

ORDER FOR SUPPLIES OR SERVICES

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

BPA NO.

1. DATE OF ORDER 3/4/2011		2. CONTRACT NO. (If any) NRC-03-10-081		6. SHIP TO:	
3. ORDER NO. T005		4. REQUISITION/REFERENCE NO. NRR-11-111; FFS: 111776		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission	
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Valerie Whipple Washington, DC 20555 Mail Stop: TWB-01-B10M				b. STREET ADDRESS Brandon Cherry Mail Stop OWFN 13E19	
7. TO:		c. CITY Washington		d. STATE DC	e. ZIP CODE 20555
a. NAME OF CONTRACTOR SOUTHWEST RESEARCH INSTITUTE				f. SHIP VIA	
b. COMPANY NAME				8. TYPE OF ORDER	
c. STREET ADDRESS 6220 CULEBRA RD				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
d. CITY SAN ANTONIO		e. STATE TX	f. ZIP CODE 782385166		
9. ACCOUNTING AND APPROPRIATION DATA B&R: 2011-x0200-20-11-4-148 J4473 BOC: 252A APPN: 31X0200.020 \$20,000 FAIMIS: 110955 NRR-11-051; FAIMIS: 111776 NRR-11-111 DUNS: 007936842				10. REQUISITIONING OFFICE NRR	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))				12. F.O.B POINT Destination	
<input type="checkbox"/> a. SMALL		<input checked="" type="checkbox"/> b. OTHER THAN SMALL		<input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED	
<input type="checkbox"/> d. WOMEN-OWNED		<input type="checkbox"/> e. HUBZone		<input type="checkbox"/> f. EMERGING SMALL BUSINESS	
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
a. INSPECTION		b. ACCEPTANCE		May 31, 2012	
				16. DISCOUNT TERMS Net 30	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	The Contractor shall provide services in accordance with the attached Statement of Work Entitled "Technical Assistance in Support of Reactor License Renewal and Environmental Evaluation Activities Related to Nuclear Reactor Regulation, South Texas Project Unit 1 and 2, U.S. Nuclear Regulatory Commission." Total CPFF amount: \$232,051; Optional Work: \$49,580; Total Possible: \$281,631 Total obligated amount: \$20,000 Period of Performance: March 4, 2011 through May 31, 2012, w/option to Extend through February 28, 2013. Technical Monitor: Robert Sun 301-415-3421 NRC Project Officer: Brandon Cherry 301-415-3154 List of Attachments: Statement of Work TOTAL TASK ORDER CEILING.....\$232,051 TOTAL TASK ORDER CEILING IF ALL OPTIONS EXERCISED.....\$281,631 DUNS: 007936842 NAISC: 541690 PSC: R421					

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO	
21. MAIL INVOICE TO:					
a. NAME Department of Interior / NBC NRCPayments@nbc.gov		b. STREET ADDRESS (or P.O. Box) Attn: Fiscal Services Branch - D2770 7301 W. Mansfield Avenue		CPFF \$232,051 Current Ceiling	
c. CITY Denver		d. STATE CO	e. ZIP CODE 80235-2230		
				CPFF \$281,631 If all options exercised	
SEE BILLING INSTRUCTIONS ON REVERSE				17(h) TOTAL (Cont. pages)	
				17(i) GRAND TOTAL	

22. UNITED STATES OF AMERICA BY (Signature) <i>Valerie Whipple</i> 3/2/11		23. NAME (Typed) Valerie Whipple Contracting Officer TITLE: CONTRACTING/ORDERING OFFICER	
--	--	---	--

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

a 3/4/11

11/11/11

Please indicate your acceptance of this order by having an official who is authorized to bind your organization, execute this document in the space provided below.

