ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 9 PAGES

IMPORTANT: Mark all packages and papers with contract and/or order numbers. BPA NO. NRC-DR-04-09-122

1. DATE OF ORDER: 08-19-2009
2. CONTRACT NO. (If any): GS-23F-0011L
3. ORDER NO. / MODIFICATION NO.: Task Order 1
4. REQUISITION/REFERENCE NO.: RFPA:RES-08-145 FFS: RES-C09-591

5. ISSUING OFFICE (Address correspondence to)
U.S. Nuclear Regulatory Commission
Div. of Contracts
Attn: Sheila Bumpass, 301-492-3484
Mail Stop TWR-01-B10M
Rockville MD 20852

6. SHIP TO.
a. NAME OF CONSIGNEE
b. STREET ADDRESS
c. CITY | d. STATE | e. ZIP CODE
f. SHIP VIA

7. TO:
a. NAME OF CONTRACTOR: Battelle Memorial Institute
b. COMPANY NAME
c. STREET ADDRESS: 505 King Avenue
d. CITY: Columbus | e. STATE: OH | f. ZIP CODE: 43201

8. TYPE OF ORDER
[ ] a. PURCHASE — REFERENCE YOUR _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.
[X] b. DELIVERY — Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

9 ACCOUNTING AND APPROPRIATION DATA
B&R: 960-15-111-127 Job: N6687 BOC: 252A Approp.:31X0200.960
Obligate: $200,515.00 FFS: RES-C09-591
DUNS: 007901598

10. REQUISITIONING OFFICE: RES
David Rudland RES/DE/CIB 301-251-7622

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

12. F.O.B. POINT: N/A

13. PLACE OF a. INSPECTION	13. PLACE OF b. ACCEPTANCE	14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	16. DISCOUNT TERMS
destination	destination		08/30/2011	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)
	Contractor will perform "Reactor Coolant Pressure Boundary Analyses as stated in the attached statement of work and in accordance with the attached pricing schedule. Period of Performance: August 19, 2009 - August 31, 2011 Total Task Order Amount: $635,613.00 (NTE) Total Obligated Amount: $200,515.00 Amount Available for Obligation: $435,098.00 Timothy L. Fesser Contractor Acceptance Timothy L. Fesser Contracting Officer					

18. SHIPPING POINT | 19. GROSS SHIPPING WEIGHT | 20. INVOICE NO.

SEE BILLING INSTRUCTIONS ON REVERSE

21. MAIL INVOICE TO:
a. NAME
b. STREET ADDRESS (or P.O. Box)
c. CITY | d. STATE | e. ZIP CODE

17(h) TOTAL (Cont. pages): $635,613.00

17(i). GRAND TOTAL: $635,613.00 (NTE)

22. UNITED STATES OF AMERICA BY (Signature): Sheila Bumpass

23. NAME (Typed)
Sheila Bumpass
Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (REV. 4/2006)
PRESCRIBED BY GSA/FAR 48 CFR 53.213(f)

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

ADM002

SECTION A

A.1 General

(a) The contractor shall perform the services reflected in the SOW at the labor hour rates set forth below.

(b) The period of performance for this task order is:

August 19, 2009 – August 31, 2011

A.2 Pricing

(a) The hourly rate is a fixed unit hourly rate that includes all costs (including, but not limited to: labor, fringe benefits, overhead, G&A, and profit) necessary to provide the services required in the solicitation.
(b) CLIN 0005 – all travel must be pre-approved in advance by the project officer. Travel will be in accordance with the US Government Travel Regulations at: www.gsa.gov/federaltravelregulation and the per diem rates set forth at: www.gsa.gov/perdiem. This is a "not to exceed" CLIN. Travel costs exceeding this CLIN without an advance modification to the contract will not be reimbursed.
(c) This task order has a not-to-exceed value of $635,613. Costs exceeding the not-to-exceed amount without an advance modification to the contract will not be reimbursed.

