payee shall include the Payee's Data Universal Number (DUNS) or DUNS+4 number that identifies the Payee's name and address. The DUNS+4 number is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the Payee to identify alternative Electronic Funds Transfer (EFT) accounts for the same parent concern.
- b. Taxpayer Identification Number. The Payee shall include the Payee's taxpayer identification number (TIN) used by the Internal Revenue Service (IRS) in the administration of tax laws. (See IRS Web site: [http://www.irs.gov/Individuals/International-Taxpayers/Taxpayer-Identification-Numbers-\(TIN\)\)](http://www.irs.gov/Individuals/International-Taxpayers/Taxpayer-Identification-Numbers-(TIN))).
- c. Payee's Name and Address. Show the name of the Payee as it appears in the contract and its correct address. Where the Payee is authorized to assign the proceeds of this contract in accordance with the clause at Federal Acquisition Regulation (FAR) 52.232-23 Assignment of Claims, the Payee shall require as a condition of any such assignment, that the assignee shall register separately in the System for Award Management (SAM) database at <http://sam.gov> and shall be paid by EFT in accordance with the terms of this contract. See FAR 52.232-33 Payment by Electronic Funds Transfer-System for Award Management.
- d. Contract Number. Insert the NRC contract number (including Enterprise-wide Contract (EWC)), GSA Federal Supply Schedule (FSS), Governmentwide Agency Contract (GWAC) number, or Multiple Agency Contract (MAC) number, as applicable.
- e. Task Order Number. Insert the task/delivery order number (If Applicable). **Do not include more than one task order per invoice or the invoice may be rejected as improper.**
- f. Invoice/Voucher. The appropriate sequential number of the invoice/voucher, beginning with 001 should be designated. Contractors may also include an individual internal accounting number, if desired, in addition to the 3-digit sequential number.
- g. Date of Invoice/Voucher. Insert the date the invoice/voucher is prepared.
- h. Billing Period. Insert the beginning and ending dates (day, month, year) of the period during which costs were incurred and for which reimbursement is requested.
- i. Description of Deliverables. Provide a brief description of supplies or services, quantity, unit

cost, and total cost.

j. Work Completed. Provide a general summary description of the services performed or products submitted for the invoice period and specify the section or Contract Line Item Number (CLIN) or SubCLIN in the contract pertaining to the required deliverable(s).

k. Shipping. Insert weight and zone of shipment, if shipped by parcel post.

l. Charges for freight or express shipments. Attach prepaid bill if shipped by freight or express.

m. Instructions. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.

n. For Indefinite Delivery contracts, the final invoice/voucher shall be marked "FINAL INVOICE" or "FINAL VOUCHER".

o. Final invoices must include the name of the NRC Contracting Officer's Representative (COR) and Contracting Officer.

p. Direct Costs. Insert the amount billed for the following cost elements, adjustments, suspensions, and total amounts, for both the current billing period and for the cumulative period (from contract inception to end date of this billing period).

(1) Direct Labor. This consists of salaries and wages paid (or accrued) for direct performance of the contract itemized as follows:

<u>Labor</u> <u>Category</u>	<u>Hours</u> <u>Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative</u> <u>Hours Billed</u>
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(2) Fringe Benefits. This represents fringe benefits applicable to direct labor and billed as a direct cost. Where a rate is used indicate the rate. Fringe benefits included in direct labor or in other indirect cost pools should not be identified here.

(3) Contractor-acquired property (\$50,000 or more). List each item costing \$50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) an item description, (b) manufacturer, (c) model number, (d) serial number, (e) acquisition cost, (f) date of purchase, and (g) a copy of the purchasing document.

(4) Contractor-acquired property (under \$50,000), Materials, and Supplies. These are equipment other than that described in (3) above, plus consumable materials and supplies. List by category. List items valued at \$1,000 or more separately. Provide the item number for each piece of equipment valued at \$1,000 or more.

(5) Premium Pay. This enumeration in excess of the basic hourly rate. (Requires written approval of the Contracting Officer.)

(6) Consultant Fee. The supporting information must include the name, hourly or daily rate of the consultant, and reference the NRC approval (if not specifically approved

in the original contract).

(7) **Travel.** Total costs associated with each trip must be shown in the following format:

<u>Start Date</u>		<u>Destination</u>		<u>Costs</u>
From	To	From	To	\$

(Must include separate detailed costs for airfare, per diem, and other transportation expenses. All costs must be adequately supported by copies of receipts or other documentation.)

(8) **Subcontracts.** Include separate detailed breakdown of all costs paid to approved subcontractors during the billing period.

(9) **Other Costs.** List all other direct costs by cost element and dollar amount separately.

q. **Indirect Costs (Overhead and General and Administrative Expense).** Cite the formula (rate and base) in effect in accordance with the terms of the contract, during the time the costs were incurred and for which reimbursement is requested.

r. **Fixed-Fee.** If the contract provides for a fixed-fee, it must be reimbursed as indicated in the contract. Cite the formula or method of computation. Include this information as it applies to individual task orders as well.

(1) The NRC will withhold payment of 15% of the negotiated contract fixed-fee amount, not to exceed \$100,000.

(2) If the fee withholding amount has reached \$100,000, the contractor may resume billing the NRC for the balance of its fee under subsequent invoices for work completed.

(3) Any fee amounts withheld by the NRC will be paid to the contractor during contract closeout in increments, following the submission/settlement of indirect rate proposals in accordance with FAR 52.216-8, "Fixed Fee" (JUN 2011).

s. **Total Amount Billed.** Insert columns for total amounts for the current and cumulative periods.

t. **Adjustments.** Insert columns for any adjustments, including outstanding suspensions for deficient or defective products or nonconforming services, for the current and cumulative periods.

u. **Grand Totals.**

3. Sample Invoice/Voucher Information

Sample Invoice/Voucher Information (Supporting Documentation must be attached)

This invoice/voucher represents reimbursable costs for the billing period from _____ through _____.

