

| | | | |
|--|--|--|--|
| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | 1 CONTRACT ID CODE | PAGE 1 OF 4 PAGES |
| 2 AMENDMENT/MODIFICATION NO 038 | | 3 EFFECTIVE DATE JAN 29 2003 | 4 REQUISITION/PURCHASE REQ NO 12/31/02 CIO-01-182-(54-60) |
| 5 PROJECT NO (If applicable) | | 7 ADMINISTERED BY (If other than Item 6) | |
| 6 ISSUED BY U S. Nuclear Regulatory Commission Division of Contracts Attn Sally Adams, MailStop T-7-I-2 Contract Mgmt. Center 1 Washington DC 20555 | | U.S. Nuclear Regulatory Commission Div of Contracts Two White Flint North - MS T-7-I-2 Washington, DC 20555 | |
| 8 NAME AND ADDRESS OF CONTRACTOR (No street, county, State and ZIP Code) | | (X) 9A AMENDMENT OF SOLICITATION NO | |
| OAO Corporation ATTN George Cobb Program Manager 30 West Gude Drive, Suite 300 Rockville MD 20850 | | 9B DATED (SEE ITEM 11) | |
| CODE | | 10A MODIFICATION OF CONTRACT/ORDER NO GS-35F-4524G NRC-33-01-182-001 | |
| FACILITY CODE | | 10B DATED (SEE ITEM 13) X 06-18-2001 | |

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods

(a) By completing Items 8 and 15, and returning _____ copies of the amendment, (b) By acknowledging receipt of this amendment of each copy of the offer submitted, or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12 ACCOUNTING AND APPROPRIATION DATA (If required) See pages 3 and 4 of modification.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

| | |
|-----|--|
| (X) | A THIS CHANGE ORDER IS ISSUED PURSUANT TO (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO IN ITEM 10A |
| | B THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14 PURSUANT TO THE AUTHORITY OF FAR 43.103(b) |
| | C THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF |
| X | D OTHER (Specify type of modification and authority) FAR 212-4, Section F 8, and mutual agreement of the parties. |

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 2 copies to the issuing office.

14 DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings including solicitation/contract subject matter where feasible)

See pages 2-4 for description of modification

| | | | |
|--|-----------------|---|-----------------|
| 15A NAME AND TITLE OF SIGNER (Type or print) | | 16A NAME AND TITLE OF CONTRACTING OFFICER (Type or print) | |
| William M. Pastorek - Contracts Man | | Joyce A. Fields Contracting Officer | |
| 15B CONTRACTOR/OFFEROR | 15C DATE SIGNED | 16B UNITED STATES OF AMERICA | 16C DATE SIGNED |
| (Signature of person authorized to sign) | 01/29/03 | BY Joyce A. Fields (Signature of Contracting Officer) | 01-21-2003 |

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A as heretofore changed, remains unchanged and in full force and effect.

TEMPLATE - ADM001

ADM002

STANDARD FORM 30 (REV 10-83)

The purpose of this modification is to increase the delivery order ceiling by \$520,119.06 from \$15,900,292.19 to \$16,420,411.25 to accomplish the following operational and maintenance support actions. This modification also provides incremental funds in the total amount of \$616,000 under CLINS 5, 6, 12, 13, 15, 16, 17, 20, 23, 24, 30, and 41; and transfers association of obligated funds in the amount of \$85,000.00 from CLIN 15 (N00118200115) to CLIN 43 (N0118200143). Accordingly, this order is hereby modified as follows:

1. Under CLIN 17, the ceiling of the CLIN is increased by \$55,016.00 to add maintenance effort to support publication of a collection of ADAMS documents from the Center for Nuclear Waste Regulatory Analysis to external high-level-waste Web and FileNET repositories. This effort was not considered at initial placement of the order as the nature and types of documents required in electronic format for the high-level waste hearings had not been adequately identified at that time. The revised statement of work for CLIN 17, which incorporates the publication support, is attached. (Reference no. RFPA CIO01182-054.)
2. Under CLIN 13, the ceiling of the CLIN is increased by \$113,964.78 to add maintenance effort to support conversion of the PC Integrated Events (PIE) system to utilize newer technology as the current server it resides on can no longer be supported. This maintenance is also inclusive of the effort required to produce/update the SDLCM system documentation required for configuration management. This effort was not considered at initial placement of the order as it was not known that the server could not be supported at that time. (Reference no. RFPA CIO01182-055.)
3. Under CLIN 5, the ceiling of the CLIN is increased by \$173,827.00 to add maintenance effort for inclusion of the Human Factors Information System (HFIS), system no. 8109, and NRC Utilities, system no. 9709-12 under the CLIN for maintenance support. This maintenance is also inclusive of the effort required to update the SDLCM system documentation which will reside in the configuration management library. This effort was not considered at initial placement of the order as these systems were not ready for acceptance into maintenance and configuration management at that time. The revised statement of work table is attached. (Reference no. RFPA CIO01182-056.)
4. Under CLIN 41, the ceiling of the CLIN is increased by \$131,716.29 to add maintenance effort for completion of the Time Resource Inventory Management system (TRIM) SDLCM documentation. The level of effort required for support of the TRIM system was greater than that originally estimated at placement of the order due to unanticipated modifications needed to address problems identified through testing of the RPS/TRIM module. As a result of the unanticipated maintenance activities, the level of effort is not sufficient to accomplish the update and creation of SDLCM documentation for configuration management. (Reference no. RFPA CIO01182-057.)
5. Under CLIN 7, an administrative change is made to remove 4 inactive systems from the table of systems to be supported under the CLIN and to change the CLIN Manager from

D. Weiss to C. Hite (effective January 3, 2003). The removal of the systems will not impact the ceiling or estimated level of effort required under the CLIN as these systems were inactive and did not require maintenance activities. The revised statement of work table is attached (Reference no. RFPA CIO01182-058.)

6. Under Section F.8, "Consideration and Obligation," the first paragraph and the first sentence of the second paragraph are deleted and replaced with the following.

"The total estimated amount (ceiling) of this order is \$16,420,411.25

The amount presently obligated with respect to this order is \$12,873,131.13 "

A revised version of Price Schedule pages 1, 1a, 30,38,42 and 65, and SOW pages 48-53, 59-67, 126-128h, 242, and 243 are contained in Attachment 1 to this modification and hereby replace the corresponding pages in the order.

Accounting information for Modification No. 38 follows:

| CLIN | APPN. # | ACCTNG ID # | B&R # | BOC | JOB CODE | COMMIT. # | AMOUNT |
|------|-------------|-------------|-------------|------|----------|------------|-------------|
| 005 | 31X0200 320 | N0118200105 | 32015101160 | 2574 | J2916 | 200365037 | 25,000 00 |
| 005 | 31X0200.320 | N0118200105 | 32015101160 | 2574 | J2917 | 200365048 | 10,000 00 |
| 005 | 31X0200.320 | N0118200105 | 32015101160 | 2574 | J2916 | 200365046 | 25,000 00 |
| 005 | 31X0200.320 | N0118200105 | 32015101160 | 2574 | J2919 | 200365045 | 25,000 00 |
| 006 | 31X0200 27M | N0118200106 | 37M15547160 | 252A | J7037 | RQ70030035 | 5,000 00 |
| 012 | 31X200 | N0118200112 | 37R15548160 | 252A | J7004 | RQ70030033 | 7,200.00 |
| 013 | 31X0200 320 | N0118200113 | 32015101160 | 2574 | J2922 | 200365047 | 40,000 00 |
| 016 | 31X0200310 | N0118200116 | 31015523340 | 252A | J1080 | 10370612 | 99,000.00 |
| 017 | 31X0200 310 | N0118200117 | 31015524350 | 252A | J1017 | 10370608C | 153,800 00 |
| 020 | 31X0200.37L | N0118200120 | 37L15546160 | 252A | J7034 | RQ70030032 | 20,000 00 |
| 023 | 31X0200 384 | N0118200123 | 38415512120 | 2574 | G8402 | | 80,000 00 |
| 024 | 31X0200 | N0118200124 | 35015203232 | 252A | J5384 | AA8500120 | 60,000 00 |
| 030 | 31X0200 320 | N0118200130 | 32015101160 | 2574 | J2920 | 200365044 | 50,000.00 |
| 041 | 31X0200.320 | N0118200141 | 32015101160 | 3140 | J3013 | 200365043 | 16,000 00 |
| 015 | 31X0200 | N0118200115 | 25015203162 | 252A | J5386 | correction | (85,000.00) |

Order No. NRC-33-01-182-001

Modification No. 38

Page 4 of 4

| CLIN | APPN # | ACCTNG ID # | B&R # | BOC | JOB CODE | COMMIT. # | AMOUNT |
|--|---------|-------------|-------------|------|----------|------------|--------------|
| 043 | 31X0200 | N0118200143 | 25015203162 | 252A | J5386 | correction | 85,000 00 |
| Total Obligation - Modification No. 38 : | | | | | | | \$616,000.00 |

This modification transfers/re-associates obligated funds in the amount of \$85,000.00 from CLIN 15 (accounting identification no. N00118200115) to CLIN 43 (accounting identification no. N0118200143). Accordingly, the obligated amount under CLIN 15 accounting identification no. N011820015 is reduced by \$85,000.00 to \$ and the obligated amount under CLIN 43 accounting identification no. N0118200143 is increased by \$85,000.00 to \$ to reflect the transfer of funds between the line items.

