

# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

OCT 1 5 2007

OAO Corporation 2277 Research Boulevard Mailstop 4G ATTN: Joyce L. Lambert Rockville, MD 20850

SUBJECT: TASK ORDER NO.11 ENTITLED "Database Administration", UNDER DELIVERY ORDER NO. DR-33-07-358

Dear Ms. Lambert:

In accordance with Section C.27 entitled "Task Order Procedures," of the subject delivery order, this letter hereby definitizes Task Order 11. This effort shall be performed in accordance with the enclosed Statement of Work and OAO Corporation's cost estimate dated, September 18, 2007, which is made a part hereof of this order.

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

- Project Manager

The Contractor agrees that such personnel shall not be removed from the effort under the task order without compliance with the Key Personnel Clause (2052.215-70) of the delivery order.

Task Order No. 11 shall be in effect from September 26, 2007, through September 25, 2008, with a total cost ceiling of \$541,002.47.

This Task Order No. 11 obligates funds in the amount of \$238,677.00. The obligated amount shall, at no time, exceed the task order cost ceiling. When and if the amount(s) paid and payable to the Contractor hereunder shall equal the obligated amount, the Contractor shall not be obligated to continue performance of the work unless and until the Contracting Officer shall increase the amount obligated with respect to this task order. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor's risk.

Your contacts during the course of this task order are:

Technical Matters: Harry Kromer - (301) 415-6817

Tu Tran - 301-415-7119

Contractual Matters: Richard Bright - (301) 415-8086



Page 2 Delivery No. DR-33-07-358 Task Order 11

\*ACCOUNTING AND APPROPRIATION DATA Task Order No. 11 is as follows:

B&R: 710-15-5F1-340 JC: J1272 BOC: 2574 APPN: 31X0200.710 COM: 10770799C \$238,677.00

### \*ADMINISTRATIVELY TRANSFERRED FUNDS FROM BASE CONTRACT

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

Please indicate your acceptance of this task order by having an official who is authorized to bind your organization, execute three copies of this document in the spaces provided below and return two copies to the Contract Specialist. You should retain the third copy for your records. If you have any questions regarding the subject task order, please contact Richard Bright, Contract Specialist on (301) 415-8086.

Sincerely,

Elen Jernell, Contracting Officer

Contract Management Branch No. 3

Division of Contracts
Office of Administration

ACCEPTED: Joyce L Lamber
Joyce L. Lambert NAME
NAME
CONTRACTS
TITLE
10/23/2007
DATE