Period: August 19, 2009 – August 31, 2009

ITEM	CATEGORY	UNIT	UNIT PRICE	ESTIMATED HOURS	TOTAL
0001	PES Manager III	HR	[redacted]		4624.80
0002	PES Engineer VI	HR			20,790.43
0003	PES Functional Specialist II	HR			312.56
0003	PES Functional Specialist I	HR			113.27
0004	PES Administrative Assistant I	HR			231.57

Period: September 1, 2009 – August 31, 2010

ITEM	CATEGORY	UNIT	UNIT PRICE	ESTIMATED HOURS	TOTAL
0001	PES Manager III	HR	[redacted]		88,684.80
0002	PES Engineer VI	HR			394,726.95
0003	PES Functional Specialist II	HR			3,867.36
0003	PES Functional Specialist I	HR			2,101.86
0004	PES Administrative Assistant I	HR			2,546.24

Period: September 1, 2010 – August 31, 2011

ITEM	CATEGORY	UNIT	UNIT PRICE	ESTIMATED HOURS	TOTAL
0001	PES Manager III	HR	[redacted]		17,342.50
0002	PES Engineer VI	HR			66,533.12
0003	PES Functional Specialist II	HR			837.30
0003	PES Functional Specialist I	HR			2062.78
0004	PES Administrative Assistant I	HR			496.08

Period: **August 19, 2009 – August 31, 2011**

	Total LOE [redacted]s			$605,271.62
.	Travel			$30.341.38.
		Total	**Task Order**	**$635,613.00 (NTE)**

STATEMENT OF WORK

TITLE: Reactor Coolant Pressure Boundary Analyses - Task

BACKGROUND

Many pressurized water reactor (PWR) primary reactor coolant pressure boundary (RCPB) components contain nickel-based alloys to include Alloys 82, 182, and 600. Primary coolant water coupled with the operating conditions of PWR plants has been shown to cause cracking of Alloy 82, 182, and 600 through a rocess called primary water stress corrosion cracking (PWSCC). PWSCC in nickel-based RCPB components is a safety concern due to the potential for reactor pressure boundary leaks and the associated potential of boric acid corrosion of low alloy steels at nozzle-to-safe end dissimilar metal (DM) butt welds. Either condition, depending on the size and location of the flaws, could result in a loss of coolant accident (LOCA). Specific plant operating experiences identifying PWSCC in Alloy 82, 182, and 600 through leakage or in-service inspections include:

- In 1993, Palisades discovered a leak through a circumferential crack in the Alloy 600 safe end on the pressurizer nozzle for the power-operated relief valve. The circumferential extent of the crack was about 3 inches in the 4-inch diameter pipe. Metallurgical analysis of a sample characterized the cracking as PWSCC of the Alloy 600 safe end material in the heat-affected zone of the Alloy 82 and 182 weld. This was the first instance of PWSCC associated with butt welds at a U.S. reactor licensed by the NRC.
- In 2000, ultrasonic examination of a reactor pressure vessel (RPV) hot leg nozzle-to-safe end DM weld at Ringhals 4 in Sweden revealed four axial part-through-wall flaws. Metallurgical analysis attributed the cracking to PWSCC. Two small axial indications were identified in a Ringhals 3 RPV hot leg nozzle-to-safe end DM weld. These indications were left in service until a follow up inspection in 2001, at which time; the indications were sampled and analyzed to be PWSCC.
- In 2000, a large accumulation of boric acid deposits was observed during a refueling outage at V.C. Summer which led to the discovery of cracking in the "A" hot leg pipe-to-RPV nozzle DM weld. The weld contained a through-wall axial flaw and small part-through-wall axial flaws, as well as a circumferential flaw. Metallurgical analysis attributed the cracking to PWSCC. Small axial and circumferential cracks were identified in the "B" hot leg pipe-to-RPV nozzle DM welds; a small circumferential crack was identified in the "C" hot leg pipe-to-RPV nozzle DM weld; and a small circumferential crack was found in both the "A" and "C" cold leg pipe-to-RPV nozzle DM welds.
- In 2003, ultrasonic examination of the pressurizer surge line hot leg nozzle-to-safe end weld at Three Mile Island Unit 1 revealed an axial part-through-wall indication in a DM weld. The licensee attributed the indication to PWSCC.
- In 2003, Tsuruga 2 in Japan observed boron deposits on the surface of a pressurizer relief valve nozzle that led to the discovery of three axially oriented flaws in the nozzle-to-safe end DM weld. Subsequent nondestructive examination (NDE) of the safety valve nozzle revealed two additional axial flaws in the nozzle-to-safe end DM weld. Metallurgical analysis of the flaws identified PWSCC as the mechanism for flaw initiation and growth.
- In 2003, ultrasonic examination revealed a shallow axial indication in the pressurizer-to-surge line weld at Tihange 2 in Belgium. This indication was attributed to PWSCC.
- In 2005, ultrasonic examination identified two axial part-through-wall indications approximately 180 degrees apart in a 2 inch hot leg drain nozzle-to-safe end DM weld at Calvert Cliffs Unit 2. The Licensee attributed the indications to PWSCC.
- In 2005, ultrasonic examination identified an axial part-through-wall indication in a pressurizer nozzle-to-safe end DM weld for the pressurizer safety valve at D. C. Cook Unit 1. The licensee attributed the indication to PWSCC.