This modification obligates FY03 funds in the amount of \$616,000.00

The summary of obligations for this order is contained in Attachment 2 to this modification

All other terms and conditions of this order remain unchanged

Attachment:

1. Replacement pages
2. Summary of Obligations

PRICE/COST SCHEDULE. PRICE/COST SCHEDULE SUMMARY (Inclusive of Modification 38)

| CLIN No | Ceiling - Year 1 | Ceiling - Year 2 | Total Ceiling |
|---------|------------------|------------------|----------------|
| 001 | \$149,047.95 | \$0.00 | \$149,047.95 |
| 002 | \$260,235 28 | \$270,615 09 | \$530,850 37 |
| 003 | \$111,616 60 | \$116,047.65 | \$227,664 25 |
| 004 | \$176,693 55 | \$183,794 55 | \$360,488 10 |
| 005 | \$1,222,989 05 | \$890,936 10 | \$2,113,925.15 |
| 006 | \$8,014 87 | \$8,315 56 | \$16,330 43 |
| 007 | \$409,776 52 | \$436,143 00 | \$845,919 52 |
| 008 | \$22,192 20 | \$23,090 09 | \$45,282 29 |
| 009 | \$11,267 40 | \$11,718 70 | \$22,986 10 |
| 010 | \$40,002 10 | \$150,319.86 | \$190,321 96 |
| 011 | \$6,849 12 | \$7,109 68 | \$13,958 80 |
| 012 | \$55,252 32 | \$57,440 84 | \$112,693 16 |
| 013 | \$161,564.44 | \$246,731 10 | \$408,295 54 |
| 014 | \$4,090 20 | \$4,254 00 | \$8,344 20 |
| 015 | \$352,975 25 | \$652,164 61 | \$1,005,139 86 |
| 016 | \$230,980 30 | \$383,996 00 | \$614,976 30 |
| 017 | \$761,012.75 | \$946,816 32 | \$1,707,829 07 |
| 018 | \$33,206 40 | \$136,505 70 | \$169,712 10 |
| 019 | \$44,725 00 | \$45,425 46 | \$90,150 46 |
| 020 | \$107,354 00 | \$111,666 26 | \$219,020 26 |
| 021 | \$42,437.00 | \$51,694 85 | \$94,131 85 |
| 022 | \$24,930 83 | \$28,171 35 | \$53,102 18 |
| 023 | \$557,933 67 | \$580,435.80 | \$1,138,369 47 |
| 024 | \$359,367 00 | \$786,232 94 | \$1,145,599 94 |
| 025 | \$18,371.50 | \$19,129 04 | \$37,500 54 |
| 026 | \$21,326 40 | \$8,718.36 | \$30,044 76 |
| 027 | \$0 00 | \$0 00 | \$0 00 |
| 028 | \$294,636 65 | \$313,960 15 | \$608,596 80 |
| 029 | \$44,738 40 | \$46,505 75 | \$91,244 15 |
| 030 | \$157,787.64 | \$273,292 10 | \$431,079.74 |
| 031 | \$68,270 90 | \$3,413 26 | \$71,684 16 |
| 032 | \$13,053 80 | \$62,576 81 | \$75,630 61 |

| CLIN No. | Ceiling - Year 1 | Ceiling - Year 2 | Total Ceiling |
|--------------------|-----------------------|-----------------------|------------------------|
| 033 | \$1,994 04 | \$2,073 96 | \$4,068 00 |
| 034 | \$0 00 | \$0 00 | \$0 00 |
| 035 | \$216,532 95 | \$0 00 | \$216,532 95 |
| 036 | \$118,960 23 | \$0 00 | \$118,960.23 |
| 037 | \$1,059,290 65 | \$1,652,541 20 | \$2,711,831.85 |
| 038 | \$15,152 60 | \$15,760 50 | \$30,913 10 |
| 039 | \$30,395 70 | \$31,615.12 | \$62,010.82 |
| 040 | \$4,300 50 | \$14,943 00 | \$19,243 50 |
| 041 | \$45,594.99 | \$241,706 64 | \$287,301 63 |
| 042 | n/a | \$70,018 95 | \$70,018.95 |
| 043 | n/a | \$261,764 00 | \$261,764.00 |
| 044 | n/a | \$7,846 15 | \$7,846 15 |
| TOTAL PRICE | \$7,264,920 75 | \$9,155,490 50 | \$16,420,411.25 |

| CONTRACT LINE ITEM (CLIN) NO 005 | DESCRIPTION O&M Support for Reactor Program Systems | EST. QTY. | UNIT | UNIT PRICE | CEILING AMOUNT |
|---|--|-----------|-------|------------|-------------------|
| | Project Manager | ██████ | hours | ██████ | 20,550 00 |
| | Program Manager | ██████ | hours | ██████ | 37,500.00 |
| | Application Systems Analyst Manager | ██████ | hours | ██████ | 12,053 00 |
| | Application Systems Analyst Programmer | 0 | hours | ██████ | 0 00 |
| | Sr. Functional Analyst | ██████ | hours | ██████ | 564,041 60 |
| | Analyst 1 | 0 | hours | ██████ | 0 00 |
| | Analyst 2 | 0 | hours | ██████ | 0.00 |
| | Analyst 3 | 0 | hours | ██████ | 0 00 |
| | Analyst 5 | ██████ | hours | ██████ | 100,232.00 |
| | Doc Coordinator | 0 | hours | ██████ | 0 00 |
| | Doc. Specialist | 0 | hours | ██████ | 0.00 |
| | Network Control Tech. | 0 | hours | ██████ | 0.00 |
| | Support Specialist 3 | 0 | hours | ██████ | 0 00 |
| | Support Specialist 4 | 0 | hours | ██████ | 0 00 |
| | Support Specialist 5 | ██████ | hours | ██████ | 2,275 50 |
| | Support Specialist 6 | 0 | hours | ██████ | 0 00 |
| | Technical Expert 1 | 0 | hours | ██████ | 0.00 |
| | Technical Expert 2 | ██████ | hours | ██████ | 154,284 00 |
| | Technical Expert 3 | 0 | hours | ██████ | 0.00 |
| | Technical Expert 4 | 0 | hours | ██████ | 0 00 |
| TOTAL CLIN 05 CEILING - YEAR 2 | | | | | \$890,936.10 |

| CONTRACT LINE ITEM (CLIN) NO 013 (Mod 38) | DESCRIPTION: | EST. QTY. | UNIT | UNIT PRICE | CEILING AMOUNT |
|--|---|-----------|-------|------------|-------------------|
| | O&M Support for PC Integrated Events | | | | |
| | Project Manager | | hours | | 11,302.50 |
| | Program Manager | | hours | | 7,125.00 |
| | Application Systems Analyst Manager | | hours | | 75,154.00 |
| | App Systems Analyst Manager (onsite) | 0 | hours | | 0.00 |
| | Application Systems Analyst Programmer | | hours | | 13,826.40 |
| | Programmer 5 | 0 | hours | | 0.00 |
| | Sr. Functional Analyst | | hours | | 18,554.00 |
| | Analyst 1 | 0 | hours | | 0.00 |
| | Analyst 2 | 0 | hours | | 0.00 |
| | Analyst 3 | 0 | hours | | 0.00 |
| | Analyst 5 | | hours | | 14,960.00 |
| | Doc. Coordinator | | hours | | 13,615.20 |
| | Doc. Specialist | 0 | hours | | 0.00 |
| | Network Control Tech | 0 | hours | | 0.00 |
| | Support Specialist 3 | 0 | hours | | 0.00 |
| | Support Specialist 4 | 0 | hours | | 0.00 |
| | Support Specialist 5 | 0 | hours | | 0.00 |
| | Support Specialist 6 | | hours | | 2,494.00 |
| | Technical Expert 1 | 0 | hours | | 0.00 |
| | Technical Expert 2 | | hours | | 89,700.00 |
| | Technical Expert 3 | 0 | hours | | 0.00 |
| | Technical Expert 4 | 0 | hours | | 0.00 |
| TOTAL CLIN 13 CEILING - YEAR 2 | | | | | \$246,731.10 |

| CONTRACT LINE ITEM (CLIN) NO 017 (Mod 38) | DESCRIPTION. | EST. QTY. | UNIT | UNIT PRICE | CEILING AMOUNT |
|--|---|-----------|-------|------------|-------------------|
| | O&M Support for ADAMS | | | | |
| | Project Manager | | hours | | 41,100 00 |
| | Program Manager | | hours | | 28,000 00 |
| | Application Systems Analyst Manager | | hours | | 127,620 00 |
| | Application Systems Analyst Programmer | 0 | hours | | 0.00 |
| | Sr. Functional Analyst | | hours | | 166,986 00 |
| | Analyst 1 | 0 | hours | | 0.00 |
| | Analyst 2 | 0 | hours | | 0 00 |
| | Analyst 3 | 0 | hours | | 0 00 |
| | Analyst 5 | | hours | | 134,640 00 |
| | Doc. Coordinator | 0 | hours | | 0 00 |
| | Doc Specialist | 0 | hours | | 0 00 |
| | Network Control Tech | 0 | hours | | 0.00 |
| | Support Specialist 3 | 0 | hours | | 0 00 |
| | Support Specialist 4 | 0 | hours | | 0 00 |
| | Support Specialist 5 | 0 | hours | | 0 00 |
| | Support Specialist 6 | | hours | | 698 32 |
| | Technical Expert 1 | | hours | | 182,988 00 |
| | Technical Expert 2 | | hours | | 167,440 00 |
| | Technical Expert 3 | | hours | | 97,344 00 |
| | Technical Expert 4 | 0 | hours | | 0 00 |
| TOTAL CLIN 17 CEILING - YEAR 2 | | | | | \$946,816 32 |

| CONTRACT LINE ITEM (CLIN) NO 41 | DESCRIPTION. NRR Time Resource Inventory Management (TRIM) System | EST. QTY. | UNIT | UNIT PRICE | CEILING AMOUNT |
|--|--|-----------|-------|------------|-------------------|
| | Project Manager | ██████ | hours | ██████ | 13,357.50 |
| | Program Manager | ██████ | hours | ██████ | 5,625 00 |
| | Application Systems Analyst Manager | 0 | hours | ██████ | 0 00 |
| | Application Systems Analyst Programmer | 0 | hours | ██████ | 0.00 |
| | Sr. Functional Analyst | ██████ | hours | ██████ | 165,316 14 |
| | Analyst 1 | 0 | hours | ██████ | 0 00 |
| | Analyst 2 | 0 | hours | ██████ | 0.00 |
| | Analyst 3 | 0 | hours | ██████ | 0 00 |
| | Analyst 5 | 0 | hours | ██████ | 0.00 |
| | Doc Coordinator | 0 | hours | ██████ | 0 00 |
| | Doc Specialist | 0 | hours | ██████ | 0 00 |
| | Network Control Tech | 0 | hours | ██████ | 0.00 |
| | Support Specialist 3 | 0 | hours | ██████ | 0 00 |
| | Support Specialist 4 | 0 | hours | ██████ | 0.00 |
| | Support Specialist 5 | 0 | hours | ██████ | 0 00 |
| | Support Specialist 6 | 0 | hours | ██████ | 0 00 |
| | Technical Expert 1 | 0 | hours | ██████ | 0.00 |
| | Technical Expert 2 | ██████ | hours | ██████ | 57,408 00 |
| | Technical Expert 3 | 0 | hours | ██████ | 0.00 |
| | Technical Expert 4 | 0 | hours | ██████ | 0 00 |
| TOTAL CLIN 41 CEILING - YEAR 2 | | | | | \$241,706 64 |

CLIN 5. O & M Support for Reactor Program Systems

5.A Background

This SOW provides for the general maintenance support necessary for the continued operation of the Reactor Program System and other NRR systems.