Task Order 11	Database Ad stration	BASE YEAR RATE	BASE YEAR HOURS	BASE YEAR AMOUNT
010	010 Program Manager			\$0.00
020	020 Project Manager			the same of the sa
030	030 Quality Assurance Manager			\$0.00
050	050 Principal BPR Specialist		-	\$0.00
060	060 Senior BPR Specialist		-,-	\$0.00
070	070 Principal Systems Architect		-	\$0.00
080 090	080 Senior Systems Architect			The second secon
100	090 Principal Information Engineer 100 Senior Information Engineer			\$0.00
110	110 Senior Functional Analyst			\$0.00
130	130 Systems Analyst 5			\$0.00
140	140 Systems Analyst 4			\$0.00
150	150 Systems Analyst 3			\$0.00
160	160 Systems Analyst 2		_	\$0.00
170	170 Systems Analyst 1			\$0.00
210	210 Computer Programmer 7			\$0.00
220	220 Computer Programmer 6		-	\$0.00
230	230 Computer Programmer 5			\$0.00
240	240 Computer Programmer 4			\$0.00
250	250 Computer Programmer 3		· <u>-</u>	\$0.00
251	251 Computer Programmer 2		_	\$0.00
260	260 Support Specialist 6		-	\$0.00
270	270 Support Specialist 5		-	\$0.00
280	280 Support Specialist 4		_	\$0.00
290	290 Support Specialist 3		-	\$0.00
310	310 Engineer 5			\$0.00
320	320 Engineer 4		-	\$0.00
350	350 Sr Computer Security Specialist		-	\$0.00
360	360 Computer Security Specialist		-	\$0.00
370	370 Operations Manager		-	\$0.00
430	430 Communications Network Engineer		-	\$0.00
520	520 Apps Systems Analysis and Program Manager		-	\$0.00
530	530 Apps Systems Analysis and Program Sup	140	_	\$0.00
540	540 Apps Systems Analyst/Programmer - St Spec	4 3		\$0.00
550	550 Apps Systems Analyst/Programmer - Lead			\$0.00
560	560 Telecommunications/Internetworking Designer		-	\$0.00
570	570 Network Planner	1000	-	\$0.00
580	580 Network Operations Specialist		-	\$0.00
590	590 Telecommunications Engineer - Senior		-	\$0.00
600	600 Telecommunications Engineer - Inter	1.25	<u>-</u> :	\$0.00
610	610 Telecommunications Systems Analyst		-	\$0.00
620	620 Network Controller		-	\$0.00
630	630 Telecommunications Engineer/Analyst		-	\$0.00
640	640 Network Control Technician		-	\$0.00
650	650 Telecommunications Analyst/Tech-Senior		<u> </u>	\$0.00
700	700 Documentation Specialist		-	\$0.00
710	710 Documentation Coordinator		-	\$0.00
720	720 Technical Expert - Level 4		-	\$0.00
730	730 Technical Expert - Level 3		-	\$0.00
	740 Technical Expert - Level 2		-	\$0.00
750 760	750 Technical Expert - Level 1 760 Information Services Consultant		-	\$0.00 \$0.00
The second secon	<u> </u>		-	
	ON-SITE			
105	105 Senior Information Engineer Onsite	;		1
265	265 Support Specialist 6 Onsite			\$0.00
275	275 Support Specialist 5 Onsite		-	\$0.00
285	285 Support Specialist 4 Onsite			\$0.00
525	525 Apps Systems Analysis and Program Manager Onsite	i :		
535	535 Apps Systems Analysis and Program Sup Onsite		1	00.00
545	545 Apps Systems Analyst/Programmer - St Spec Onsite			\$0.00
555	555 Apps Systems Analyst/Programmer - Lead Onsite		<u> </u>	\$0.00
715 745	715 Documentation Coordinator Onsite 745 Technical Expert - Level 2 Onsite		-	\$0.00 \$0.00
740				
·	IOIA	IL		\$541,002.47

# A. Background

The NRC has taken the direction of reengineering mainframe computer-based systems using client server and 3Tier Web technologies. To date, the following systems are in production—RPS and its subsystems, PMNS, AMS, HFIS, OIMIS, EATS, PASS/PAM, OLTS, TRIM, RITS, GLTS, HRMS, and NRCCC. Additional systems are being developed by NRC Contractors under separate task orders (one for each application). This SOW identifies requirements for the database administration support of the Sybase Adaptive Server Enterprise (ASE), the Microsoft SQL Server, and the databases installed at the NRC headquarters and regional sites.

# B. Scope

This SOW defines a baseline level of effort for database administration and management activities associated with supporting Sybase RDBMS and Microsoft SQL Server. The Contractor shall provide the necessary onsite resources to provide comprehensive database administration services to OIS/BPIAD to perform routine and specific services upon request to the production, test and acceptance, and the development database environments. The scope of this task is to utilize the COTS software in conjunction with AIX, SUN Solaris, Windows, Sybase, and MS SQL Server software to design, develop, implement, maintain, and support the NRC-distributed database environment using SYBASE ASE, SYBASE Replication Server, and MS SQL Server.

Typical routine activities will be done during normal work hours (i.e., during the hours of 7 AM to 7 PM). Maintenance and enhancement activities will be done outside of prime use hours (i.e., hours before 7 AM or after 7 PM). Task to be performed outside of prime use hours shall need approval from Task Order Manager for overtime or compensation time.