- In 2006, ultrasonic examinations at Calvert Cliffs Unit 1 identified an axial indication in the pressurizer relief nozzle-to-safe end DM weld and a circumferential indication in the hot leg surge line nozzle-to-safe end DM weld and a hot leg drain nozzle-to-safe end DM weld. The circumferential indication in the hot leg to surge line nozzle-to-safe end was 2.4 inches in length and approximately 25 percent through-wall in depth. The circumferential indication in the hot leg drain nozzle was 0.45 inches in length and approximately 18 percent through-wall in depth.
- In October 2006, Wolf Creek reported five circumferential indications in three pressurizer DM welds. Three indications were in the pressurizer surge line nozzle-to-safe end weld, and one indication was found in each of the safety and relief nozzle-to-safe end welds. The relief nozzle-to-safe end flaw was measured as 11.5 inches long as projected on the outside diameter of the weld.
- In January 2008, Davis Besse reported a leakage event from a 1.68" axial PWSCC flaw that broke through-wall during the initial bead layering of a full structural weld overlay on the hot leg decay heat removal line.
- In March 2008, Crystal River reported two circumferential flaws in their hot leg decay heat removal line as well with the largest being 10 inches in length with a nominal wall thickness of 1.3".

The industry responded to these PWSCC instances with a detailed research program coordinated through the Materials Reliability Program (MRP). The MRP program has focused on four key technical areas: 1) non-destructive evaluation techniques to detect and size PWSCC flaws, 2) PWSCC initiation and growth rate statistics, 3) probabilistic and deterministic advanced finite element based component integrity models, and 4) PWSCC mitigation technologies. The objective of these mitigation technologies is to significantly retard future PWSCC initiation and growth. Several technologies have been identified by the industry such as water chemistry modifications (zinc additions and hydrogen injection), mechanical stress improvement, full structural weld overlays, optimized weld overlays, peening, inlays, onlays, and other potential processes. NRC reviews of these technologies are ongoing and will require continued assessments for a variety of different plant specific applications and RCPB locations to include leak-before-break (LBB) piping systems.

NRC started approving LBB analyses in 1984 by granting exemptions from General Design Criterion (GDC) - 4, "Environmental and dynamics effects design bases." In 1987, GDC-4 was revised to allow dynamic effects associated with postulated pipe ruptures to be excluded from the design basis when analyses reviewed and approved by the Commission demonstrate that the probability of fluid system piping rupture is extremely low (i.e., less than 10^{-6}/RY). The statement of considerations for the proposed revision to GDC-4 in 1986 said that "the LBB approach should not be considered applicable to fluid system piping that operating experience has indicated is particularly susceptible to failure from the effects of corrosion." Draft Standard Review Plan (SRP) 3.6.3, "LBB Evaluation Procedures," says, "...evaluations must demonstrate that these [degradation] mechanisms are not potential sources of pipe rupture." In practice, review criteria were implemented by excluding systems with potential corrosion degradation mechanisms. Satisfying draft SRP review criteria was considered a demonstration that the probability of fluid system piping rupture is extremely low.