5.B Scope

The contractor shall provide general maintenance for modules and systems listed in the statement of work section below. The request for a fix shall be E-mailed from the CLIN Manager, or their representative, to the contractor responsible for the upkeep of the application or shall be received as a call back request from the RPSHELP or LOPHELP e-mail address from the individual who discovered the problem. The contractor shall determine if the fix will require over 40 hours to perform the repair; if it does, the contractor shall E-mail the CLIN Manager with an assessment of the effort required within two (2) days of receipt. Work under 40 hours to fix shall be accomplished by the contractor without prior CLIN Manager approval. Under this SOW, the contractor may also perform work that would be classified as perfective maintenance (i.e., a minor enhancement - a modification that is not due to a code or data error). Assessment of requests that are perfective shall also be provided through E-mail to the CLIN Manager. The CLIN Manager shall make a decision as to whether the work can be authorized at the time of the E-mail response for efforts in excess of 40 hours and corrective in nature (broken). All major enhancement requests shall result in the development of a separate SOW to authorize the work. The CLIN Manager shall review the contractor assessment and E-mail the authorization response to the contractor within two (2) days of receipt. If the contractor is authorized to perform the work, the contractor shall perform the work within five (5) days of the authorization unless a longer time is specified due to the present workload of the contractor and approved by the CLIN Manager, or approved representative. The contractor shall send an E-mail to the CLIN Manager when the work is completed.

The Contractor shall perform application systems maintenance for modules listed below, following guidance provided in the SDLCM, NRC's CM rules, and utilizing the CM Library as the source for obtaining a current copy of production application systems which require maintenance. Application maintenance includes modification and/or correction of code and/or data in order to make the application system perform as intended. These modifications and corrections may include those made to programs, scripts, stored procedures, triggers, data, etc. Maintenance also includes, but is not limited to, analysis of conditions and outputs in order to identify root causes of problems and define methods for correction, troubleshooting, and establishment and execution of backups, restores, archives, housekeeping, etc.

In the performance of maintenance efforts, the Contractor shall appropriately checkout a copy of the current production version of an application system through the CM Library gatekeeper, make changes to the copy provided, and submit the changed application system (new code, documentation, builds, etc.) back through the CM Library gatekeeper for deployment by NRC.

The Contractor shall be considered a technical resource to the deployment team and remain available until deployment is completed to provide deployment support as part of the maintenance process.

The Contractor shall also produce necessary documentation of work performed as defined in subparagraphs "Maintenance Work Effort Reporting" and "Schedule of Deliverables" listed below.

5.C Statement of Work

1. Maintenance

The contractor shall be responsible for making necessary changes to ensure that identified problems with an RPS module are corrected and the system is returned to production in the shortest amount of time possible.

a. Module/System to be maintained:

| System Name | Project Manager | System Number | System Acronym | JCN | Software | Platform |
|---|---------------------|---------------|----------------|-------|---|---------------|
| Reactor Program System | Michael MacWilliams | 9709 | RPS | J2919 | PowerBuilder, ERWIN, SYbase RoboHelp SQL, | Client Server |
| Inspection Planning module | Michael MacWilliams | 9709-1 | RPS/IP | J2916 | " | Client Server |
| Inspection Planning Cycle module formerly called SALP | Michael MacWilliams | 9709-3 | RPS/IPC | J2916 | " | Client Server |
| Inspection Procedure Authority System module | Michael MacWilliams | 9709-4 | RPS/IPAS | J2916 | " | Client Server |
| Inspection Report Tracking System module | Michael MacWilliams | 9709-5 | RPS/IRTS | J2916 | " | Client Server |
| Item Reporting module | Michael MacWilliams | 9709-6 | RPS/IR | J2916 | " | Client Server |
| Item Reporting module - NMSS | Joel Bristor | 9709-6N | NMSS-IR | J5386 | " | Client Server |
| Security Access Method module | Conchita See | 9709-7 | RPS/SAM | J2916 | " | Client Server |

| System Name | Project Manager | System Number | System Acronym | JCN | Software | Platform |
|--|---------------------|---------------|----------------|-------|---|---------------|
| Tables module | Conchita See | 9709-8 | RPS/TABLES | J2916 | " | Client Server |
| Reports module | Michael MacWilliams | 9709-9 | RPS/REPORTS | J2916 | " | Client Server |
| Performance Measures module | Michael MacWilliams | 9709-10 | PM | J2917 | " | Client Server |
| Reactor Oversight module formerly called Performance Indicators (PI) | Conchita See | 9709-11 | ROP | J2918 | " | Client Server |
| NRC Utilities | Conchita See | 9709-12 | Utilities | J2919 | " | Client Server |
| Allegations Management System | Carl Mohrwinkel | 9615 | AMS | J2921 | " | Client Server |
| Operator Licensing Tracking System | Larry Vick | A0048 | OLTS | J2925 | " | Client Server |
| NRR Applications support | Michael MacWilliams | 9709 | NRR | J2919 | Various | Various |
| Safety Issues Management System | Michael MacWilliams | 1216 | SIMS | J2919 | Ramis, Assembler, Cobol | Mainframe |
| Human Factors Information System) | Michael MacWilliams | 8109 | HFIS | J2815 | PowerBuilder, ERWIN, SYbase SQL, VB | Client Server |
| Technical Assistance Program Support System | Michael MacWilliams | 1206 | TAPSS | J2919 | Cobol, DB2, ISPF, WYLBUR | Mainframe |
| Work Item Tracking System | Michael MacWilliams | 3609 | NRR-WITS | J2919 | Clipper, Blinker, dBase III, R&R Reportwriter | PC |

b. Definitions

Maintenance - application systems maintenance shall include but not be limited to modification of code, tables, and data, performing analysis, troubleshooting and establishing and executing backups, restores, archives and other systems housekeeping duties.

c. Initiation of Work

Individual application system failures or other reasons or problems that necessitate a maintenance action will be brought to the attention of the Contractor either as directly viewed during monitoring efforts conducted by

the Contractor in its role of providing operational support or through e-mail direction from NRC's CLIN Manager.

d. Independent Action

The Contractor shall have authority to take necessary actions for up to 40 hours to evaluate application system problems, correct the problem, appropriately document the problem and actions taken in the Software Engineering Notebook (SEN), test the corrections and prepare the corrected/new component of the system for deployment, including submission to the CM Library gatekeeper. The Contractor shall notify the CLIN Manager when the corrected system is ready for deployment (i.e., testing completed, ready for deployment) and follow e-mail directions of NRC's CLIN Manager to support deployment efforts.

e. Work Actions Requiring Pre-approval

The Contractor shall develop and deliver, via e-mail, to NRC's CLIN Manager, work estimates and plans for any efforts requiring more than 40 hours effort to complete. NRC's CLIN Manager will review the Contractor's assessment (estimate and plan) and will provide an e-mail authorization within two work days of receipt. The Contractor shall not commence code or data changes for efforts covered by a work estimate and plan where the level of effort for code, test and document creation/changes exceeds 40 hours without an e-mail authorization from NRC's CLIN Manager. Authorized actions shall be performed by the Contractor within 5 days of authorization, unless a longer time is approved by NRC's CLIN Manager.

f. Standard Work Approach

The Contractor shall perform maintenance actions using the current production version of the application system source which is controlled by the CM Library gatekeeper. Changes to application system source code shall be made utilizing only those vendor products defined in the application system baseline, unless authorization has been received in writing from NRC's CLIN Manager (i.e, if the application is coded in Power Builder version 6.51, only Power Builder version 6.51 will be utilized in the changes). It is the responsibility of both NRC's CLIN Manager and the Contractor to ensure that introduction of any new product to the application system is consistent with the authorized list of vendor products (aka., toolkit) approved by NRC's Environmental Change Control Board. Check-out of application system code and related products (test data, documentation, etc.) through the CM Library gatekeeper is required for each work effort. Upon completion of any

maintenance effort, the Contractor shall provide an e-mail to NRC's CLIN Manager defining actions taken and readiness of the application for deployment. This notification shall indicate that the application system has been submitted and is available as the current version for deployment through the CM Library gatekeeper. The Contractor shall remain available to assist the deployment contractor and answer any questions associated with deployment of the application and/or data.

g. Work Effort Ceiling

The total hours authorized under this work effort will be approximately 12,200 hours per year.

h. Maintenance Work Effort Reporting

The contractor and the NRC CLIN Manager shall attend, as required, occasional (but not more than 25) meetings at the NRC office to discuss significant maintenance issues.

An updated/record log shall be established and shall reflect the modifications made by each "fix it" request. All required documentation shall be updated to reflect the fix.

5.D Place of Performance

Most efforts under this contract can be performed at the contractor site. Access to the NRC facilities shall be provided by the NRC Staff, as required, for the contractor personnel during normal working hours for the duration of this SOW.

5.E Schedule of Deliverables

The maintenance shall be performed within 5 work days of receipt of the request unless otherwise negotiated with the CLIN Manager. When the problem is repaired, an E-mail shall be sent to the CLIN Manager with a brief explanation of the repair.

The contractor, NRR requesting official, and the NRC CLIN Manager shall attend occasional (but not more than 25) meetings to discuss significant maintenance issues.

The update/record log shall be updated to reflect each "fix" requested. All required documentation shall be updated to reflect the change.

5.F Expertise/Skills

The contractor shall provide personnel with the following skills:

1. Working experience with and knowledge of PowerBuilder version 6.51, and
2. Working experience with and knowledge of SYBASE version 11.921, and
3. Working experience with and knowledge of Novell LAN platform
4. Experience in analysis and design of complex enterprise-wide client-server applications, and
5. Experience with database management systems technologies, use of 4GL programming languages (structure and object-oriented)

5.G CLIN Manager

The manager for this CLIN is Mike MacWilliams, 415-1877.

5.H Level of Effort

The Government's estimated level of effort is 12,200 staff hours per year.

CLIN 7. O & M Support for FEES Program Systems

7.A Scope

The Contractor shall perform application systems maintenance for systems listed below in the statement of work section, subparagraph "Maintenance," following guidance provided in the SDLCMM, NRC's CM rules, and utilizing the CM Library as the source for obtaining a current copy of production application systems which require maintenance. Application maintenance is defined as modification and/or correction of code and/or data which are part of an application system in order to make the application system perform as intended in support of a business process/area for which it was written. These modifications/corrections may include those made to programs, scripts, job control languages, data, etc. Maintenance also includes, but is not limited to, analysis of conditions and outputs in order to identify root causes of problems and define methods for correction, troubleshooting, and establishment and execution of backups, restores, archives, housekeeping, etc.

In the performance of maintenance efforts, the Contractor shall appropriately checkout a copy of the current production version of an application system through the CM Library gatekeeper, make changes to the copy provided, and submit the changed application system (new code, documentation, builds, etc.) back through the CM Library gatekeeper for deployment by NRC.

The Contractor shall be considered a technical resource to the deployment team and remain available until deployment is completed to provide deployment support as part of the maintenance process.

The Contractor shall perform operation support tasks for systems listed below in the statement of work section, subparagraph "Operational Support," following guidance provided by the CLIN Manager. Individual efforts required of the Contractor shall be to provide operational support for agency applications in the form of data support, report generation, and production support, as defined in subparagraph "Work Direction by System" listed below.

The Contractor shall also produce necessary documentation of work performed as defined in subparagraphs "Maintenance Work Effort Reporting" and "Operational Support Work Effort Reporting" listed below.