ACCEPTED:

Signature: 

Name: R.B. Kalmbach

Title: Executive Director, Contracts

Date: 3/2/2011

TASK ORDER TERMS AND CONDITIONS

1. CONSIDERATION AND OBLIGATION--COST PLUS FIXED FEE (JUN 1988) ALTERNATE I (JUN 1991)

- (a) The total estimated cost to the Government for full performance of this contract is **\$232,051** of which the sum of \$ [REDACTED] represents the estimated reimbursable costs, and of which \$ [REDACTED] represents the fixed fee. In the event that the Government exercised optional tasks, the task order shall increase as follows:

Optional Task 5: **\$17,144** (cost: \$ [REDACTED], fee: \$ [REDACTED])
Optional Task 6: **\$12,502** (cost \$ [REDACTED], fee \$ [REDACTED])
Optional Task 7: **\$19,934** (cost: \$ [REDACTED], fee: \$ [REDACTED])
Total: **\$49,580**

- (b) There shall be no adjustment in the amount of the Contractor's fixed fee by reason of differences between any estimate of cost for performance of the work under this contract and the actual cost for performance of that work.
- (c) The amount currently obligated by the Government with respect to this contract is **\$20,000**, of which the sum of \$ [REDACTED] represents the estimated reimbursable costs, and of which \$ [REDACTED] represents the fixed fee.

2. PERIOD OF PERFORMANCE

The period of performance of this order shall be **March 4, 2011** through **May 31, 2012**, with the option to extend through **February 28, 2013** should Optional Tasks 5, 6 and/or 7 be exercised.

3. 52.217-6 OPTION FOR INCREASED QUANTITY (MAR 1989)

The Government may increase the quantity of supplies called for in the Schedule at the unit price specified. The Contracting Officer may exercise the option by written notice to the Contractor within the period of performance of the contract. Delivery of the added items shall continue at the same rate as the like items called for under the contract, unless the parties otherwise agree.

4. 52.217-9 OPTION TO EXTEND THE TERM OF THE TASK ORDER

(a) The Government may extend the term of this task order by written notice to the Contractor within 60 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 15 days before the task order expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended task order shall be considered to include this option clause.

(c) The total duration of this task order, including the exercise of any options under this clause, shall not exceed **2 years**.

5. ADVANCE UNDERSTANDING - CORROSION AND FAILURE ANALYSIS OF A CONTROL ROD DRIVE MECHANISM (CRDM)

SwRI submitted a request for Organizational Conflict of Interest (OCOI) analysis in relation to the South Texas Project on January 24, 2010. NRC provided their determination via letter dated February 16, 2011.

SwRI's Mechanical Engineering Division has performed work for South Texas Project, addressing the intermittent failure of a Corrosion and Failure Analysis of a Control Rod Drive Mechanism latching mechanism. The scope of work encompassed three areas: (1) providing rapid-response answers about corrosion rates, amount and types of corrosion products formed, and the passivation of the stainless steel in CRDM latching mechanisms; (2) providing recommendations on how to optimize the passivation rate and minimize the corrosion products; and (3) providing an action plan to use actual testing of the samples to validate the assumptions and conclusions. The period of performance was March 5, 2010 through June 30, 2010 with a total value of \$23,000. Because the CRDM is categorized as a component important to safety, it may be subject to NRC review and therefore could give rise to an OCOI. **Therefore, to completely assure that no OCOI arises, no review work related to the CRDM will be assigned to the CNWRA under this task order.**

6. 2052.215-70 KEY PERSONNEL (JAN 1993)

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

Name

Title

[REDACTED]
[REDACTED]
[REDACTED]

Program Manager
Principal Investigator
Quality Assurance Specialist

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.

7. 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT -ALTERNATE 1 (OCT 1999)

- (a) Total expenditure for travel may not exceed **\$16,584** without the prior approval of the contracting officer. ***This amount increases up to \$3,810 to \$20,394 with the exercise of the optional tasks 6 and 7 (\$1,618 and \$2,192, respectively).***
- (b) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days prior to the commencement of travel.
- (c) The contractor will be reimbursed only for those travel costs incurred that are directly related to this contract and which are allowable subject to the limitations prescribed in FAR 31.205-46.
- (d) It is the responsibility of the contractor to notify the contracting officer in accordance with the FAR Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the travel ceiling amount identified in paragraph (a) of this clause.
- (e) Reasonable travel costs for research and related activities performed at State and nonprofit institutions, in accordance with Section 12 of Pub. L. 100-679, shall be charged in accordance with the contractor's institutional policy to the degree that the limitations of Office of Management and Budget (OMB) guidance are not exceeded. Applicable guidance documents include OMB Circular A-87, Cost Principles for State and Local Governments; OMB Circular A-122, Cost Principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

8. SEAT BELTS

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

9. WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES (JULY 2006)

- (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.
- (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.