#### C. Statement of Work

The work shall include, but is not limited to, the following tasks:

- (1) The Contractor shall perform distributed database administration activities to ensure optimum database performance by monitoring and fine tuning of the Sybase and Microsoft SQL Server environments.
- (2) The Contractor shall perform routine maintenance of the client server database environment to ensure the system is up and running, accessible to users on a 12 h/d basis. If the system fails, downtime is to be kept to a minimum.
- (3) The Contractor shall perform database consistency check and database backup and review the execution log to determine whether the backup database is sufficient to ensure a proper database recovery.
- (4) The Contractor shall perform database administration activities to create databases, tables, indexes, and stored procedures. In addition, the Contractor will add ASE log-in IDs, database groups, database users, and grant group and users permissions.

- (5) The Contractor shall apply EBF and/or updated software release (SWR) to the Sybase and Microsoft SQL Server environments.
- (6) The Contractor shall install and/or upgrade Sybase ASE releases to the Sybase environment and Microsoft SQL Server releases to the MS SQL Server environment.
- (7) The Contractor shall install and/or upgrade Sybase Replication Server to the Sybase Replication Server environment.
- (8) The Contractor shall integrate Docs Open databases and/or software into the Sybase ASE with instructions from the application development contractor.
- (9) The Contractor shall work with the application development staff to perform database and software migration from the development to the test and acceptance to the production environment for enhancements to existing applications and for deployment of new applications.
- (10) The Contractor shall support databases in the production environment for client server applications.
- (11) The Contractor shall support databases in the development, as well as in the test & acceptance, environment, including databases which are developed in-house or off-the-shelf purchased computer databases.
- (12) The Contractor shall test and verify the connectivity between the new releases of Sybase Open Client, the MS SQL DB-Lib, and ODBC to the Sybase ASE and the Microsoft SQL Server from the client workstation applications to determine the software upgrade validity.
- (13) The Contractor shall perform emergency problem source identification and resolution.
- (14) The Contractor shall perform hardware capacity planning and upgrade based on additional system requirements.
- (15) The Contractor shall perform specific services upon request which are to be determined at times of impact.
- (16) The Contractor shall maintain and keep the information up-to-date for all server binders which contain information related to each RS/6000 computer, SUN computer, Sybase ASE, Microsoft SQL Server, and databases residing in the Sybase ASE and Microsoft SQL Server.
- (17) The Contractor shall review current database support documentation and shall document the database administration functions which are not yet documented in a format that other database administrators will be able to follow and perform the task.

- (18). The Contractor shall work with OIS/ICOD staff and its contractor to ensure that the RS/6000 AIX Operating System, the SUN OS, and the Windows OS standards set by OIS/ICOD are followed, the interrelationship between AIX, SUN OS, Windows OS, Sybase and Microsoft SQL Server database administration support is coherent, and the standards set by the OIS Client Server and 3Tier Committees will be followed.
- (19) The Contractor shall complete emergency work within 2 hours of notification, unless a longer time is approved by the NRC TOM. Nonemergency work shall be completed within 3 days of notification, unless a longer time is approved by the NRC TOM.
  - (20) The Contractor shall participate in the task of upgrading the workstation Open/Client software from version 12.0 to version 12.5.
- (21) The Contractor shall assist application developers with table design and writing efficient stored procedures. The Contractor shall perform SQL queries performance tuning for users and application developers with the approval from the NRC TOM.
- (22) The Contractor shall upgrade the Sybase ASE from release 12 to release 12.5, and the Sybase Replication Server from release 12 to release 12.5. The Contractor shall develop an Upgrade Action Plan and modify server document binders to reflect the server's new configuration.
  - (23) The Contractor shall document and support the HRMS/RPS/RITS interface 3 program.
  - (24) The Contractor shall assist in determining the best tools to use in supporting the ASE and Microsoft SQL Server environment based on the available software in the NRC toolkit.
  - (25) The Contractor shall assist with performing testing of new database software and tools that may be recommended for inclusion in the NRC Toolkit. The test finding shall be documented in the format required for submission to the NRC toolkit for approval.
  - (26) The Contractor shall write the installation/administration/operations documentation for the ASE and MS SQL Server. The Contractor shall develop a template to be used for the database administration support document. All documents shall be prepared using the current agency's word processing software, which at the time this task order was written is WordPerfect 10.
  - (27) Upon request, the Contractor shall prepare and present oral briefings on the progress of work, unique or interesting technical findings, results of research, and presentation of draft conclusions or reports.