7.B Statement of Work

1. Maintenance

The contractor shall be responsible for making necessary changes to ensure that identified problems with an application system are corrected and the system is returned to production in the shortest amount of time possible.

a. Systems to Be Serviced

| System Name | System Number | System Acronym | Software | Platform | Allotted Level of Effort |
|---|---------------|----------------|---|---------------|--------------------------|
| License Fee Reports System | 1289 | FEES | COBOL, DB2, WYLBUR | NIH Mainframe | See 1 g |
| Material Annual Fees System | 1281 | MATANN | COBOL, DB2, ISPF, KERMIT, ONNET PC/TCP, QMF | NIH Mainframe | See 1 g |
| Material Licensing Database and Tracking System | 3506 | MATSYS | Clipper, UI | PC/LAN | See 1 g |
| Fees File Transfer Process | 9778 | FEESFTP | Clipper, Blinker, Crosstalk, DbaseIII+, UI | PC/LAN | See 1 g |
| Facilities Inspection Fees System | 3507 | FACFEES | Clipper, Blinker, UI | PC/LAN | See 1.g |
| PC Materials Annual Fees System | 9779 | PC-MATANN | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 1 g |
| Fees License Billing System | 3592 | FEESLBS | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 1.g |
| Materials Review System | 3543 | MATREV | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 1.g |
| Fee Set Invoice Detail System | 9779 | FEESSET | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 1 g |

b. Definitions

Maintenance - application systems maintenance shall include but not be limited to modification of code, tables, and data, performing analysis, troubleshooting and establishing and executing backups, restores, archives and other systems housekeeping duties.

c. Initiation of Work

Individual application system failures or other reasons or problems that necessitate a maintenance action will be brought to the attention of the Contractor either as directly viewed during monitoring efforts conducted by the Contractor in its role of providing operational support or through e-mail direction from NRC's CLIN Manager.

d. Independent Action

The Contractor shall have authority to take necessary actions for up to 20 hours to evaluate application system problems, correct the problem and appropriately document the problem and actions taken in the Software Engineering Notebook (SEN), test corrections and prepare the corrected/new component of the system for deployment, including submission to the CM Library gatekeeper. The Contractor shall notify the CLIN Manager when the corrected system is ready for deployment (i.e., testing completed, ready for deployment) and follow e-mail directions of NRC's CLIN Manager to support deployment efforts.

e. Work Actions Requiring Pre-approval

The Contractor shall develop and deliver, via e-mail, to NRC's CLIN Manager, work estimates and plans for any efforts requiring more than 20 hours of effort to complete. NRC's CLIN Manager will review the Contractor's assessment (estimate and plan) and will provide an e-mail authorization within two work days of receipt. The Contractor shall not commence code or data changes for efforts covered by a work estimate and plan (level of effort exceeds 20 hours for code, test and document creation/changes) without an e-mail authorization from NRC's CLIN Manager. Authorized actions shall be performed by the Contractor within five (5) workdays of authorization, unless a longer time is approved by NRC's CLIN Manager.

f. Standard Work Approach

The Contractor shall perform maintenance actions using the current production version of the application system source which is controlled by the CM Library gatekeeper. Changes to application system source code shall be made utilizing only those vendor products defined in the application system baseline, unless authorization has been received in writing from NRC's CLIN Manager (i.e, if the application is coded in CLIPPER 5.2d, only CLIPPER 5.2d will be utilized in the changes). It is the responsibility of both NRC's CLIN Manager and the Contractor to ensure that introduction of any new product to the application system is consistent with the authorized list of vendor products (aka., toolkit) approved by NRC's Environmental Change Control Board. Check-out of application system code and related products (test data, documentation, etc.) through the CM Library gatekeeper is required for each work effort. Upon completion of any maintenance effort, the Contractor shall provide an e-mail to NRC's CLIN Manager defining actions taken and readiness of the application for deployment. This notification shall indicate that the application system has been submitted and is available as the current version for deployment through the CM Library gatekeeper. The Contractor shall remain available to assist the deployment contractor and answer any questions associated with deployment of the application and/or data.

g. Work Effort Ceiling

The total hours authorized under this work effort per application system is 60 hours. An e-mail notification to the NRC CLIN Manager shall be made by the contractor when less than 24 hours remain available for maintenance of an application system.

h. Maintenance Work Effort Reporting

No unique reporting is required that exceeds that which would be presented in the Bi-weekly Status Report described in CLIN 2.

i. Known Perfective Maintenance Tasks

Modify the existing (MATANN #1281) process of capturing Terminated, New and Expired licenses for fees billing (approximately 200 hours)

Modify PCMATANN (#9779) to add facility annual fee invoice processing (approximately 200 hours)

Modify FACFEES (#3507) to add MATSYS (#3506) licenses for fee billing (approximately 200 hours)

Modify PCMATANN (#9779) to generate invoices for the General License Tracking System (GLTS) delinquent payments. (approximately 200 hours)

Standardize invoice formats for interface with the Department of the Treasury's Pay.Gov. initiative (approximately 200 hours)

Develop a scoping document to review the FEES systems operations via WINDOWS (approximately 200 hours)

The CLIN Manager will provide written guidance to the contractor, as needed, for perfective maintenance tasks.

2. Operational Support

a. Systems to be Covered under Operational Support

The FEES billing and cost systems are:

| System Name | System Number | System Acronym | Software | Platform | Allotted Level of Effort |
|---|---------------|----------------|---|---------------|--------------------------|
| License Fee Reports System | 1289 | FEES | COBOL, DB2, WYLBUR | NIH Mainframe | See 2.c |
| Material Annual Fees System | 1281 | MATANN | COBOL, DB2, ISPF, KERMIT, ONNET PC/TCP, QMF | NIH Mainframe | See 2 c |
| Material Licensing Database and Tracking System | 3506 | MATSYS | Clipper, UI | PC/LAN | See 2 c |
| Fees File Transfer Process | 9778 | FEESFTP | Clipper, Blinker, Crosstalk, DbaseIII+, UI | PC/LAN | See 2.c |
| Facilities Inspection Fees System | 3507 | FACFEES | Clipper, Blinker, UI | PC/LAN | See 2 c |
| PC Materials Annual Fees System | 9779 | PC-MATANN | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 2.c |
| Fees License Billing System | 3592 | FEESLBS | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 2.c |

| System Name | System Number | System Acronym | Software | Platform | Allotted Level of Effort |
|-------------------------------|---------------|----------------|---------------------------------|----------|--------------------------|
| Materials Review System | 3543 | MATREV | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 2.c |
| Fee Set Invoice Detail System | 9779 | FEESSET | Clipper, Blinker, DbaseIII+, UI | PC/LAN | See 2 c |

b. Definition

Operational support may take various forms, including:

1. Data support:
 - a. data interpretation,
 - b. OCR, scanning,
 - c. verification, and
 - d. entry;

2. Report Generation:

Producing reports in outputs including hard copy and electronic (MS-ACCESS, WordPerfect, ASCII, or QUATTRO PRO format, etc.), from agency systems either on a scheduled or ad-hoc basis of (a) standard reports or (b) quick query or new reports using newly defined criteria; and

3. Production support:

- a. initiating program sequences on a prescribed schedule,
- b. data transfers between systems either through kick-off of electronic processes (programs) or inputs of tapes or other physical media;
- c. system monitoring, troubleshooting, and applying immediate corrective measures to agency production application systems (in some cases, on a 24-hour on-call basis).

c. Work of Contractor and NRC Technical Direction

The Contractor shall provide operational support as follows:

1. On a weekly basis, monitor scheduled batch jobs that produce source files from the LTS, TAPIS and NSS & DRS systems for maintenance

of the licensee addresses used in the license fee billing process. Resulting file is downloaded from the mainframe, reviewed for quality assurance and prepared for production use in the "weekly address refresh" process. (approximately **10 hours** per week)

2. Support the billing of material licensees to include generating MATANN invoices and reports on a monthly and quarterly basis, as well as on request for special cases. Download invoice data files, review for quality assurance and prepare for production use in PC/MATANN. (approximately **20 hours** per month)
3. Annually, at the start of each Fiscal Year, gather and load accurate data from LTS, TAPIS and NSS & DRS to create a baseline for that year's billing (the MATANN annual "freeze") of materials licensees and generate reports. (approximately **80 hours** per year)
4. On request, produce ad-hoc reports from any of the various LFARB sponsored systems. (approximately **60 hours** per month)
5. Support the quarterly full cost billing effort to include responding to any questions or problems encountered by the Offices, Regions or the LFARB staff, as well as assistance in running reports and invoices as needed. Over 60 files of staff hour manpower and contract costs data are produced, downloaded, reviewed for quality assurance, corrected as needed to ensure usability, and prepared for production. (approximately **320 hours** quarterly)
6. Respond to questions pertaining to use of the various LFARB sponsored systems. (approximately **10 hours** per week)
7. Maintain several tables used by the FEES system. (approximately **5 hours** per month)
8. Process the OMPA pay tape files to include running mainframe jobs, and routing various reports. (approximately **5 hours** bi-weekly)
9. Reset billing system data as needed to accurately interface with the FFS system. (approximately **10 hours** per month)
10. Create mailing labels annually for the Fee Rule mailings. (approximately **10 hours** per year)

d. Operational Support Work Effort Reporting

No unique reporting is required that exceeds that which would be presented in the Bi-weekly Status Report described in CLIN 2.

7.C Place of Performance

Most efforts under this CLIN can be performed at the contractor site. Access to the NRC facilities shall be provided by the NRC, as required.

7.D Schedule of Deliverables

| <u>Deliverable Name</u> | <u>Responsibility</u> | <u>Delivery Schedule</u> |
|---|-------------------------|---|
| Maintenance Work Plan and Estimate to NRC CLIN Manager (1.e) | Contractor | Whenever work effort will exceed 20 hours |
| Work Plan and Estimate Approval e-mail (1.e) | NRC work effort manager | Upon review and approval of Work Plan and Estimate |
| Work effort approach of Ceiling Notification e-mail (1.g) | Contractor | When 23 or less hours are available |
| New Versions of Application Products to CM (1.f) | Contractor | When maintenance effort tested and ready for deployment |
| Special Reports of Work and Status - Maintenance (1.h) | Contractor | At frequency directed |
| Ad-Hoc Report Outputs (2.c) | Contractor | Two work days from receipt of request |
| Special Reports of Work and Status - Operational Support (2.d.) | Contractor | At frequency Directed |

7.E. Expertise/Skills

Demonstrated experience in application systems software and platforms defined for systems identified in relevant sections of this CLIN as requiring maintenance support.

Competency in technical, written communication, and analytical skills as demonstrate through prior assignments in the technical support area, and experience with applications running on a NOVELL LAN platform.

7.F CLIN Manager

The manager for this CLIN is Christine Hite, 415-8191.

7.G Level of Effort

The Government's estimated level of effort is 5,540 staff hours per year.