**STATEMENT OF WORK
Task Order #5**

Project Title: Technical Assistance in Support of Reactor License Renewal and Environmental Evaluation Activities Related to Nuclear Reactor Regulation, South Texas Project Unit 1 and 2, U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation

Job Code: J-4473

Task Area: Kick-off Meeting, Technical Support for Safety Review, Peer Review, ACRS support, ASLBP support

Task Order #: Five (5)- South Texas Project Unit 1 and 2 (Safety Review)

Budget Structure Code: 2011-x0200-20-11-4-148

NRC Issuing Office: Office of Nuclear Reactor Regulation

NRC Project Officer: Brandon Cherry, (301) 251-7638, Brandon.Cherry@nrc.gov

NRC Technical Monitor: Robert Sun, 301-415-3421, Robert.Sun@nrc.gov

Fee Recoverable: Yes

TAC Numbers: South Texas Project Unit 1- Safety- ME4936
South Texas Project Unit 2- Safety- ME4937

Performing Organization: Center for Nuclear Waste Regulatory Analyses (CNWRA hereafter Center)

1.0 Background

NRC's Office of Nuclear Reactor Regulation (NRR) is responsible for ensuring the public health and safety through licensing and inspection activities at all commercial nuclear power reactor facilities in the United States. Evaluation of License Renewal Applications (LRAs) is performed by the Division of License Renewal (DLR). DLR performs its work in accordance with the requirements of Title 10 of the *Code of Federal Regulations, Part 54 (10 CFR Part 54)*, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." In addition, DLR uses guidance provided in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants", Revision 1 (SRP-LR), dated September 2005 and in NUREG-1801, "Generic Aging Lessons Learned (GALL) Report," Revision 1 also dated September 2005. The staff is seeking technical assistance in the review of LRAs in the area of Corrosion/Materials Engineering.

2.0 Objective

The objective of this contract is to provide technical support in the area of corrosion/materials engineering to the DLR project team in reviewing and evaluating the operating license renewal application of South Texas Project Unit 1 and 2.

3.0 Scope of Work

The project team, composed of the Center and NRC staff, will audit and review aging management programs (AMPs), aging management reviews (AMRs), and time-limited aging analyses (TLAAs) submitted by the applicant. The project team will be led by a plant project manager (PM). The Center shall provide subject matter technical experts (SMEs) knowledgeable and experienced in the area of corrosion/materials engineering and science applicable to license renewal activities. The Center will provide technical expertise and services on a task basis for task 1. The Center may provide technical expertise and services on this task order for three (3) optional tasks (tasks 5, 6, and 7) which include providing technical support for Advisory Committee on Reactor Safeguards (ACRS) meetings, technical support for Atomic Safety and Licensing Board Panel (ASLBP) hearings and peer review of safety evaluation reports if directed to do so by the Technical Monitor or Project Officer.

For its AMP review, the project team evaluates and audits the AMPs the applicant proposes to ensure that they are consistent with the GALL Report and reviews other selected plant-specific AMPs. For the assigned task scope of work the project team reviews the applicant's aging management activities and programs to determine whether these AMPs are adequate to manage the effects of aging on systems, structures, and components so their intended functions will be maintained consistent with the plant's current licensing basis (CLB) during the proposed period of extended operation.

For its AMR review, the project team evaluates the AMRs assigned in work packages called technical review packages. The technical review package concept will be explained below.

For the TLAA review, the project team evaluates the information provided by the applicant addressing the GALL Report recommendations and plant-specific TLAAs and determines if the information provided meets the requirements of 10 CFR 54.21.

An important attribute of this statement of work (SOW) is to provide flexibility in support. DLR will have multiple license renewal applications being reviewed concurrently and intends to use a blend of NRC personnel with Center support. Therefore, the contract support will need to be flexible and integrated with DLRs needs. DLR will provide a clear delegation of responsibility before the work begins for this project/plant to prevent any duplication of effort.

