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NRC-03-03-038 Task Order No. 030 Page 2 of 12

In accordance with Section G.4, Task Order Procedures, of contract no. NRC-03-03-038, this definitizes Task Order No. 030. The effort shall be performed in accordance with the attached Statement of Work.

Task Order No. 030 shall be in effect from the Day of Award through July 31, 2008, with a cost ceiling of \$201,491.00. The amount of \$186,639.00 represents the estimated reimbursable costs, and the amount of \$14,852.00 represents the fixed fee.

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

Your contacts during the course of this task order are:

Technical Matter:

Bernard L. Grenier Project Officer 301-415-2726

Contractual Matters: Kala Shankar

Kala Shankar Contract Specialist 301-415-8054

Acceptance of Task Order No. 030 should be made by having an official, authorized to bind your organization, execute three copies of this document in the space provided and return two copies to the Contract Specialist at the address identified in Block No. 5 of the OF 347. You should retain the third copy for your records.

ACCEPTANCE: VP

TITLE

DATE

TO30

SUPPLEMENTAL INVOICING INFORMATION										
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NRC-03-03-038 T030

TASK ORDER TERMS AND CONDITIONS

NOT SPECIFIED IN THE CONTRACT

A.1 NRC Acquisition Clauses - (NRCAR) 48 CFR Ch. 20 A.2 Other Applicable Clauses

[] See Addendum for the following in full text (if checked)

[] 52.216-18, Ordering

[] 52.216-19, Order Limitations

[] 52.216-22, Indefinite Quantity

[] 52.217-6, Option for Increased Quantity

[] 52.217-7, Option for Increased Quantity Separately Priced Line Item

[] 52.217-8, Option to Extend Services

[] 52.217-9, Option to Extend the Term of the Contract

A.3 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.

Statement of Work for Task Order 30 (J3269) Under NRC Contract No. DR-03-03-038

Title: Review of the Wolf Creek License Renewal Application (LRA) -Scoping and Screening of Balance of Plant (BOP - Auxiliary and Steam and Power Conversion less HVAC and Containment) Systems and Components that are subject to Aging Management Review (AMR)

Technical Monitor: Raul Hernandez, 301/415-1079; E-mail = RXH1@NRC.GOV

TAC Number: To be assigned

BACKGROUND

Pursuant to Section 50.51 of Title 10 of the <u>Code of Federal Regulations</u> (10 CFR 50.51), licenses to operate nuclear power plants are issued by the U.S. Nuclear Regulatory Commission (NRC) for a fixed period of time not to exceed 40 years; however, these licenses may be renewed by the NRC for a fixed period of time including a period not to exceed 20 years beyond expiration of the current operating license. The Commission=s regulations in 10 CFR Part 54, (60 FR 22461) published on May 8, 1995, set forth the requirements for the renewal of operating licenses for commercial nuclear power plants (NPPs).

Applicants for license renewal are required by 10 CFR 54 (The License Renewal Rule) to perform an integrated plant assessment (IPA). As specified in 10 CFR 54.4, the applicant must identify the systems, structures, and components (SSCs) that are within the scope of license renewal (scoping). In addition, in accordance with 10 CFR 54.21(a)(1), the applicant must determine which of the SSCs are subject to an aging management review (screening). 10 CFR 54.21 (a)(2) requires the applicant to describe and justify the methods used to meet the requirements of 10 CFR 54.21(a)(1). Further, 10 CFR 54.21(a)(3) requires that, for each structure and component subject to an aging management review, the applicant must demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the current licensing basis (CLB) for the period of extended operation (aging management program or AMP). 10 CFR 54.21(b) requires that each application contain CLB changes, in the form of an amendment, during NRC review of the license renewal application (LRA). 10 CFR 54.21(c) requires the applicant to provide an evaluation of Time-limited Aging Analyses (TLAAs) including a list of TLAAs, as defined in 10 CFR 54.3 (special reviews for equipment which has aging assumptions integral to the design process). Lastly, 10 CFR 54.21(d) requires that each LRA include a FSAR supplement containing a summary description of the intended aging management programs (AMPs) for the period of extended operation.

For the purposes of this task order, the BOP systems include auxiliary systems and steam and power conversion systems less HVAC and containment systems.

OBJECTIVE

The objective of this task order is to obtain technical expertise from Information Systems Laboratories (ISL) to assist the in determining the adequacy of applicant's screening and scoping of balance of plant (BOP) systems and components as stated within the scope of the license renewal application for Wolf Creek Nuclear Power Plant pursuant to 10 CFR 54 requirements.

TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

Up to three Mechanical/Systems Engineers, one senior-level and two staff-level engineers, on

an intermittent, part-time basis, with experienced with commercial nuclear power reactors operations and specifically with BOP systems, with NRC License Renewal Regulations and technical and with the regulatory issues associated with BOP SSCs commonly found at commercial nuclear reactor plants.

The proposal should identify who will be designated as the Principal Investigator, and any other key personnel and the role they will play in performing the work.