(a)	<u>Direct Costs</u>	<u>Amount Billed</u>	
		<u>Current Period</u>	<u>Cumulative</u>
(1)	Direct labor	\$ _____	\$ _____
(2)	Fringe benefits (% of direct labor)	\$ _____	\$ _____
(3)	Government property (\$50,000 or more)	\$ _____	\$ _____
(4)	Government property, Materials, and Supplies (under \$50,000 per item)	\$ _____	\$ _____
(5)	Premium pay (NRC approved overtime)	\$ _____	\$ _____
(6)	Consultants Fee	\$ _____	\$ _____
(7)	Travel	\$ _____	\$ _____
(8)	Subcontracts	\$ _____	\$ _____
(9)	Other costs	\$ _____	\$ _____
	Total Direct Costs:	\$ _____	\$ _____

(b) **Indirect Costs** (provide the rate information applicable to your firm)

(10)	Overhead ____ % of _____ (Indicate Base)	\$ _____	\$ _____
(11)	General and Administrative (G&A) ____ % of _____ (Indicate Base)	\$ _____	\$ _____
	Total Indirect Costs:	\$ _____	\$ _____

(c) **Fixed-Fee:**

- (12) Fixed-Fee Calculations:
- Total negotiated contract fixed-fee percent ____ and amount \$ _____
 - 85% allowable fee amount \$ _____
 - Cumulative fee billed on prior invoices \$ _____
 - Fee due this invoice (not to exceed 85% of fee earned based upon negotiated contract fee percentage) \$ _____

Note: The fee balance withheld by NRC may not exceed \$100,000.

	Total Fixed-Fee:	\$ _____	\$ _____
(d)	Total Amount Billed	\$ _____	\$ _____
(e)	Adjustments (+/-)	\$ _____	\$ _____

(f) **Grand Total** \$ _____ \$ _____

(The invoice/voucher format provided above must include information similar to that included below in the following to ensure accuracy and completeness.)

SAMPLE SUPPORTING INFORMATION

The budget information provided below is for format purposes only and is illustrative.

Cost Elements:

1) **Direct Labor - \$2,400**

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
Senior Engineer I	100	\$14.00	\$1,400	975
Engineer	50	\$10.00	\$ 500	465
Computer Analyst	100	\$ 5.00	\$ 500	320
			<u>\$2,400</u>	<u>1,760 hrs.</u>

2) **Fringe Benefits - \$480**

Fringe @ 20% of Direct Salaries

<u>Labor Category</u>	<u>Salaries</u>	<u>Fringe Amount</u>
Senior Engineer I	\$1,400	\$280
Engineer	\$ 500	\$100
Computer Analyst	<u>\$ 500</u>	<u>\$100</u>
	<u>\$2,400</u>	<u>\$480</u>

3) **Government-furnished and contractor-acquired property (\$50,000 or more) - \$60,000**

Prototype Spectrometer - item number 1000-01 = \$60,000

4) **Government-furnished and contractor-acquired property (under \$50,000), Materials, and Supplies - \$2,000**

10 Radon tubes @ \$110.00	= \$1,100
6 Pairs Electrostatic gloves @ \$150.00	= <u>\$ 900</u>
	<u>\$2,000</u>

5) **Premium Pay - \$150**

Walter Murphy - 10 hours @ \$10.00 Per Hour (Reg. Pay) = \$100 x 1.5 OT rate = \$150
(EX: Premium pay for this individual was approved and authorized under this contract by the NRC Contracting Officer by letter dated 6/1/2011.)

6) Consultants' Fee - \$100

Dr. Carney - 1 hour fully-burdened @ \$100 = \$100

7) Travel - \$2,640

(i) Airfare: (2 Roundtrip trips for 1 person @ \$300 per r/t ticket)

<u>Start Date</u>	<u>End Date</u>	<u>Days</u>	<u>From</u>	<u>To</u>	<u>Cost</u>
4/1/2011	4/7/2011	7	Philadelphia, PA	Wash, D.C.	\$300
7/1/2011	7/8/2011	8	Philadelphia, PA	Wash, D.C.	\$300

(ii) Per Diem: \$136/day x 15 days = \$2,040

8) Subcontracting - \$30,000

Company A	= \$10,000
Company B	= <u>\$20,000</u>
	\$30,000

(EX: Subcontracts for Companies A & B were consented to by the Contracting Officer by letter dated 6/15/2011.)

9) Other Costs - \$5,100

Honorarium for speaker at American Nuclear Society conference = \$5,000
Nuclear Planet Journal subscription fee = \$100

10) Overhead Expense - \$41,148

Overhead @ 40% of Total Direct Costs

11) General and Administrative (G&A) Expense - \$22,784

G&A @ 20% of Total Costs, excluding subcontracts and consultants

12) Fixed-Fee - \$8,218

Fixed-Fee applied to Total Costs @ 5%

Fixed-Fee Calculations:

- i. Total contract fixed-fee \$100,000
- ii. 85% allowable fee \$85,000
- iii. Cumulative fee billed on prior invoices \$85,000
- iv. Fee due this invoice (*not to exceed 85% of fee earned based upon negotiated contract fee percentage*) \$8,218

Total Amount Billed	\$175,020
Adjustments (+/-)	- <u>\$8,218</u>
Grand Total	\$166,802