The following table provides examples of corrosion/materials engineering areas Center support staff will be expected to review and/or audit. Each of these topical areas is referred to as a "technical review package." The technical review package contains:

- Relevant SRP Sections

- AMRs that are not associated with a SRP section (Note E's)
- AMR line items (Non-note A - D)
- AMRs questioned by the plant project manager as to their consistency with the GALL Report
- Relevant AMPs
- FSAR Supplement (Associated with AMPS/TLAAs to be verified by Technical Reviewer)
- GALL items where there was no associated aging effect claimed by the applicant

TLAAs will also be included in a technical review package. Technical review packages are work packages that are developed to focus the reviewers on the specific areas for review. Audits are performed for the technical areas where the applicant claims consistency with the GALL Report. In some cases, the Staff or Center may not need to audit a technical review package item because the items are not consistent with the GALL Report and will need to be technically reviewed. Items where there is a claim for consistency with GALL will be audited at the plant site. The Center will provide the audit write up, requests for additional information (RAIs) and safety evaluation report (SER) input for the audited items. Areas not audited will be reviewed, RAIs developed, and SER input provided.

The table below lists examples of technical review packages in the corrosion/materials area for a typical license renewal application. The list may or may not reflect the final technical review package assignments. The actual list of technical review package assignments will be finalized later.

Generic GALL Section	Description of Topical Areas	Expertise Needed	Audit(varies by plant)
XI.M2	Reactor Water Chemistry	Materials	Yes
XI.M10	Boric Acid Corrosion	Reactor Materials	Yes
XI.M11	Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors	Reactor Materials	Yes
XI.M17	Flow Accelerated Corrosion	Materials	Yes
XI.M20	Open Cycle Cooling Water	Materials	Yes
XI.M21	Closed Cycle Cooling Water	Materials	Yes
XI.M24	Compressed Air	Materials	Yes
XI.M33	Selective Leaching of Materials	Materials	Yes
XI.M34	Buried Piping and Tanks Inspection	Materials	Yes
XI.M36	External Surfaces Monitoring Program	Materials	Yes

Generic GALL Section	Description of Topical Areas	Expertise Needed	Audit(varies by plant)
	Special topical areas (such as Diesel Exhaust Piping, Stress Corrosion Cracking, CASS, or Cast Austenitic Stainless Steel, as needed based on uniqueness of LRA)	Various	Maybe

If any work will be subcontracted or performed by consultants, the Center shall obtain the written approval of the subcontractor or consultant prior to initiation of the subcontract effort by the NRC Project Officer (PO) or Technical Monitor (TM). Conflict of interest considerations shall apply to any subcontracted effort.

3.1 Task 1- Technical Support for Safety Review

Project Kick-off Meeting

The Center project staff shall attend a project initiation meeting with NRC staff within 10 working days of award of the agreement. This meeting will take place via teleconference. Training will also occur via teleconference. The purpose of the initial meeting is to discuss and finalize the draft project plan provided in response to the agreement request for proposal. The NRC PO, NRC TM, and CNWRA PM shall establish the elements of the final project plan, inclusive of deliverables, schedules, and staffing, and shall discuss expectations and objectives of the technical assistance, timeliness and quality of review products. The Center staff shall perform the review in accordance with the final project plan approved by the NRC TM. A copy of the final Project Plan shall be sent electronically (MS Project or similar format) to the NRC TM and PO for the task order.

Deliverable: Final Project Plan Due: 10 working days from date of Project Kick-off meeting

Audit Preparation, Auditing, and Audit Report

The NRC project TM will provide information on the work assignments, e.g., the split of work between the Center SMEs and other NRC technical staff. The Center shall provide up to four (4) qualified professionals/SMEs to participate in an NRC-led project team audit, of up to twelve (12) days (six days per week for two weeks). The purpose of the team audit is to determine whether the applicant has sufficient on-site documentation, as indicated in its LRA, to demonstrate that the AMPs, which are determined by the applicant to be consistent with the GALL Report or previously approved staff positions, are actually consistent.

The Center shall perform the front end work associated with the preparation of audit and review. This work shall be performed at the Center's office immediately after the receipt of the task order for South Texas Project Unit 1 and 2. The SME(s) will pre-write their assigned evaluation portion of the audit report, to the maximum extent possible. In addition, the Center shall ensure that each SME (1) review her/his portion of the assignments (technical review packages) and

(2) review and pre-write the evaluation of her/his portion of the audit report, where possible. This will minimize the time needed at the auditee's site.