CLIN 17 O & M Support for ADAMS

17.A Background

NRC has developed the Agencywide Documents Access and Management System (ADAMS) according to the NRC Application Systems Life Cycle Management Methodology (SDLCM) but with a focus on utilizing the Commercial Off-the-Shelf (COTS) package, the FileNet suite of products integrated with Provenance's ForeMost records management product to provide the bulk of the ADAMS functional requirements.

17.B Scope

The scope of this CLIN is to ensure that contractor resources are available to respond to urgent ADAMS application and configuration problems, to provide release-based and emergency maintenance and operational support for the ADAMS application (COTS and custom) and make routine and ad hoc preventative and corrective changes to any of the components that comprise the ADAMS system. The system components covered under this CLIN include:

1. Document Management Services (internal, public, and remote/mobile users)
2. Workflow Services
3. Imaging Services
4. Records Management Services
5. EIE Services
6. Backup Services
7. Recovery Services
8. COTS Vendor Release Implementation Services
9. Custom Code Maintenance Services

The contractor shall provide general (release-based and emergency) maintenance support of the ADAMS application software, files, databases, and hardware configuration, as defined by the NRC's System Development and Life-Cycle Management Methodology (SDLCM).

17.C Statement of Work

The contractor shall handle all roles in the SDLCM for release-based and emergency maintenance except for that of Overall Project Manager and the Configuration Control Board. However, the NRC CLIN Manager shall set priorities and approve changes.

1. Change Management

The contractor shall perform maintenance/enhancement work resulting from NRC evaluations of Change Proposals and Problem Reports.

2. Release Management

Under release management, the contractor shall take a defined release, plan the release, and manage changes to the release during its development (implementation in the case of COTS).

3. Enhancements

Under enhancement work, the contractor shall perform a major change to some part of an existing application, architecture, or to the support environment.

4. Release-based maintenance

The contractor shall evaluate vendor issued upgrades to COTS software as well as custom code upgrades, testing the release prior to implementation in the production environment.

5. Emergency maintenance

The contractor shall perform maintenance for changes requiring emergency action. These types of changes, which are the exception rather than the rule, may require follow-up with a normal release-based maintenance process.

6. Study to Support High-Level Waste Electronic Submittals

a. Background

In accordance with the provisions of 10 CFR 2 Subpart J (see Appendix A), the Nuclear Regulatory Commission (NRC) must have the ability to successfully manage the accessibility and integrity of docket information stored in the High-Level Waste Electronic Hearing Docket (HLW-EHD) for the duration of the High-Level Waste (HLW) proceedings. An integral part of the HLW-EHD is the capability to transmit electronic submittals of filings by the submitter to the presiding officer, the parties, and the Office of the Secretary (SECY).

The licensing submission and docketing of adjudicatory documents and inclusion in the EHD has raised several issues relative to the electronic transmission, processing, service, management, dissemination, and use of HLW materials in the context of the HLW adjudicatory proceeding and as official agency records. These issues relate to:

- Electronic transmission of very large files with special attributes, such as color graphics and engineering drawings, via the Internet
- Acceptable document format and resolutions
- Need to ensure the fidelity and integrity of records and their future retirement to the National Archives and Records Administration
- Limitations of NRC's electronic document/records management system which does not support the use of hyperlinks
- How to handle non-textual documentary materials
- The ability of users to search, navigate, view, download and print very large documents.

10 CFR Part 2, Subpart J, allows for a number of electronic formats and for gray scale and color images at a resolution of 150 dpi. These formats and resolution currently are authorized for the documentary materials that reside on participants' servers for the Licensing Support Network (LSN) searching purposes, and for submission via Electronic Information Exchange (EIE) to the NRC. However, because of problems that some formats and resolutions pose, NRC plans to adopt PDF and a minimum resolution of 200 dpi for grayscale and color images as a standard for electronic submission to the HLW proceeding. Decisions still need to be made, and guidance provided to submitters, on how to handle certain forms of non-textual materials, such as computer models, and audio and video tapes.

Currently, NRC's Electronic Information Exchange (EIE) process has a file size limitation of 15 MB per file, meaning a fair number of segments of large Department of Energy (DOE) documents (e.g., Regulatory License Application, Final Environmental Impact Statement) and other electronic submittals will not make it through the NRC's EIE process pipeline, and current processes do not allow for segmentation of files via the EIE process. Large document submittals in electronic format containing either a single large file, or multiple files are required to be submitted on CD-ROM. For its part, 10 CFR § 2.1013(c)(1) implies that electronic transmission (as opposed merely to delivery on an electronic media) is required. Although the proposed "e-rule" guidance allows the use of CD-ROM for submission of large documents, it is not applicable to adjudicatory submissions and, in any event, could be considered superseded by the existing regulatory provision for the HLW proceedings that requires electronic transmission, not just transfer on an electronic media. If the use of CD-ROM submission is recommended for the HLW proceeding, it may require a change in NRC's rules. Therefore, it is highly desirable that NRC modify its EIE process to accommodate HLW proceeding requirements, and that CD-ROM be considered only in addition to (not as a substitute for) electronic transmission via EIE.

In addition, submissions received through EIE must be first processed into ADAMS before they are electronically copied to the Electronic Hearing Docket, the HLW library, and the ADAMS Public Library that reside outside NRC's firewall. ADAMS libraries. Currently, large documents entered into ADAMS are broken down into "manageable" segments. Custom code allows for use of an "envelope" which links the document segments together. This approach results in smaller files to ensure that the NRC staff and the public can open, view, and download in an acceptable time frame, but adversely impacts the ability of users to search and navigate across the large document in its entirety. However the document is received electronically, NRC must be assured that it can ensure its fidelity and integrity so that there are no chain of custody issues raised as to whether the document that was transmitted is accurately represented in ADAMS, EHD, the HLW server, or wherever it resides.

This highlights constraints introduced by the different usages made of these documents and the associated processes: document intake, document management, docket management, courtroom management, appellate case file management, and agency records management.

Additionally, the characteristics of the HLW proceeding user community should be considered relative to handling large documents. The user community is composed of NRC personnel including Atomic Safety and Licensing Board Panel (ASLBP) judges and staff, Office of the General Counsel (OGC) attorneys and staff, Office of Nuclear Material Safety and Safeguards (NMSS) staff and contractors, Office of Commission Appellate Adjudication (OCAA) staff, Commissioner offices staff, SECY and OCIO records management staff and contractors, parties and potential parties to the litigation, and the general public. The parties will require electronic access to these documents via the electronic docket to prepare the litigation cases and the public will access the electronic docket for informational purposes. These user attributes mean that the large documents must (1) be easy to navigate to specific sections, chapters, or pages of interest; (2) be browsable via table of contents; (3) be text searchable across the entire document; (4) be text searchable against other complementary/contrasting documents; (5) show highlighted sections found during text searches; (6) be browsable within a section (page forward, page back); (7) faithfully represent embedded tables, figures, diagrams, charts, maps, formulas etc.; (8) handle footnotes and quick access to referenced documents; and (9) be consistent with other search and retrieval tools in use by NRC and public: (10) be forwardable to future adjudicatory bodies (e.g., appeals courts, supreme court, etc.); and ultimately (11) be transferrable to the National Archives. The varied nature of the user community and tight Licensing Application (LA) review time constraints mean that these documents must be available in an electronic media that

minimizes training in new tools/products and can quickly be deployed to all users.

b. Approach

The NRC has assembled a team of internal stakeholders representing different functional areas who are tasked with (1) preparing a report that identifies any gaps in the High Level Waste (HLW) adjudicatory process electronic capability (e.g., agency acceptance, processing, and utilization of very large HLW documents) under existing or proposed rules that cannot be met with agency information technology capabilities/information management practices currently in place or under development and (2) developing an action plan and schedule to address closing identified gaps. Contractor support is required to perform technical work related to this tasking.

c. Study Statement of Work

The contractor shall perform the following work in support of the tasking described under section b above. In performing this analysis, the contractor shall consider the range of capabilities that exist in the user community; technology limitations (e.g., limits that exist on the capability to transfer or manipulate large complex electronic objects); and user (agency and external) stakeholder costs associated with meeting proposed solutions, such as acquisition of additional equipment and document conversion and processing (labor) costs.

- The NRC will provide the contractor with a report summarizing the NRC's knowledge of the scope, characteristics, timing, numbers, and types of documentary materials to be produced by and submitted to the NRC related to the HLW proceeding. The report will document the functional requirements of the user community with respect to their different usages of the same documents, and associated work activities (document intake and capture, records management, licensing review, docketing management, courtroom management, appellate review, public access). In addition, the NRC will provide the contractor with documentation detailing existing processes, limitations, and capabilities of NRC's systems related to the electronic receipt via EIE, capture, and utilization of HLW documentary materials.
- Through review of the material provided by the NRC and interviews as necessary to understand and clarify the existing capabilities and functional requirements, the contractor shall perform a gap analysis between the existing capabilities of NRC's systems and the functional requirements the user community.

- The contractor shall identify and evaluate alternative solutions available for meeting the functional requirements of the user community. The evaluation shall identify any changes to the agency's current information technology capabilities and/or information management practices, and recommendations regarding the adoption of alternatives including instances where rules should be changed because of technology or cost limitations. The evaluation shall also characterize the technical risk and estimated cost of the alternative solutions.
- The contractor shall present alternatives and proposed recommendations to OCIO, OGC, SECY, NMSS, and ASLBP management.
- Based on NRC management feedback, the contractor shall develop an action plan to implement the selected solution(s).

d. Milestone Schedule

Tasks/activities to meet the requirements to handle HLW large volume documents are identified below:

| Task | Lead | Status | Completion Date |
|--|-----------------------|---------|-----------------|
| Identify / develop survey instrument to collect data on scope, characteristics, timing, etc. of HLW documentary materials to be submitted to NRC | Task Force | Pending | 9/23/2002* |
| Develop report summarizing the NRC's knowledge of the scope, characteristics, timing, numbers, and types of documentary materials to be produced by and submitted to the NRC related to the HLW proceeding | SECY | Pending | 10/18/2002* |
| Perform a gap analysis between the existing capabilities of NRC's systems and the functional requirements of the user community | Contractor | Pending | 11/15/2002* |
| Identify and evaluate alternative solutions available for meeting the functional requirements of the user community | Contractor | Pending | 12/02/2002* |
| Present alternatives and proposed recommendations to OCIO, OGC, SECY, NMSS, and ASLBP management | Contractor/Task Force | Pending | 12/15/2002* |
| Develop an action plan to implement the selected solution(s) | Contractor/Task Force | Pending | 02/15/2003* |

* Independent government estimates, unsubstantiated by contractor.

e. Deliverables

The contractor shall provide all document deliverables in written and electronic format. Electronic documents shall be provided in the appropriate software compatible with the NRC standard software, Corel WordPerfect 8.0.

| <u>Deliverables</u> | <u>Due Date</u> |
|----------------------------------|-----------------|
| Project Plan | 09/16/2002* |
| Gap Analysis | 11/15/2002* |
| Alternatives and Recommendations | 12/15/2002* |
| Action Plan | 02/15/2002* |

* Independent government estimates, unsubstantiated by contractor.

f. Acceptance of Work

The NRC reserves the right to negotiate additional work in the event such requirements become necessary. The NRC will notify the contractor of its intent to exercise this option in writing.

g. Level of Effort

The Government's estimated level of effort for this study is 500 staff hours.

h. Place of Performance

Work shall be performed primarily at NRC in the Two White Flint North (TWFN) Building in NRC provided space.

i. Government Furnished Equipment (GFE)/Government Furnished Information (GFI):

The contractor shall identify in the task proposal the type, amount, and time frame for any required Government resources, including those listed below. The following resources will be provided by the NRC:

- Information Sources - NRC shall provide appropriate subject matter experts and support staff to facilitate;
- Documentation - The NRC shall provide any internal documentation in the support of this effort; and
- Hours of Work - The normal hours of work for the NRC are 8:00 a.m. to 5:00 p.m., Monday through Friday, except Federal holidays.