SRP 3.6.3 also contains guidance on the application of LBB to boiling water reactor (BWR) piping which is susceptible to intergranular stress corrosion cracking (IGSCC). The draft SRP indicates that LBB could be considered for this piping provided two mitigation methods (e.g., resistant materials, stress improvement, enhanced water chemistry) were applied to the piping. In the regulatory actions taken to provide acceptable inspection intervals for managing IGSCC in BWR piping, credit has been given for the number of mitigation techniques employed. At the time these criteria were developed, they were based on engineering judgment. However, it has been observed through operating experience that two mitigation methods in BWR piping provided improved resistance to IGSCC as compared to one method and that the use of two mitigation methods renders the piping highly resistant to cracking. Nevertheless, owners of BWRs have not requested NRC approval to apply LBB to this piping.

Recently, the MRP has prepared inspection and evaluation guidelines for DM butt welds in the reactor coolant system. These guidelines are contained in MRP-139, "Primary System Piping Butt Weld Inspection and Evaluation Guidelines," and the Nuclear Energy Institute provided them to the NRC staff on July 27, 2005.

These guidelines were issued with "mandatory" implementation under the NEI 03-08, "Guidelines for the Management of Materials Initiatives." The purpose of these guidelines is to manage PWSCC through a combination of inspection and mitigation. These industry guidelines do not discriminate between welds approved by the NRC staff for LBB and other DM butt welds. In a draft user need letter dated August 5, 2005, from J.E. Dyer, Director, Office of Nuclear Reactor Regulation, to Carl J. Paperiello, Director, Office of Nuclear Reactor Regulation, "User Need Request on PWSCC in LBB Systems," assistance from the RES was requested in the development of a position on the management of PWSCC in LBB piping systems.

As a result, the NRC has developed several research programs to address the various aspects of developing a strategy to manage PWSCC in LBB and RCPB components. The NRC programs mirrors the MRP program to confirm the industry's claims related to: 1) capabilities of non-destructive evaluation techniques to detect and size PWSCC flaws, 2) PWSCC initiation and growth rate statistics, 3) probabilistic and deterministic advanced finite element based component integrity models, and 4) PWSCC mitigation technologies. For 3), a robust component integrity analysis typically consists of PWSCC flaw growth calculations that evaluate the specific component design, configuration, fabrication, applied loads, and environmental degradation effects such as PWSCC growth rates. It is only through evaluating all four areas that a PWSCC mitigation and management strategy can be developed for LBB and RCPB systems.

OBJECTIVE

The objective of this project is to provide flexible technical analyses to RES to develop and/or confirm the technical bases for future regulatory decisions related to RCPB and LBB system integrity and associated PWSCC mitigation assessments.

SCOPE OF WORK

Task 1: PWSCC Safety Issues:

Subtask 1): PWSCC Mitigation Assessments:

The contractor shall develop, compare, and contrast commercially available stress improvement and material replacement PWSCC mitigation processes, e.g. optimized weld overlay, full structural weld overlay, etc., through finite element model assessments and flaw evaluations to available weld residual stress measurement data and flaw evaluations thereof from NRC sponsored mockups.

Subtask 2) Support of xLPR Code Development:
2a) The contactor shall use existing infrastructure to set-up and maintain a SharePoint site for use by the NRC-led xLPR team members. This site will allow NRC approved users to access relevant xLPR data and codes.
2b) The contractor shall use the current version of the SQUIRT leak rate estimation software and convert the SQUIRT2 module into a usable Fortran subroutine for inclusion into the xLPR code.
2c) The contractor shall provide technical support by participating in and providing assistance to the models, inputs, and computational groups through meetings, teleconferences, information exchange, etc.