At the kick off meeting, the NRC will provide a sample of an audit report to the Center to aid in the pre-write of the audit report. The Center shall ensure that each SME prepares his/her questions after reviewing the program basis documents for discussion with the applicant during the audit. The Center shall document the results of the SMEs audit and review activities in an audit report in accordance with the example format provided. At or before the kickoff meeting, the NRC will provide a copy of the NRC training course materials on PWR and BWR reactor technology for the SMEs review.

The audit reports shall contain the LRA-specific information, extracted from the LRA, which are related to the audit. The audit report template will aid the SMEs in the pre-write of her/his assigned evaluation portion of the audit report. The TM will provide a current copy of the writing guidelines and a recently-issued audit report. The Center staff shall prepare the draft audit report in accordance with the writing guidance provided. The Center shall provide draft RAI's and initial audit report input from the audit before the on-site audit is completed.

The Center shall provide qualified professional technical staff/SMEs to prepare and review the audit report. The Center shall ensure the report is technically correct and complete. The Center shall incorporate comments from the peer review, comments from the NRC staff, and responses to the RAIs into the final audit report. The Center shall also provide technical writing services to prepare the final audit report.

The Center may be requested to support specific TLAA reviews and prepare portions of the draft TLAA sections of the audit report. The deliverables for this task are similar to the AMPs and AMR deliverables.

Deliverables:

1. Draft RAI's from the audit.
2. Draft audit report sections

The draft RAI's from the audit shall be delivered to the TM no later than five (5) working days after the completion of the on-site visit.. The draft audit report sections shall be delivered to the TM no later than ten (10) working days after the completion of the onsite visit(s). The Center shall revise the draft sections to reflect the NRC staff comments and shall deliver the final section of the audit report no later than five (5) working days after receipt of the NRC's comments on the draft sections.

Request for Additional Information, Review Applicant's Responses, and SER Input (with Open items and Final)

The Center shall provide qualified professionals/SME to prepare formal requests for additional information (RAI), when determined appropriate, to obtain additional information to continue with the LRA safety review. The RAI shall cite the technical and regulatory basis for requesting the information. The Center shall also provide qualified professionals/SMEs to review applicant's responses to the RAI and to determine whether the applicant's responses are acceptable. The Center shall coordinate any exception to the GALL with the NRC technical staff through the TM.

Deliverables (if applicable):

- (1) Draft RAIs from aging management review;
- (2) Documentation of RAI evaluation incorporated into SER; and
- (3) SER input (with open items and final).

The Center shall deliver the draft RAIs from the aging management review to the TM no later than forty (40) working days after assigned. The Center shall deliver the documentation of RAI evaluation to the NRC TM no later than seven (7) working days after receiving responses from the applicant. The Center shall incorporate responses to the RAIs into the SER. The Center shall develop the draft SER with open items in accordance with "Safety Evaluation Report Writing Guidelines and Samples" for AMPs which are consistent with the GALL (and reviewed during the audit) to the NRC TM no later than twenty (20) working days after the completion of the onsite visit(s). The Center shall deliver the draft SER with open items for Plant-Specific AMPs, AMRs, Further Evaluations and TLAAs to the NRC TM no later than forty (40) working days after assigned. The TM and/or plant PM will coordinate any internal NRC staff review of the draft SER with open items input and will prepare a set of NRC staff comments. The TM or plant PM will provide the comments to the Center and will discuss them with the Center. The Center shall revise the draft SER with open items to reflect the comments provided by the TM or plant PM and deliver the final SER inputs no later than five (5) working days after receipt of the comments.

Safety Evaluation Reports shall be written in accordance with NRC review guidance, and shall be consistent with NUREG-0650, "Publishing Documents in the NUREG Series," and NUREG-1379, "NRC Editorial Style Guide," and "Safety Evaluation Report (SER) Style Guide." SERs are to be delivered "camera ready" to NRC in Microsoft® Office Word 2003 or current NRC designated word processing software on a CD-ROM or an equivalent medium. Figures will be in .tif format. NRC will take the electronic files and produce the published report.

The Center shall develop and follow its quality control plan which outlines the procedures and system to be used for document version control, technical input tracking, change management, and technical and editorial reviews. The Center shall organize, track, and manage changes in a structured, systematic, and transparent manner, throughout the review and production of the draft and final SER.