7. Publish the Center for Nuclear Waste Regulatory Analysis Documents

a. Background

The Nuclear Regulatory Commission (NRC) and the Center for Nuclear Waste Regulatory Analysis (CNWRA) are working collaboratively to identify High-Level-Waste (HLW) documents in CNWRA's document collection that must be entered into ADAMS to support HLW proceedings. Once entered into ADAMS, the CNWRA collection is required to support NRC's Licensing Support Network (LSN) web crawler collection, the Electronic Hearing Docket (EHD) Panagon repository, and the Publicly Available Records System (PARS) Panagon repository.

b. Statement of Work

The contractor shall provide a Lead Technical Consultant to work collaboratively with FileNET Professional Services (FPS) to publish a significant ADAMS collection of CNWRA documents to external HLW web and FileNET repositories. A high volume of these documents will be entered into ADAMS as custom packages and therefore will need to be converted to Panagon compound documents¹. Subsequently, the Panagon compound documents must be published to both the web-based HLW/LSN collection and selectively to the FileNET-based EHD. Also, due to the anticipated increased volume of documents, all extraneous Panagon Web Publishing (PWP) generated information on the web server must be eliminated and multi-valued fields must be delineated using the "pipe" symbol as opposed to PWP's "comma" delineator. The contractor can anticipate that at least two cycles of LSN testing will be necessary, resulting in minor follow-up corrective actions.

Contractor responsibilities include:

- Current publishing system technical architecture and processing documentation.
- Test FPS developed custom code to convert ADAMS custom packages to Panagon compound documents from main library to interim CS 5.1 server.
- Test FPS developed custom code to eliminate extraneous PWP generated information from documents published to the HLW LSN server from ADAMS.
- Test FPS developed custom code to replace PWP's "comma" delineator with the "pipe" symbol to delineate multi-valued fields in all published documents.
- Provide URL to text in all cases to allow LSN to full-text-index.
- Implement automatic publishing features from ADAMS to external repositories.
- Republish the HLW collection of single documents from ADAMS' main and legacy libraries to external repositories.

¹Custom Package to Panagon compound document conversion activities assigned to FileNET Professional Services.

- Publish converted packages (compound documents) from the interim CS 5.1 server to external repositories.
- Convert unsupported file extensions such as .let to supported file extensions such as .txt.
- Identify via hardcopy report any database anomalies such as ocr files with no associated image or image files with no associated ocr.
- Demonstrate the feature to automatically capture and publish newly added documents.
- Provide full system and process documentation.

c. Deliverables

| Deliverable | Lead | Duration * |
|---|----------|------------|
| Current Publishing System Documentation | OAo | 5 days |
| Testing/Results Report - FileNET's (FPS) Conversion of Packages to Compound Documents | OAo/ FPS | 10 days |
| URL to Text - Allow LSN Full-Text-Index | OAo | 5 days |
| Automatic Publishing - HLW/LSN Web Server | OAo | 10days |
| Automatic Publishing - EHD CS 5.1 Server | OAo | 10 days |
| Convert Extensions | OAo | 10 days |
| Identify/Report Anomalies | OAo | 5 days |
| Demonstrate/Deliver Full System Interoperability Features | OAo | 5 days |
| Deliver Full System/Process Documentation | OAo | 2 days |
| | | |

* Independent government estimates, unsubstantiated by contractor.

d. Acceptance of Work

The NRC reserves the right to negotiate additional work in the event such requirements become necessary. The NRC will notify the contractor of its intent to exercise this option in writing.

e. Level of Effort

The Government's estimated level of effort for this work is 460 staff hours.

f. Place of Performance

Work shall be performed primarily at NRC in the Two White Flint North (TWFN) Building in NRC provided space.

17.D Status Reporting

The contractor shall provide regular and ad hoc status reports to the NRC CLIN Manager.

17.E Place of Performance

Performance of this task shall be accomplished primarily at the contractor facilities.

17.F Deliverables

| Section # | Deliverable | Delivery Schedule |
|-----------|--|-------------------|
| 4.6 | Weekly Status Reports | ongoing |
| 4.6 | Biweekly Status Reports | ongoing |
| 4.6 | Ad Hoc/Release Analysis Reports | as required |
| 4.1 - 4.5 | Software Tests on Units, Modules, and Subsystems | as required |
| 4.1 - 4.5 | Software Configuration Library Updates | as required |

17.G Expertise/Skills

All staff performing activities directly related to the maintenance of the ADAMS software solution must have appropriate levels of experience with FileNET Panagon software, Visual Basic, TSM (formerly ADSM), Windows NT, NT Server, SQL Server, and other software foundations required to maintain the ADAMS solution.

17.H CLIN Manager

The manager for this CLIN is Wil Madison, 415-7221.

17.I Level of Effort

The total hours authorized under this work effort per application system is approximately 10,155 hours annually.

10 CFR 2 SUBPART J REQUIREMENTS

10 CFR 2 Subpart J requires that:

- Document production and the EHD are subject to the provisions of Subpart J. 10 CFR § 2.1011(a).
- NRC, DOE, parties and potential parties (i.e., the participants) provide the computer system necessary to comply with the requirements for electronic document production and service. Id. § 2.1011(b)(1).
- The participants shall comply with specified standards in designing systems necessary to comply with electronic document production and service. Id. § 2.1011(b)(2).
- Images must be 300dpi TIFF (black and white) or 150 dpi PNG (grey-scale or color) or 300dpi PDF (any media style); and that TIFF versions of those documents found on participant's machines [for LSN spidering], will be stored as TIFF images. No differentiation is made in the rule regarding single or multi-page TIFF images. Thus both are an acceptable format for use in the LSN. Id. § 2.1011(b)(2)(iv).
- The Office of the Secretary (SECY) will maintain the official docket of the proceeding. Id. § 2.1013(a)(1).
- SECY must determine that the application can be properly accessed under the Commission's electronic docket rules and will establish the docket (commencing with the staff docketing in an electronic form of the license application) as the official record materials in searchable full text or, for material that is not suitable for entry in searchable full text, by header and image, as appropriate. Id. § 2.1013(a)(2).
- All filings in the proceeding shall be transferred electronically by the submitter to the presiding officer, the parties, and SECY according to established format requirements and that a password security code will be required for the transmission of these documents. Id. § 2.1013(c)(1).

- f. Any unauthorized commitment or direction issued by the project officer may result in an unnecessary delay in the contractor's performance and may even result in the contractor expending funds for unallowable costs under the order or associated BPA.
- g. A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto is subject to 52.233-1 - Disputes.
- h. In addition to providing technical direction as defined in paragraph (b) of the section, the project officer shall:
 - 1. Monitor the contractor's technical progress, including surveillance and assessment of performance, and recommend to the CO changes in requirements.
 - 2. Assist the contractor in the resolution of technical problems encountered during performance.
 - 3. Review all costs requested for reimbursement by the contractor and submit to the CO recommendations for approval, disapproval, or suspension of payment for supplies and services required under orders.
 - 4. Assist the contractor in obtaining the badges for the contractor personnel.
 - 5. Immediately notify the Personnel Security Branch, Division of Facilities and Security (PERSEC/DFS) (via e-mail) when a contractor employee no longer requires access authorization and return the individual's badge to PERSEC/DFS within three days after their termination.

7. Period of Performance

This order shall be effective from June 18, 2001 through June 17, 2003.

8. Consideration and Obligation

The total estimated amount (ceiling) of this order is \$16,420,411.25.

The amount presently obligated with respect to this order is \$12,873,131.13. The Contracting Officer may increase this amount from time to time by unilateral modification to the order. The obligated amount shall, at no time, exceed the order 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. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor's sole risk.

It is estimated that the amount currently allotted will cover performance of the effort through February 28, 2003.

9. FAR 52.232-7, "Payments under Time-and-Material and Labor-Hour Contracts"

FAR 52.232-7 is applicable and hereby incorporated into this order. The notification requirements of FAR 52.232-7 apply on a CLIN basis for this order.

BPA NO. NRC-33-01-182

ORDER NO. 001

FUNDING INFORMATION (THROUGH MODIFICATION NO. 38)