On the newly developed 3Tier platform, tasks to be performed under this SOW shall be on the development platform only, unless it is directed by the NRC TOM.

#### D. Client Server Hardware/Software Platform

- (1) Hardware: IBM RS/6000, models H70, H80, P660, 595, 591, 590, 580, 570, 390, 370, and 360. All servers are running AIX 5.x.
- (2) Hardware: Sun models 5500, 3500, 450, and E220R. The Sun OS is Solaris 2.8.
- (3) Hardware: Dell 26 or Del 28 series. The Windows OS is W2K or Windows 2003.
- (4) Software: Microsoft SQL Enterprise Manager, release 8.0
- (5) Software: Sybase ASE, release 12.0.0.5
- (6) Software: Sybase Replication Server, release 12.1
- (7) Software: SQR Enterprise for IBM AIX
- (8) Software: PeopleSoft bundle software for Sun OS
  - (9) Development software: PowerBuilder, ColdFusion bundle, Visual Basic, Delphi, Docs Open, MS Access, SQR Enterprise
- (10) CASE software: ERwin.
- (11) Client workstation: 486/33 MHZ or better workstation with a minimum of 128 MB of RAM and 20 GB hard disk
- (12) Client O/S software: Windows XP.
- (13) Client application software: PowerBuilder, Visual Basic, Delphi, Docs Open, MS Access, Peoplesoft
- (14) LAN: Novell Netware 6.x supporting multiple concurrent protocols, including TCP/IP and IPX/SPX

# E. Training

The Contractor shall provide NRC Database Administrator training during implementation of revisions, as well as follow-on Database Administrator training as necessary (in conjunction with system software upgrades, hardware changes) to ensure the ability of NRC database administrators to administer the revised systems.

#### F. Expertise/Skills

The Contractor shall provide two people on site to support the NRC's database administration functions. The normal working hours for this delivery order are from 7 AM

to 7 PM. When required and needed, database administration functions will be performed outside the normal 7 AM to 7 PM workdays and/or on the weekends.

The Contractor shall provide personnel with the following skills/experiences:

- (1) demonstrated ability to perform problem source identification and resolution
- (2) excellent communications and interpersonal skills
- (3) competency in writing user and technical documentation, as demonstrated through prior assignments, using the supported software of choice for the documentation, WordPerfect 10
- (4) demonstrated ability to revise/enhance client server solutions, including hardware, software, and communications
- (5) demonstrated ability to maintain an enterprise client server and n-tier database environment
- (6) Knowledge of Unix, RS/6000 AIX, Sun Solaris, Windows XP, Windows 2000 and 2003, and TCP/IP
- (7) knowledge of CASE technology (ERwin)
- (8) knowledge of Structured Query Language (SQL), DML/DDL, and Transact-SQL
- (9) knowledge of C, Unix scripts, SQR Enterprise, PowerBuilder, Visual Basic, Delphi, MS Access, Open Client, and ODBC software
  - (10) knowledge of Sybase ASE, Sybase Replication Server, and MS SQL Server, including, preferably, a Sybase Certified Professional on ASE 12.x and MS SQL Server Certified Professional on 8.x
- (11) knowledge of client server connectivity through LAN, TCP/IP, Open Client, and ODBC.

## G. Reporting Requirements

It is anticipated that the NRC will conduct one meeting every 2 weeks with the Contractor personnel. The meetings will be conducted at the NRC's Rockville, Maryland, offices. No other unique reporting is required which exceeds that which would be presented in the Biweekly Status Report.

For a specific assignment with start and end dates, the Contractor shall submit a detailed Project Management Plan. The plan will show tasking, milestones, staff assigned, and the projected number of hours estimated to complete each task.

#### H. Place of Performance

The Contractor shall primarily perform work on site at NRC Headquarters.

# I. Task Order Manager

The manager for this task order is Tu T. Tran, (301) 415-7119.