3.2 Task 2 - Technical Support for Environmental Review

Not Applicable

3.3 Task 3 - Technical Support for Quality Assurance Review

Not Applicable

3.4 Task 4 - Technical Support for Work Packages

Not Applicable

3.5 Task 5 - Peer Review of Safety Evaluation Report (OPTIONAL- as directed by TM)

The Center shall provide up to 100 person-hours of peer review support for designated SER sections. The TM will provide specific sections to the Center for review in accordance with DLR guidance. The scope of work, resources, and completion time for each SER section will be agreed upon by the facilitator and the PO/TM prior to starting this activity.

The deliverable for this task is a marked (electronic and paper copy) version of the assigned SER section(s), with comments, as applicable and additional communication, if necessary, to clarify comments. The Center shall deliver the peer review to the NRC TM no later than twenty (20) working days after assigned.

3.6 Task 6- Advisory Committee on Reactor Safeguards (ACRS) Support (OPTIONAL- as directed by the TM)

The Center shall provide up to 60 person-hours of key personnel SME per meeting to support DLR staff during ACRS meetings (up to two meetings - subcommittee and final) to present the results of the LRA safety review. The activities may include, but are not limited to: providing information, preparing input for the staff's presentation, and participating in the dry run and the ACRS meeting. The ACRS meeting is normally held several months after the completion of the audit report and the SER inputs. The estimated effort should include refreshing of the specialist on the review and any technical issues. The dry run could be accomplished through telephone conference, if deemed acceptable by the TM. A two-day trip to Rockville, MD shall be included in the estimate to support the ACRS meeting.

There is no formal deliverable for this Task 6. The Center shall support for the preparation for the ACRS meeting, support services for the dry run, and support for the duration of the ACRS meetings at the NRC Headquarters.

3.7. Task 7- Atomic Safety and Licensing Board Panel (ASLBP) Support (OPTIONAL- as directed by the TM)

The Center shall provide experienced and qualified technical experts (subject matter experts) to support DLR staff in preparation for and during ASLBP hearings (up to four hearings). The activities associated with this task may include, but are not limited to: replying to contentions, preparing for ASLBP hearings, and participating in those hearings by presenting the results of the LRA safety review and providing testimony in response to questions by the ASLBP.

The ASLBP hearings are normally held 12 months after the issuance of the final SER. The estimated effort should include refreshing of the specialist on the review and any technical issues. The preparation for the ASLBP hearings could be accomplished through telephone conference, if deemed acceptable by the TM. A one-week trip to a town near the plant's location and 100 person-hours of work shall be included in the estimate to support the ASLBP meeting.

There is no formal deliverable for this Task 7.

4.0 Technical and Other Special Qualifications Required

It is the responsibility of the Center to assign technical staff, employees, subcontractors, or specialists who have the required educational background, experience, or combination thereof to meet both the technical and regulatory objectives of the tasks specified in this SOW. The NRC will rely on representations made by the Center concerning the qualifications of the personnel assigned to this agreement, including assurance all information contained in the technical and cost proposal, including resumes, is accurate and truthful. The use of experienced personnel for the key positions on each task and technical review package under this project is essential to the success of the project.

The Center shall provide all necessary personnel, equipment, facilities and materials to accomplish the efforts placed under this contract. The use of particular personnel on this project is subject to the NRC TM's and PO's approval. This includes proposed changes to key personnel during the life of the agreement.

The Center team shall consist of SMEs in corrosion/materials engineering and science capable of conducting the SOW including the following disciplines: corrosion, materials engineering, power plant engineering or equivalent disciplines, as applicable to license renewal activities. For the purpose of bidding, assume that either three (3), or four (4) Center subject matter experts from the required disciplines will participate on the audit team per week with NRC and providing staff in other technical areas on an as-needed basis. It is expected the Center will review and comment on the sections of the SER provided by NRC staff. The NRC prepared sections will be incorporated in the camera-ready copies of the SER after the quality assurance and editing process of the sections are completed.

If any task will be subcontracted or performed by subcontractors or consultants, the Center shall obtain the NRC PO's written approval of the subcontractor or consultant prior to initiation of the subcontracted effort. Conflict of interest considerations shall apply to any subcontracted effort.

The subject matter experts will have demonstrated their expertise as documented in resumes, describing oral presentations at public meetings, professional conferences, management briefings, and providing expert testimony in hearings.