Attachment 2

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|------------|-------------|-------------|----------|--------------|----------------|-------------|----------------------------|
| 001 | 31X0200.110 | 11015523105 | 252A | J1068 | 10170157 | \$70,000.00 | 149,148.22 |
| 001 Mod. 1 | 31X0200.110 | 11015523105 | 252A | J1068 | 10170181C2 | 79,148.22 | |
| 002 | 31X0200.110 | 11015523105 | 252A | J1068 | 10170158 | 72,000.00 | 401,000.00 |
| 002 Mod. 2 | 31X0200.110 | 11015524120 | 252A | J1017 | 10170224 | 40,000.00 | |
| 002 Mod. 6 | 31X0200.210 | 21015523340 | 252A | J1068 | 10270050 | 26,500.00 | |
| 002 Mod. 9 | 31X0200.210 | 21015523340 | 252A | J1068 | 10270079 | 262,500.00 | |
| 003 | 31X0200.110 | 11015523105 | 252A | J1068 | 10170159 | 40,000.00 | 205,000.00 |
| 003 Mod. 6 | 31X0200 210 | 21015523340 | 252A | J1068 | 10270038 | 37,000.00 | |
| 003 Mod. 6 | 31X0200.210 | 21015523340 | 252A | J1068 | 10270051 | 27,000.00 | |
| 003 Mod. 9 | 31X0200 210 | 21015523340 | 252A | J1068 | 10270080 | 101,000.00 | |
| 004 | 31X0200 110 | 11015523105 | 252A | J1068 | 10170160 | 42,000.00 | 232,000.00 |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|---------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 004 Mod. 6 | 31X0200.210 | 21015523340 | 252A | J1068 | 10270039 | 38,000.00 | |
| 004 Mod. 6 | 31X0200 210 | 21015523340 | 252A | J1068 | 10270052 | 26,500.00 | |
| 004 Mod. 9 | 31X0200 210 | 21015523340 | 252A | J1068 | 10270081 | 125,500.00 | |
| 005 | 31X0200.121 | 12015101160 | 252A | J2916 | 200165063 | 100,000.00 | 1,558,837.73 |
| 005 Mod. 1 | 31X0200.121 | 12015101160 | 2574 | J2916 | 200165063(I) | 100,000.00 | |
| 005 | 31X0200.121 | 12015101160 | 252A | J2917 | 200165064 | 50,000.00 | |
| 005 | 31X0200.121 | 12015101160 | 252A | J2918 | 200165064 | 50,000.00 | |
| 005 Mod. 1 | 31X0200.121 | 12015101160 | 2574 | J2918 | 200165065(I) | 24,991.48 | |
| 005 | 31X0200.121 | 12015101160 | 252A | J2919 | 200165066 | 50,000.00 | |
| 005 | 31X0200.121 | 12015103160 | 252A | J2921 | 200165062 | 10,000.00 | |
| 005 | 31X0200.120 | 12015101160 | 252A | J2925 | 200165068 | 5,000.00 | |
| 005 Mod. 2 | 31X0200.121 | 12015101160 | 2574 | J2918 | 200165065(I) | 33,846.25 | |
| 005 Mod 2 | 31X0200.121 | 12015101160 | 2574 | J2919 | 200165066(I) | 75,000 00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|-------------------------------|-------------|-------------|----------|--------------|----------------|------------------|----------------------------|
| 005 Mod. 9 | 31X0200 220 | 22015101160 | 2574 | J2916 | 200265035 | 400,000.00 | |
| 005 | 31X0200.220 | 22015101160 | 2574 | J2917 | 200265036 | 50,000.00 | |
| 005 | 31X0200.220 | 22015101160 | 2574 | J2919 | 200265037 | 180,000.00 | |
| 005 | 31X0200 220 | 22015103160 | 2574 | J2921 | 200265041 | 30,000.00 | |
| 005 Mod. 9 | 31X0200 220 | 22015101160 | 2574 | J2918 | 200265048 | 200,000.00 | |
| 005 Mod. 10 | 31X0200.220 | 22015101160 | 252A | J2925 | 200265056 | 15,000.00 | |
| 005 Mod. 17 | 31X0200.220 | 22015101160 | 2574 | J2919 | 200265037 | 150,000.00 | |
| 005 Mod. 21 | 31X0200 220 | 22015101160 | 2574 | J2919 | 200265037 | 36,000.00 | |
| 005 Mod. 26 | 31X0200.220 | 22015101160 | 252A | J2925 | 200265056 | 20,000.00 | |
| 005 Mod. 27 De-obligate | 31X0200.220 | 22015101160 | 2574 | J2916 | 200265035 | (110,000.00) | |
| 005 Mod. 34 | 31X0200.250 | 25015203162 | 252A | J5386 | AA8500113 | 4,000.00 | |
| 005 Mod 38 | 31X0200.320 | 32015101160 | 2574 | J2916 | 200365037 | 25,000.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 005 Mod. 38 | 31X0200.320 | 32015101160 | 2574 | J2917 | 200365048 | 10,000.00 | |
| 005 Mod. 38 | 31X0200.320 | 32015101160 | 2574 | J2916 | 200365046 | 25,000.00 | |
| 005 Mod. 38 | 31X0200 320 | 32015101160 | 2574 | J2919 | 200365045 | 25,000.00 | |
| 006 | 31X0200.17M | 17M15547160 | 252A | J7037 | RQ70010176 | 2,700.00 | 14,700.00 |
| 006 Mod. 21 | 31X0200.27M | 27M15547160 | 252A | J7037 | RQ70020156 | 6,000.00 | |
| 006 Mod. 34 | 31X0200.27M | 27M15547160 | 252A | J7037 | RQ70020251 | 1,000.00 | |
| 006 Mod. 38 | 31X0200.27M | 37M15547160 | 252A | J7037 | RQ70030035 | 5,000.00 | |
| 007 | 31X0200.17N | 17N15532160 | 252A | J7014 | RQ70010200 | 80,000.00 | 670,473.00 |
| 007 Mod. 3 | 31X0200.17N | 17N15532160 | 252A | J7014 | RQ70010280 | 110,473.00 | |
| 007 Mod. 12 | 31X0200.27N | 27N15532160 | 252A | J7014 | RQ70020089 | 120,000 00 | |
| 007 Mod 21 | 31X0200.27N | 27N15532160 | 252A | J7014 | RQ70020144 | 120,000.00 | |
| 007 Mod. 34 | 31X0200.27N | 27N15532160 | 252A | J7014 | RQ70020213 | 120,000.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|-----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 007 Mod. 37 | 31X0200.37N | 37N15532174 | 252A | J7014 | RQ70030014 | 120,000.00 | |
| 008 | 31X0200.17B | 17B15108160 | 252A | J7002 | RQ70010186 | 1,000.00 | 34,000.00 |
| 008 Mod. 3 | 31X0200.17B | 17B15108160 | 252A | J7002 | RQ70010283 | 11,000.00 | |
| 008 Mod. 26 | 31X0200.27B | 27B15108160 | 252A | J7002 | RQ70020197 | 12,000.00 | |
| 008 Mod. 34 | 31X0200.27B | 27B15108160 | 252A | J7002 | RQ70020270 | 10,000.00 | |
| 009 | 31X0300.130 | 13015601160 | 252A | L3044 | RQ30ITCIS2001 | 7,500.00 | 22,500.00 |
| 009 Mod. 3&5 | 31X0300.130 | 13015601160 | 252A | L3044 | RQ30ITCIS2001 | 5,000.00 | |
| 009 Mod. 34 | 31X0300.230 | 23015601160 | 252A | L3044 | 30ITCIS2002 | 10,000.00 | |
| 010 | 31X0200.17N | 17N15531160 | 252A | M7037 | RQ70010184 | 30,000.00 | 211,319.00 |
| 010 Mod. 2 | 31X0200.17N | 17N15531160 | 252A | M7007 | 70010276 | 10,000.00 | |
| 010 Mod. 21 | 31X0200.27 | 27N15531160 | 252A | M7037 | RQ70020166 | 20,000.00 | |
| 010 Mod. 34 | 31X0200.27N | 27N15531160 | 252A | M7037 | RQ70020252 | 151,319.00 | |
| 011 | 31X0200.110 | 11015523105 | 252A | J1080 | 10170161 | 10,000.00 | 10,000.00 |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|-----------|----------------------------|
| 012 | 31X0200.07E | 17E15548105 | 252A | B1564 | RQ70010185 | 10,000.00 | 57,329.00 |
| 012 Mod. 2 | 31X200 | 17E15548160 | 252A | J7004 | RQ70010254 | 20,000.00 | |
| 012 Mod. 4 | 31X0200 | 17E15548105 | 252A | B1564 | RQACS01-302 | 8,129.00 | |
| 012 Mod. 34 | 31X200 | 27R15548160 | 252A | J7004 | RQ70020257 | 12,000.00 | |
| 012 Mod. 38 | 31X200 | 37R15548160 | 252A | J7004 | RQ70030033 | 7,200.00 | |
| 013 | 31X0200.120 | 12015101160 | 252A | J2922 | 200165070 | 26,489.00 | 286,489.00 |
| 013 Mod. 9 | 31X0200.220 | 22015101160 | 2574 | J2922 | 200265034 | 65,000.00 | |
| 013 Mod. 12 | 31X0200.220 | 22015101160 | 2574 | J2922 | 200265060 | 43,359.00 | |
| 013 Mod. 21 | 31X0200.220 | 22015101160 | 2574 | J2922 | 200265060 | 91,641.00 | |
| 013 Mod. 34 | 31X0200.220 | 22015101160 | 2574 | J2922 | 200265060(I) | 20,000.00 | |
| 013 Mod. 38 | 31X0200.320 | 32015101160 | 2574 | J2922 | 200365047 | 40,000.00 | |
| 014 | 31X0200.110 | 11015524120 | 252A | J1017 | 10170153 | 1,500.00 | 1,500.00 |
| 015 | 31X0200 | 15015203135 | 252A | J5386 | AA8500090 | 50,000.00 | 761,341.00 |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|-------------|----------------------------|
| 015 Mod. 1 | 31X0200 | 15015203135 | 252A | J5386 | 5001R135 | 71,591.00 | |
| 015 Mod. 10 | 31X0200 | 15015203135 | 252A | J5385 | AA8500089 | 1,250.00 | |
| 015 Mod. 12 | 31X0200 | 25015203162 | 252A | J5386 | AA8500103 | 370,000.00 | |
| 015 Mod. 34 | 31X0200 | 25015203162 | 252A | J5386 | AA8500112 | 266,000.00 | |
| 015 Mod. 35 | 31X0200 | 25015203162 | 252A | J5386 | AA8500116 | 87,500.00 | |
| 015 Mod. 38 | 31X0200 | 25015203162 | 252A | J5386 | correction | (85,000.00) | |
| 016 | 31X0200.110 | 11015523110 | 252A | J1080 | 10170155 | 80,100.00 | 513,600.00 |
| 016 Mod. 10 | 31X0200.210 | 21015523340 | 252A | J1080 | 10270098 | 134,500.00 | |
| 016 Mod. 12 | 31X0200.210 | 21015523340 | 252A | J1080 | 10270107 | 200,000.00 | |
| 016 Mod. 38 | 31X0200310 | 31015523340 | 252A | J1080 | 10370612 | 99,000 00 | |
| 017 | 31X0200.110 | 11015523105 | 252A | J1068 | 10170175 | 60,000.00 | 1,371,921.83 |
| 017 Mod 2 | 31X0200 110 | 11015524120 | 252A | J1017 | 10170210 | 125,000.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 017 Mod. 3 | 31X0200.110 | 1115524120 | 252A | J1017 | CIO001732KP | 73,888.43 | |