WORK REQUIREMENTS AND SCHEDULE

Tasks

- In accordance with the requirements of Section 2.2 of NUREG-1800, perform a plant level scoping review of all the systems and structures assigned to the BOP Branch listed in the tables of LRA Section 2.2 and determine if any of the systems and structures that perform their intended functions as defined in 10 CFR 54.4 is missing. Prepare a request for additional or clarifying information. Using the screening criteria found in the Brunswick License Renewal Safety Evaluation Report, ADAMS accession number: ML 05355034 dated December, 2005, determine which systems and structures will be reviewed using the "tier-two" process and which will be reviewed using the "tier-one" process. Prepare a technical letter report.
- 2. In accordance with the requirements of Section 2.3 of NUREG-1800, perform a detailed review of all BOP systems assigned to the BOP Branch according to the level of importance specified in the NUREG and identify those aspects of the application that need additional or clarifying information. Identify systems, if any, that need regional inspection support to verify the results of scoping and screening described in the LRA. Prepare a technical letter report.
 - a. First-third of the review.
 - b. Second-third of the review.
 - c. Last-third of the review.

WORK REQUIREMENTS AND SCHEDULE

<u>Tasks</u>

3. Based on the review conducted in Task 2 and using

Scheduled Completion

Four weeks after authorization of work or after receipt of the license renewal application.

Four weeks after authorization of work.

Three weeks after completion of Subtask 2.a.

Three weeks after completion of Subtask 2.b.

Scheduled Completion

Three weeks after

the "shell¹" developed by NRC for preparing the SER, prepare a technical letter report.

- 4. On an as required basis, provide technical review and evaluation of additional information associated with clarifying the RAI or intent of the RAI, resolving an RAI or open items and addressing issues raised by NRC management or the ACRS. This task includes participation in telephone conference calls as may be required. If applicable, prepare a technical letter report².
- 5. If necessary, prepare for and travel to the plant site or the applicant's offices to review site documents relevant to the scoping and screening of BOP systems. Prepare a trip report.
- 6. Review the applicant's responses to the RAIs and identify those issues that have been resolved along with the basis for resolution and those items for which further information may be needed, but for which resolution may not be readily forthcoming, i.e, the open items remain. Prepare a technical letter report, to include those items addressed in Tasks 4 and 5, above.

a. Draft report.

b. Incorporate NRC comments and prepare the final report.

- Prepare for and travel to NRC HQ to participate in the ACRS Subcommittee meeting scheduled for August, 2007; prepare a trip report.
- 8. Participate via telephone conferencing in the ACRS full committee meeting scheduled for November, 2007; prepare a technical letter report.

LEVEL OF EFFORT

The estimated level of effort in professional staff days apportioned among the tasks is as follows:

- ¹ If, for some reason, the "shell" or template for preparing the SER input is not yet available at the beginning of work on this Task, the evaluation is to be prepared and inserted in the SER shell when it becomes available. The completion date of this Task may need to be changed if the "shell" is not available on a timely basis.
- ² As mutually agreed upon, if a technical letter report is not required, document the request for assistance, the results provided and the date provided in the "<u>Work</u> <u>Accomplished During the Period</u>" section of the Monthly Business Letter Report.

completion of Task 2.

As mutually agreed ; upon each request will be documented in an E-mail by the Technical Monitor.

One week after the trip.

Four weeks after receipt of the applicant's responses to the RAIs.

Two weeks after receipt of NRC comments.

One week after the meeting.

One week after the meeting.

Tasks	Level of Effort (days)					
	FY-06	<u>FY-07</u>	<u>FY-08</u>			
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7. 8. Total	2	4 158	$\frac{1}{1}$	= 161 days		
Project management Subtotal	02	<u>13</u> 171	0	= 174 days		
Program support	_0	32	0			
Total	2	203	1	= 206 d <u>a</u> ys		

PERIOD OF PERFORMANCE

The projected period of performance is 22 months from authorization of work.

DELIVERABLES

Technical Reporting Requirements

NOTE: All reports are to be submitted electronically using WordPerfect 10.0 (font: Arial regular 11 point) to the Technical Monitor with a copy provided to the Project Officer. In all correspondence, include identifying information: JCN No., Task No., the applicant, the facility, TAC No., and NRC/NRR Division and Branch.

- At the completion of Task 1, submit a technical letter report that contains the identified systems and structures that may be missing or mis-categorized and describe the need for the RAIs and the bases for the RAI. The report will also consist of a listing of those systems and structures for which a "tier-one" or a "tier-two" review is recommended, the basis for the recommendation, the review schedule consistent with the milestones established under Task 2 and the assigned reviewer to each system or structure.
- 2. At the completion of Subtasks 2.a., 2.b. and 2.c., submit a technical letter report that contains the list of RAIs the <u>basis</u> or <u>bases</u> for the RAIs clearly articulated.

DELIVERABLES (CONTINUED)

Technical Reporting Requirements

3. At the completion of Task 3, submit a technical letter report that contains the SER input following the format contained in the Safety Evaluation Report Template (to be provided) of the results of the evaluation of the review in Task 2. The SER input is to consist of the full

text of the proposed NRC safety evaluation report. Where additional or clarifying information is needed, i.e., RAIs, this is to be noted as part of the text. **The RAI question or request for additional information is to be bolded** for clear identification using the RAI reference number, if available.