Subtask 3) Weld Residual Stress Modeling of NRC & EPRI Fabricated Mockups:
Weld residual stress models using finite element analyses of Alloy 82/182/600 dissimilar metal butt welds configurations have been conducted in NRC licensee relief requests and confirmatory regulatory evaluations thereof. Subtask 3 focuses on benchmarking and validating the use of finite element models for these Alloy 82/182/600 dissimilar metal butt welds using the Phase I-IV NRC and EPRI fabricated mockups. The contractor shall predict and refine the through-thickness weld residual stress profiles of

the Phase I-IV NRC and EPRI fabricated dissimilar metal weld mockups. For this modeling effort, the NRC will provide the detailed fabrication specifications and welding parameters for each mockup within 12 months after the task initiation.

Subtask 4) Provide Technical assistance to the NRC staff for:

- Knowledge transfer of existing models and inputs used in the PRO-LOCA probabilistic fracture mechanics code
- Reviewing pertinent industry reports and guidelines related to the industry-proposed criteria for PWSCC mitigation processes
- NRC/EPRI/licensee coordination efforts, proposals, meetings, and conference calls
- Advisory Committee for Reactor Safeguards (ACRS)/NRC meetings - provide technical expertise to the NRC as necessary
- Review of pertinent industry reports, guidelines, and efforts in these areas, including base assumptions, computer codes used, and operational experience

Task 1 Deliverable Schedule:

Subtask 1) Provide a technical letter report 24 months after task initiation.
Subtask 2) a) Provide the SharePoint site within one month of task initiation.
b) Provide the SQUIRT2 Fortran module 4 months of task initiation.
c) Provide technical assistance as required.
Subtask 3) Provide technical letter report for Phase I-IV results 24 months after task initiation.
Subtask 4) Provide technical assistance as required.

MEETING AND TRAVEL REQUIREMENTS

Biweekly phone progress reports shall be conducted with the NRC Project Officer for approximately one-hour in duration throughout the period of performance. The frequency and duration of the phone progress reports will be adjusted according to the needs of the program to ensure progress is maintained. Travel requirements for this task will include up to five three-day trips for up to three people to Rockville, MD or NRC-designated location to provide expertise in the various technical areas associated with this task.

RESEARCH QUALITY

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

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

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

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

TECHNICAL AND OTHER SPECIAL QUALIFICATIONS NEEDED

The program manager, key personnel, and any other senior technical staff performing work under this contract shall have expertise, experience, and/or education in the following key areas:

(a) Expertise in materials and structural mechanics
(b) Expertise in finite element analyses
(c) Expertise in developing probabilistic codes
(d) Expertise in leakage detection methodology and leak-rate calculations with existing leak-rate codes
(e) Detailed knowledge of pressurized water reactor piping system design and manufacturing methods including material property information
(f) Detailed knowledge of techniques used to evaluate residual stresses in pipe welds, e.g. weld sequencing
(g) Detailed knowledge of industry and NRC staff analyses regarding reported occurrences of primary water stress corrosion cracking and NRC actions, e.g., notices, bulletins, etc..

REPORTING REQUIREMENTS

NRC Project Managers should: Provide a concise list of reports to be provided, the desired level of contractor management review of reports, and the frequency, content, and distribution of the reports.

Monthly Letter Status Report.

A Monthly Letter Status Report (MLSR) is to be submitted to the NRC Project Manager by the 20th of the month following the month to be reported with copies provided to the following:

David.Rudland@NRC.GOV
Brandon.Cherry@nrc.gov
Aladar.Csontos@nrc.gov
RESDEMLSR.Resource@nrc.gov

The MLSR will identify the title of the project, the job code, the Principal Investigator, the period of performance, the reporting period, summarize each month's technical progress, lis monthly spending, total spending to date, and the remaining funds and will contain information as directed in NRC Management Directive 11.1. Any administrative or technical difficulties which may affect the schedule or costs of the project shall be immediately brought to the attention of the NRC project manager.