| 017 Mod. 10 | 31X0200 210 | 2115524120 | 252A | J1017 | 10270116 | 250,000.00 | |
| 017 Mod. 21 | 31X0200.210 | 2115524120 | 252A | J1017 | C10270174 | 202,705.67 | |
| 017 Mod. 34 | 31X0200.210 | 21015524120 | 252A | J1017 | C10270233 | 260,294.33 | |
| 017 Mod. 35 | 31X0200 | 21015301189 | 252A | J1179 | 10270281 | 90,233.40 | |
| 017 Mod. 37 | 31X0200 310 | 31015524350 | 252A | J1017 | 10370548 | 156,000.00 | |
| 017 Mod. 38 | 31X0200.310 | 31015524350 | 252A | J1017 | 10370608C | 153,800.00 | |
| 018 | 31X0200 | 14015511160 | 252A | B1458 | 401IT003 | 15,000.00 | 151,250.00 |
| 018 Mod. 33 | x0200 | 24015511160 | 2570 | B1458 | ADM-02-168 | 136,250.00 | |
| 019 | 31X0200.17L | 17L15546160 | 252A | J70341 | RQ70010180 | 15,000.00 | 89,000.00 |
| 019 Mod 2 | 31X0200 17L | 17L15546160 | 3142 | J70341 | RQ70010252 | 17,000 00 | |
| 019 Mod. 17 | 31X0200.27L | 27L15546160 | 3142 | J70342 | RQ70020125 | 40,000.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|-----------|----------------------------|
| 019 Mod. 34 | 31X0200.27L | 27L15546160 | 3142 | J70342 | RQ70020243 | 17,000.00 | |
| 020 | 31X0200.17L | 17L15546160 | 252A | J70341 | RQ70010189 | 20,000.00 | 130,000.00 |
| 020 Mod. 9 | 31X0200.27L | 27L15546160 | 3142 | J70342 | RQ70020043 | 50,000.00 | |
| 020 | 31X0200.27L | 27L15546160 | 252A | J70342 | RQ70020174 | 30,000.00 | |
| 020 Mod. 37 | 31X0200.37L | 37L15546160 | 252A | J7034 | RQ70030013 | 10,000.00 | |
| 020 Mod. 38 | 31X0200.37L | 37L15546160 | 252A | J7034 | RQ70030032 | 20,000.00 | |
| 021 Mod. 1 | 31X0200.121 | 12015101160 | 2574 | J2932 | 200165079 | 25,000.00 | 93,442.80 |
| 021 Mod. 21 | 31X0200.220 | 22015101160 | 2574 | J2932 | 2002650780 | 18,342.80 | |
| 021 Mod. 21 | 31X0200.210 | 21015523340 | 253A | J1080 | 10270204 | 5,100.00 | |
| 021 Mod. 26 | 31X0200.27N | 27N15532172 | 252A | N7053 | RQ70020201 | 30,000.00 | |
| 021 Mod. 34 | 31X0200.27N | 27N15532172 | 252A | N7053 | RQ70020239 | 15,000.00 | |
| 022 | 31X0200.110 | 11015523110 | 252A | J1080 | 10170154 | 2,600.00 | 38,700.00 |
| 022 Mod. 9 | 31X0200.210 | 21015523340 | 252A | J1080 | 10270086 | 12,000.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 022 Mod. 14 | 31X0200.210 | 21015523340 | 252A | J1080 | 10270130 | 24,100.00 | |
| 023 | 31X0200 984 | 08415512120 | 252A | G8402 | 01 | 200,000.00 | 678,000.00 |
| 023 Mod. 2 | 31X0200.984 | 08415512120 | 2574 | G8402 | 02 | 225,000.00 | |
| 023 Mod. 9 | 31X0200.984 | 28415512160 | 252A | G8402 | 03 | 133,000 00 | |
| 023 Mod 37 | 31X0200.384 | 38415512120 | 2574 | G8402 | 04 | 40,000 00 | |
| 023 Mod. 38 | 31X0200.384 | 38415512120 | 2574 | G8402 | | 80,000.00 | |
| 024 | 31X0200 | 15015203110 | 252A | J5384 | AA8500091 | 78,800.00 | 802,162.00 |
| 024 Mod. 1 | 31X0200 | 15015203110 | 252A | J5384 | 5001R136 | 33,469.00 | |
| 024 Mod. 9 | 31X0200 | 25015203232 | 252A | J5384 | AA8500100 | 247,098.00 | |
| 024 Mod. 13 | 31X0200 | 25015203232 | 252A | J5384 | AA8500104 | 150,000.00 | |
| 024 Mod. 21 | 31X0200 | 25015203232 | 252A | J5384 | AA8500111 | 142,902.00 | |
| 024 Mod. 37 | 31X0200 | 35015203232 | 252A | J5384 | AA8500118 | 89,893.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 024 Mod 38 | 31X0200 | 35015203232 | 252A | J5384 | AA8500120 | 60,000.00 | |
| 025 | 31X0200 | 15015201125 | 252A | J5373 | AA8500093 | 15,000.00 | 15,000.00 |
| 026 | 31X0200 | 15015203160 | 252A | J5383 | AA8500092 | 7,000.00 | 14,000.00 |
| 026 Mod 9 | 31X0200 | 25015203160 | 252A | J5383 | AA8500101 | 2,000.00 | |
| 026 Mod. 12 | 31X0200 | 25015203160 | 252A | J5383 | AA8500102 | 5,000.00 | |
| 027 | see CLIN 15 | | | | | | 0.00 |
| 028 | 31X0200.110 | 11015524110 | 252A | D2413 | 10170156 | 30,000 00 | 587,404 00 |
| 028 Mod. 2 | 31X0200.110 | 11015524110 | 252A | D2413 | 10170220 | 63,504.00 | |
| 028 Mod. 10 | 31X0200.210 | 21015524346 | 252A | D2413 | 10270103 | 100,000.00 | |
| 028 Mod. 13 | 31X0200 210 | 21015524346 | 252A | D2413 | 10270136 | 159,000 00 | |
| 028 Mod. 28 | 31X0200.210 | 21015524346 | 252A | D2413 | 10270185 | 150,000.00 | |
| 028 Mod. 34 | 31X0200.210 | 21015524346 | 252A | D2413 | C10270235 | 84,900.00 | |
| 029 | 31X0200.160 | 16015110160 | 252A | Y6449 | 33011820129 | 25,000.00 | 75,000 00 |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|-------------|----------------------------|
| 029 Mod. 9 | 31X0200.260 | 26015110160 | 252A | Y6449 | RES-C02326 | 25,000.00 | |
| 029 Mod. 26 | 31X0200.260 | 26015110160 | 252A | Y6449 | RES-C02326 | 25,000.00 | |
| 030 | 31X0200.121 | 12015101160 | 252A | J2920 | 200165067 | 50,000.00 | 306,000 00 |
| 030 Mod. 9 | 31X0200.220 | 22015101160 | 2574 | J2920 | 200265038 | 100,000.00 | |
| 030 Mod. 21 | 31X0200.220 | 22015101160 | 2574 | J2920 | 200265038 | 106,000.00 | |
| 030 Mod. 38 | 31X0200.320 | 32015101160 | 2574 | J2920 | 200365044 | 50,000.00 | |
| 031 | 31X0200.17N | 17N15531160 | 252A | M7037 | RQ70010211 | 5,000.00 | 70,000.00 |
| 031 Mod. 2 | 31X0200.17N | 17N15531160 | 252A | M7037 | RQ70010246 | \$65,000.00 | |
| 032 | 31X0200 17A | 17A15109160 | 252A | J7075 | RQ70010177 | 1,200.00 | 59,000.00 |
| 032 Mod. 10 | 31X0200.27A | 27A15109160 | 252A | J7075 | RQ70020058 | 13,800 00 | |
| 032 Mod. 34 | 31X0200.27A | 27A15109160 | 252A | J7075 | RQ70020196 | 44,000.00 | |
| 033 | 31X0200 17C | 17C15544160 | 252A | J70031 | RQ70010193 | 750.00 | 750.00 |
| 034 | Canceled | | | | | 0.00 | 0.00 |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 035 Mod. 2 | 31X0200 | 17N15532125 | 2572 | N7019 | RQ70010241 | 60,000.00 | 115,000.00 |
| 035 Mod. 3 | 31X0200 | 17N15532125 | 2572 | N7019 | RQ70010285 | 30,000.00 | |
| 035 Mod. 6 | 31X0200 | 27N15532172 | 2572 | N7015 | RQ70020033 | 25,000.00 | |
| 036 Mod. 2 | 31X0200.110 | 11015523110 | 252A | J1068 | 10170205 | 119,000.00 | 119,000.00 |
| 037 | 31X0200 | 27N15532172 | 2572 | N7015 | RQ0020036 | 100,000.00 | 2,570,000.00 |
| 037 Mod. 10 | 31X0200 | 27N15532172 | 2572 | N7015 | RQ70020060 | 500,000.00 | |
| 037 Mod. 12 | 31X0200.27N | 27N15532172 | 2572 | N7015 | RQ70020090 | 400,000.00 | |
| 037 Mod. 21 | 31X0200.27N | 27N15532172 | 2572 | N7015 | RQ70020169 | 275,000.00 | |
| 037 Mod. 34 | 31X0200.27N | 27N15532172 | 2572 | N7015 | RQ70020226 | 400,000.00 | |
| 037 Mod. 34 | 31X0200.27N | 27N15532172 | 2572 | N7015 | RQ70020277 | 350,000.00 | |
| 037 Mod. 34 | 31X0200.27N | 27N15532172 | 2572 | N7015 | RQ70020265 | 545,000.00 | |
| 038 Mod. 16 | 31X0200.260 | 26015110160 | 252A | Y6629 | RESC02398 | 15,000.00 | 30,000.00 |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------|-------------|-------------|----------|--------------|----------------|------------|----------------------------|
| 038 Mod. 34 | 31X0200.260 | 26015110160 | 252A | Y6629 | RES-C02478 | 15,000.00 | |
| 039 Mod. 16 | 31X0200 | 25015203160 | 252A | J5418 | AA8500106 | 20,000.00 | 20,000.00 |
| 040 Mod. 19 | 31X0200 210 | 21015522338 | 252A | J1157 | 10270158 | 8,773.20 | 19,773 20 |
| 040 Mod. 34 | 31X0200.210 | 21015522338 | 252A | J1157 | CIO270240 | 11,000.00 | |
| 041 | 31X0200.220 | 22015101160 | 252 | J3013 | 200265074 | 109,990.35 | 125,990.35 |
| 041 Mod. 38 | 31X0200.320 | 32015101160 | 3140 | J3013 | 200365043 | 16,000.00 | |
| 042 Mod. 24 | 31X0200.210 | 21015523340 | 252A | J1080 | 10270184 | 70,000.00 | 70,000.00 |
| 043 Mod. 33 | 31X0200.210 | 21015523340 | 253A | J1068 | 10270204 | 50,000.00 | 185,000.00 |
| 043 Mod. 34 | 31X0200 210 | 21015523340 | 252A | J1075 | C10270238 | 50,000 00 | |
| 043 Mod. 38 | 31X0200 | 25015203162 | 252A | J5386 | correction | 85,000.00 | |
| 044 Mod 33 | 31X0200 | 27K15545160 | 252A | J70332 | RQ70020224 | 5,000.00 | 7,500.00 |
| 044 Mod 33 | 31X0200 | 27K15545380 | 252A | N70412 | RQ7002024 | 2,500.00 | |

| CLIN NO. | APPN. NO. | B&R NO. | BOC CODE | JOB CODE NO. | COMMITMENT NO. | AMOUNT | Total Obligation (by CLIN) |
|----------------------|-----------|---------|----------|--------------|----------------|-----------------|----------------------------|
| TOTAL OBLIGATION - - | | | | | | \$12,873,131.13 | \$12,873,131.13 |