- 4. For Task 4, at the completion of each request for technical assistance to address an RAI, close an open item or to address a management comment or concern, submit a technical letter report that contains the results of the work performed in the format suitable for incorporation into the safety analysis report, if applicable. If the submission of a technical letter report is not required, a brief summary of the request, results provided and date provided is to be described in the Monthly Business Letter Report.
- 5. At the completion of Task 5, submit a trip report that contains a summary of major discussion points, decisions and agreements reached, information provided by the applicant, open issues and follow-up actions, responsible party/individual(s) for the action(s), action(s) due date, and a list of attendees.
- 6. At the completion of Task 6, submit a technical letter report that contains the results of the review and evaluation of the RAI responses, essentially updating the report prepared under Task 2 (which will address 100% of the required systems in the review, i.e., work performed under Tasks 4 and 5). Within the report, identify those aspects of the application that are still considered as "Open Items" and the basis for why they remain open items.
- 7. At the completion of Task 7, submit a technical letter report that contains a summary of major discussion points, decisions and agreements reached, information provided by the applicant, open issues and follow-up actions, responsible party/individual(s) for the action(s), and the action(s) due date.
- 8. At the completion of Task 8, submit a technical letter report that contains a summary of the information provided and the date provided.

Monthly Business Reporting Requirements

A budget is to be developed for each Task based on the agreed upon allocation of the level of effort among the Tasks. Separate expenditures for each Task will be reported in the MBLR against the budget using the following format:

Authorize	ed Cost Ceiling: \$ _		Funds Obligated to date: \$			
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DELIVERABLES (CONTINUED)

Monthly Business Reporting Requirements

A monthly expense variance greater than 10 percent must be explained in the

"Problem/Resolution" section.

NOTE: Once a variance reaches 15 percent, prior approval is required in writing from the NRC Project Officer, or a Modification is to be processed.

MEETINGS AND TRAVEL---

One two-person, five-day trip to the plant site or the applicant's corporate offices located in Burlington, KS.

One one-person, two-day trip to NRC Headquarters.

NRC FURNISHED MATERIAL

Compact Disk containing the Wolf Creek LRA will be provided at least four weeks prior to the milestone due date for Task 1.

See Attachment 1 for other sources of information and documents needed.

OTHER APPLICABLE INFORMATION

License Fee Recovery

All work specified in this SOW is license fee recoverable and must be charged to TAC number indicated above.

Assumptions and Understandings

It is assumed that the documents listed **Attachment 1** or the appropriate reference locations (i.e. NRC web page address) can be accessed directly by the contractor.

It is understood that the review of this LRA will be conducted in such a manner that the majority of SER development will occur during the first six-month period, subject to unavoidable delays in obtaining needed information.

It is understood that the review goal is to evaluate the LRA in such a way that the documentation that results consists of input to be used in the NRC safety evaluation report and identifies, simultaneously and on a continuing basis as needed, the need for RAIs. That is, where "gaps " exist in the report, there will exist an RAI or, ultimately, an initial open item. Initial open items are to eventually be resolved between the applicant and the NRC staff. See the specific reporting requirements that are defined in the Technical Reporting Requirements section.

Assumptions and Understandings (continued)

The level of effort assumption for Tasks 1, 3 and 4 is based on the average level of effort spent on this type of effort on past LRA reviews.

The level of effort assumption for Task 2 is based on the average of coming up with 100 RAIs which will take, on the average, four hours to review, evaluate and prepare the RAI documentation.

The level of effort assumption for Task 4 is based on addressing/resolving approximately 60 RAIs or open items which will take, on the average, five hours each to review, evaluate and prepare the documentation.

The level of effort assumption for Task 5 is based on one half day for travel to the site, four days at the site and return travel and one half day for report writing.

It is understood that level of effort for Tasks 6, 7 and 8 is best estimate and the total is dependent on plant responses and comments from the ACRS.

WEB ADDRESS FOR NRC FURNISHED MATERIAL AVAILABLE ON-LINE

The following NRC furnished materials are available on-line at the web addresses provided below:

- License Renewal Rule, 10 CFR Part 54, "Requirements for Renewal of Operating Licenses For Nuclear Power Plants," as amended in 1995.
- Standard Review Plan for License Renewal (SRP-LR) NUREG 1800, Revision 1 dated September 2005.
- Regulatory Guide 1.188, Revision 1 dated September 2005, AStandard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses.@
- Nuclear Energy Institute Guidance in NEI- 95-10, ANuclear Energy Institute (NEI) Guidance Document NEI 95-10, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54--The License Renewal Rule," Revision 6, dated June, 2005.

The quick link to the various references to Title 10 of the Code of Federal Regulations (10 CFR) is shown below:

http://www.nrc.gov/reading-rm/doc-collections/cfr/

The quick link to the various license renewal references and guidance documents is shown below:

http://www.nrc.gov/reactors/operating/licensing/renewal/guidance.html