

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 7

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

BPA NO. DR-03-06-046

1. DATE OF ORDER SEP 22 2006		2. CONTRACT NO. (If any)		6. SHIP TO:		
3. ORDER NO. T002		MODIFICATION NO.		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission		
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div of Contracts Two White Flint North - MS T-7-I-2 Attn: Jennifer A. DeFino, (301) 415-6714 Washington, DC 20555		4. REQUISITION/REFERENCE NO. NRC-03-06-046-T2		b. STREET ADDRESS		e. ZIP CODE 20555
7. TO:		c. CITY Washington		d. STATE DC		f. SHIP VIA
a. NAME OF CONTRACTOR ARES CORPORATION		b. COMPANY NAME		8. TYPE OF ORDER		
c. STREET ADDRESS 1440 CHAPIN AVE STE 390		d. CITY BURLINGAME		e. STATE CA		f. ZIP CODE 940104058
9. ACCOUNTING AND APPROPRIATION DATA B&R: 620-15-111-104 Job Code: J-3304 BOC: 252A Apprn. No. 31X0200.620 Obligate: \$37,745.09 Contractor DUNS No. 807721980		10. REQUISITIONING OFFICE NRR		<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY 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. Except for billing instructions on the reverse, this delivery/task 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.		
11. BUSINESS CLASSIFICATION (Check appropriate box(es))		12. F.O.B. POINT N/A				
<input checked="" type="checkbox"/> a. SMALL <input type="checkbox"/> d. WOMEN-OWNED		<input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> e. HUBZone		<input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> f. EMERGING SMALL BUSINESS <input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED		
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS N/A
a. INSPECTION		b. ACCEPTANCE				

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)
	ISSUANCE OF TASK ORDER NO. 002 TITLE: TECHNICAL ASSISTANCE IN SUPPORT OF THE RESOLUTION OF GENERIC SAFETY ISSUE (GSI) 191 FOR PRAIRIE ISLAND TOTAL ESTIMATED COST: \$37,745.09 PERIOD OF PERFORMANCE: 09/25/2006 - 12/29/2006 CONTRACTOR SIGNATURE REQUIRED ON PAGE 2 OF 2					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		\$37,745.09	17(h) TOTAL (Cont. pages) 17(i). GRAND TOTAL
	21. MAIL INVOICE TO:							
	a. NAME U.S. Nuclear Regulatory Commission Division of Contracts							
	b. STREET ADDRESS (or P.O. Box) Mail Stop: T-7-I-2 ATTN: DR-03-06-046							
c. CITY Washington			d. STATE DC	e. ZIP CODE 20555		\$37,745.09		

22. UNITED STATES OF AMERICA
BY (Signature)

Phyllis Bower

23. NAME (Typed)
Donald A. King
Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

REPLATE ADJUST
AUTOMATICALLY LOCALS PRODUCTION
PREVIOUS EDITION NOT USABLE

SUNSI REVIEW COMPLETE

FORM 47 (REV. 3/2005)
FEDERAL ACQUISITION REGULATION (FAR) 48 CFR 53.213(e)

In accordance with Section A.10, Task Order Procedures, of blanket purchase agreement number DR-03-06-046, this executes Task Order No. 002. The effort shall be performed in accordance with the enclosed Statement of Work (Attachment 1).

Task Order No. 002 shall be in effect from 09/25/2006 through 12/29/2006, with a cost ceiling of \$37,745.09. See Attachment 2 for a cost breakdown.

The following individual is considered to be essential to the successful performance for work hereunder: [REDACTED]
[REDACTED] The Contractor agrees that such personnel shall not be removed from the effort under the task order without compliance with Contract Clause A.8, Key Personnel.

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 Matters:	Bernard Grenier	Contractual Matters:	Jennifer DeFino
	Project Officer		Contract Specialist
	(301) 415-2726		(301) 415-6714

Acceptance of Task Order No. 002 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. You should retain the third copy for your records.

ACCEPTED: Task Order No. 002

Kathryn Naassan KATHRYN NAASSAN
NAME

VICE-PRESIDENT
TITLE

9/22/06
DATE

Statement of Work for
Task Order 2 under DR-04-06-046

Title: Evaluation of the Technical Adequacy of New PWR Sump Design of the Prairie Island Response to Generic Letter (GL) 2004-02

Technical Monitor: Ralph Architzel, office: 301/415-2804; cell 301-728-2851;
E-mail: REA@NRC.GOV

TAC Number: Unit 1 = MC4707; Unit 2 = MC4708

BACKGROUND

In June, 2003, the NRC identified Generic Safety Issue (GSI)-191, involving the potential for clogging of recirculation sump screens in pressurized water reactors (PWRs). Based on the findings of the GSI-191 ("Assessment of Debris Accumulation on PWR Sump Performance") study conducted by the NRC Office of Nuclear Regulatory Research on ECCS suction/containment sump clogging in PWRs, the NRC staff issued a Safety Evaluation (SE) and a Generic Letter (GL) 2004-02 pertaining to the PWR sump design guideline report developed by the Nuclear Energy Institute (NEI) in conjunction with the PWR Owners group. Through this GL and using the guidance approved by the SE, licensees are requested to proceed to resolve the GSI-191 issue for each PWR plant. The NRC staff, through audit of licensees' responses to GL-2004-02, is reviewing implementation of the GL, specifically of the new sump designs in accordance with NRC requirements.

NRC staff has decided to audit the Prairie Island Nuclear Generating Plant, Units 1 and 2, to verify and confirm that their new sump strainer performance is in compliance with the 10 CFR 50.46.