PUBLICATIONS NOTE

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

If the presentation or paper is in addition to the required technical reports and the RES Project Manager determines that it will benefit the RES project, the Project Manager may authorize payment of travel and publishing costs, if any, from the project funds. If the Project Manager determines that the article or presentation would not benefit the RES project, the costs associated with the preparation, presentation, or publication will be borne by the contractor. For any publication or presentations falling into this category, the

NRC reserves the right to require that such presentation or publication will not identify the NRC's sponsorship of the work.

NEW STANDARDS FOR CONTRACTORS WHO PREPARE NUREG-SERIES MANUSCRIPTS

The U.S. Nuclear Regulatory Commission (NRC) began to capture most of its official records electronically on January 1, 2000. The NRC will capture each final NUREG-series publication in its native application. Therefore, please submit your final manuscript that has been approved by your NRC Project Manager in both electronic and camera-ready copy.

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

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

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

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

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

DELIVERABLES/SCHEDULES AND/OR DELIVERY SCHEDULE

All reports shall be submitted electronically as a Microsoft Word or PDF file to the Project Officer and Contracting Officer.

Task 1 Deliverable Schedule:

Subtask 1) Provide a technical letter report 24 months after task initiation.

Subtask 2) a) Provide the SharePoint site within one month of task initiation.
b) Provide the SQUIRT2 Fortran module 4 months of task initiation.
c) Provide technical assistance as required.
Subtask 3) Provide technical letter report for Phase I-IV results 24 months after task initiation.
Subtask 4) Provide technical assistance as required.

TECHNICAL DIRECTION

Technical direction will be provided by the Program Manager, David Rudland, who can be reached at:

U. S. Nuclear Regulatory Commission
Mail Stop: CSB-05A24M
Washington, D. C. 20555-0001
Phone: (301) 251-7622
Fax: (301) 251-7420
Email: david.rudland@nrc.gov

Express mail should be sent to:
U. S. Nuclear Regulatory Commission
Mail Stop: CSB-05A24M
11545 Rockville Pike
Rockville, MD 20852-2738

TASK ORDER TERMS AND CONDITIONS

All Applicable Basic Award and FSS Clauses are hereby incorporated.

TASK ORDER/DELIVERY ORDER UNDER A GSA FEDERAL SUPPLY SCHEDULE CONTRACT (MARCH 2007)

The Period of Performance (PoP) for this requirement may extend beyond the Offeror's current PoP on their GSA Schedule. Offerors may submit proposals for the entire PoP as long as their current GSA Schedule covers the requested PoP, or their GSA Schedule contains GSA's "Evergreen Clause" (Option to Extend the Term of the Contract), which covers the requested PoP if/when the option(s) are exercised. Offerors are encouraged to submit accurate/realistic pricing for the requirement's entire PoP, even if the proposed GSA Schedule does not include pricing for the applicable option years, etc.

For proposal evaluation purposes, the NRC assumes that applicable Evergreen Clause Option(s) will be exercised and the NRC will apply price analysis, as applicable. It is in the best interest of the Offeror to explain major deviations in escalation, proposed in any Evergreen Clause option years. Resulting GSA task/delivery order option years subject to the Evergreen Clause will be initially priced utilizing the same rates proposed under the last GSA-priced year of the subject GSA Schedule. Upon GSA's exercise of the GSA Schedule option year(s) applicable to the Evergreen Clause, the NRC will modify the awarded task/delivery order to incorporate either the proposed pricing for the option years or the GSA-approved pricing (whichever is lower).

It is incumbent upon the Offeror to provide sufficient documentation (GSA-signed schedule, schedule modifications, etc.) that shows both the effective dates, pricing and terms/conditions of the current GSA Schedule, as well as Evergreen Clause terms/conditions (as applicable). Failure to provide this documentation may result in the Offeror's proposal being found unacceptable.