Compilation of information to conduct site audits and document findings in the draft SER may require extensive interviewing of stakeholders including power plant personnel and Federal, State, and local government officials. All stakeholder interactions shall be coordinated with the plant PM.

The Center shall furnish, for the South Texas Project Unit 1 and 2 safety audit:

- Up to four (4) Subject Matter Experts per week in corrosion/materials engineering.

The subject matter experts (SME) shall:

- Provide technical expertise to complete the review of topical areas in technical review packages.
- Generate RAIs, as necessary to complete the final SER
- Provide input into the audit report, SER with open items, and final SER

The Center shall assign the technical staff, employees, subcontractors, or specialists who have the required educations background, work experiences, or a combination thereof to meet both the technical and regulatory objectives of the work specified in this SOW.

The Center shall ensure that each SME reviews and becomes familiar with the plant-specific LRA with emphasis on AMPs, AMRs, and TLAAs described in the technical review package. The Center shall ensure that each SME also reviews, for familiarization: (1) the audit report and (2) Sections 3 and 4 of a recently NRC issued SER (final SER or SER with open items), and the assigned technical review package. The NRC technical monitor (TM) will identify the specific audit reports and SERs for review.

5.0 Meetings and Travel

The audit at South Texas Project Unit 1 and 2 is scheduled around May, 2011 (tentatively).

If the optional tasks are exercised, there will be additional travel of two days to the ACRS meeting in Rockville, MD and a two day trip to a location near the site for a public meeting.

Routine status meetings (weekly to monthly) by the NRC TM and facilitator should be conducted using electronic means of Tele/Video - conferences or other means to minimize travel costs. Progress meetings will be quarterly during any active phase of this project, at the discretion of the NRC. Each of these meetings is expected to last 1 day. The Center should plan to make available key personnel assigned to active tasks during the course of these meetings. Periodically, a program review meeting, which involves NRC and Center management, will be held at the Center office to review overall program objectives and project performance; program reviews are typically held annually. In addition, meetings at NRC Headquarters and technical information gathering trips may be necessary and will be identified by the TM. Specific meeting and travel requirements will be identified in the finalized project plan. Other travel will be confirmed with the NRC PO prior to commencement of the travel.

Meetings potentially requiring Contractor travel are summarized below.

<u>Topic</u>	<u>Location</u>	<u>Trips</u>	<u>Days</u>	<u>Contractor</u>
Basic Work:				
Site Visit	Bay City, TX	up to 2	up to 12 days	3 or 4
Optional Work:				
ACRS Meeting	Rockville, MD	1	2	1
Hearings/Public Meeting	Near site TBD	1	2	1

6.0 Financial and Technical Status Reports

The Contractor shall submit periodic technical and financial reports in accordance with the contract. The estimated staff effort should be recorded at the subtask level. The work accomplished and the degree of completeness should also be tracked by subtask. The reports are due within 15 calendar days after the end of the report period (i.e., each four week period). The NRC TM shall receive one copy of the periodic status report, and the NRC PO shall receive one copy. See the contract for further distribution requirements.

**APPENDIX A
SCHEDULE AND DELIVERABLES**

TASK	DELIVERABLE	SCHEDULE (working days)
1	Final project plan	No more than ten (10) working days after Project Kick Off Meeting
1	Draft RAIs from the audit	No more than five (5) working days after the completion of the onsite visit(s)
1	Draft Audit Report sections	No more than ten (10) working days after the completion of the onsite visit(s)
1	Final Audit Report sections	No more than five (5) working days after receipt of comments from the NRC
1	Draft RAIs from aging management review	No more than forty (40) working days after assigned
1	Documentation of RAI evaluation incorporated into SER	No more than seven (7) working days after receipt of responses from the applicant
1	Draft AMP (consistent with GALL AMPs) SER input - with open items	No more than twenty (20) working days after the completion of the onsite visit(s)
1	Draft AMP(Plant specific AMPs) /AMR/TLAA SER input- with open items	No more than forty (40) working days after assigned
1	Final SER input- with open items	No more than five (5) working days after receipt of comments from the NRC
1	Final SER input- with no open items	No more than five (5) working days after receipt of comments from the NRC
5	Peer Review- marked version of the assigned SER Section(s) with comments	No more than twenty (20) working days after assigned