OBJECTIVE

The objective of this task order is to obtain engineering expertise from ARES Corporation to assist the staff in determining the technical adequacy of the GSI-191 Sump Clogging Issue analysis of the Prairie Island Nuclear Generating Plant.

TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

One senior level mechanical engineer with extensive experience on PWR LOCA analyses and containment analysis. This includes areas such as LOCA break selection, debris generation, debris characteristics, debris transport (including the emerging area of sump and containment pool "near-field effect"), recirculation water hold-up volumes, strainer design and performance, strainer head-loss and vortexing, and ECCS and containment spray pump net-positive suction head (NPSH).

WORK REQUIREMENTS

Tasks

Completion Schedule

1. Travel to NRC HQ and participate in an orientation meeting with the licensee scheduled for October 4, 2006, to become familiar with the licensee's new strainer design and approach in the areas of debris generation, transport and head loss evaluation. Prepare a trip report.

Two weeks after the meeting (October 18, 2006- Tentative).

2. Based on the guidance in the NRC Safety Evaluation for GSI-191 and NRC Regulatory Guide 1.82, Revision 3, review Prairie Island's proposed design based on the available documents and identify deficiencies and the need for additional or clarifying information to be obtained from the licensee. Discuss the results by telephone with the Technical Monitor and provide a short summary in the MBLR.

Two days prior to the audit trip scheduled for the week of October 23, 2006.

2. Travel to the Prairie Island Nuclear Generating Plant (currently planned first day onsite is October 23, 2006) to assist the NRC in the conduct of an audit of the new Prairie Island strainer design in the areas of ECCS and containment spray recirculation and associated analyses. Based on NRC guidance documents referenced above, and any further review guidance provided by the NRC, and information gathered during the audit from the licensee or its contractors or vendors, prepare a technical letter report.

a. Draft.

Two weeks after completion of the audit.

b. Incorporate NRC comments and prepare the final report.

One week after receipt of NRC comments.

LEVEL OF EFFORT

The estimated level of effort in professional staff hours apportioned among the tasks are as follows:

<u>Tasks</u>	<u>Level of Effort (hours)</u>
1.	24.0
2.	32.0
3.	144.0
Total	200.0

PERIOD OF PERFORMANCE

The period of performance shall be from September 25, 2006 through December 29, 2006.

DELIVERABLES

Technical Reporting Requirements

NOTE: All reports are to be submitted electronically using WordPerfect 10.0 (Font Arial regular 11 point) or compatible software program to the Technical Monitor with a copy provided to the Project Officer. In all correspondence, include the following information: JCN No., Task No., the applicant, the facility, TAC No., and NRC/NRR Branch: Safety Issue Resolution Branch (SSIB)

1. At the completion of Task 1, submit a trip report that contains a summary of the significant highlights of the meeting reflecting insights on possible strengths and weaknesses of the information presented, any responses to staff questions raised during the meeting and actions due and by whom; and when, if known.
2. At the completion of Task 2., inform the Technical Monitor via telephone of any need for additional information, and specific technical areas to be targeted during the audit, and the basis or bases for these technical opinion(s). Provide a summary of the work performed and results attained in the Monthly Business Letter Report.
3. At the completion of Task 3., submit a technical letter report, draft and final as appropriate, that contains a detailed technical adequacy evaluation of the licensee's new ECCS, containment spray, sump and strainer design (Generic Letter 2004-02 corrective actions), including the bases for the conclusions. Provide a list of any outstanding issues ("open items") with the basis or bases clearly articulated, including the significance of these outstanding issues relative to a conclusion of licensee GL 2004-02 corrective action adequacy.

MEETINGS AND TRAVEL

One one-person, two and a half day trip to NRC HQs.

One one-person, five and a half day trip to the Prairie Island reactor site located near Red Wing, MN.

NRC-FURNISHED MATERIALS

The NRC Safety Evaluation Report, "GSI-191 SE, Revision 0, "Pressurized Water Reactor Containment Sump Evaluation Methodology" dated December 6, 2004, and GL-2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated September 13, 2004, can be found at the following web site:

<http://www.nrc.gov/reactors/operating/ops-experience/pwr-sump-performance.html>

The licensee's submittal (on CD) will be overnight mailed to the ARES Principal Investigator upon initial implementation of this task order.

An Audit Plan will be provided by the Technical Monitor upon initial implementation of this task order.

NOTE: These documents contain licensee information which is provided for audit purposes, may be proprietary, and they must be safeguarded against unauthorized disclosure. After completion of work, the document(s) should either be destroyed or returned to NRC. If they are destroyed, please confirm this in an E-mail to the Technical Monitor with a copy to the Project Officer and include the date and manner in which the document(s) was destroyed.

OTHER APPLICABLE INFORMATION

License Fee Recovery

The work to be performed under this task order is not licensee fee recoverable.

Assumptions and Understandings

The level of effort assumption for Task 1 is based on one day travel to NRC, half days for the meeting, one day for return travel, and half a day for report writing.

The level of effort assumption for Task 2 is based the NRC judgment of what it should take to perform a thorough review of the available documentation, at the time, prior to the audit.

The level of effort assumption for Task 3 is based on one-half day for travel to the site, five days for the audit and return trip from the site, and twelve and a half days for completion of the evaluation, report writing and resolving NRC comments.

SCHEDULE OF COSTS

COST ELEMENT	HOURLY COST	HOURS	TOTAL
Labor:			
a) Program Manager/Senior Consultant	\$165.49	200	\$33,098.00
b) Administrative	\$43.57	38.4	\$1,673.09
Travel			\$2,800.00
Other Direct Costs			\$174.00
TOTAL			\$37,745.09