

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE OF PAGES 1 89	
2. CONTRACT NUMBER 31310018C0004		3. SOLICITATION NUMBER 31310018R0004	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED B D (FB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5. DATE ISSUED 12/14/2017	6. REQUISITION/PURCHASE NUMBER RES-18-0037
7. ISSUED BY US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001		CODE NRCHQ	8. ADDRESS OFFER TO (If other than Item 7)		

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and _____ copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if hand carried, in the depository located in _____ until _____ (Hour) local time _____ (Date)

CAUTION: LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME ERIKA EAM	B. TELEPHONE (NO COLLECT CALLS)			C. E-MAIL ADDRESS Erika.Eam@nrc.gov
		AREA CODE 301	NUMBER 415-8180	EXT.	

11. TABLE OF CONTENTS

(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
<input checked="" type="checkbox"/>	A	SOLICITATION/CONTRACT FORM	1 - 2	<input checked="" type="checkbox"/>	I	CONTRACT CLAUSES	41 - 58
<input checked="" type="checkbox"/>	B	SUPPLIES OR SERVICES AND PRICES/COSTS	5 - 6	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
<input checked="" type="checkbox"/>	C	DESCRIPTION/SPECS./WORK STATEMENT	7 - 21	<input checked="" type="checkbox"/>	J	LIST OF ATTACHMENTS	59 - 87
<input checked="" type="checkbox"/>	D	PACKAGING AND MARKING	22	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
<input checked="" type="checkbox"/>	E	INSPECTION AND ACCEPTANCE	23 - 24	<input type="checkbox"/>	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
<input checked="" type="checkbox"/>	F	DELIVERIES OR PERFORMANCE	25 - 26	<input type="checkbox"/>	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
<input checked="" type="checkbox"/>	G	CONTRACT ADMINISTRATION DATA	27 - 29	<input type="checkbox"/>	M	EVALUATION FACTORS FOR AWARD	
<input checked="" type="checkbox"/>	H	SPECIAL CONTRACT REQUIREMENTS	30 - 40				

OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232.8)	10 CALENDAR DAYS (%)	20 CALENDAR DAYS (%)	30 CALENDAR DAYS (%)	CALENDAR DAYS (%)
-------------------------------------------------------------------------	----------------------	----------------------	----------------------	-------------------

14. ACKNOWLEDGEMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE 092982854	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
APPLIED PROGRAMMING TECHNOLOGY INC ATTN KENNETH JONES 240 MARKET ST STE 208 BLOOMSBURG PA 178151716			

15B. TELEPHONE NUMBER	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.	17. SIGNATURE	18. OFFER DATE
AREA CODE NUMBER EXT.	<input type="checkbox"/>		

AWARD (To be completed by government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT \$2,620,471.18	21. ACCOUNTING AND APPROPRIATION See schedule
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304 (c) () <input checked="" type="checkbox"/> 41 U.S.C. 253 (c) (1)	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) ITEM
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------

24. ADMINISTERED BY (If other than Item 7) See Schedule G	CODE NRCHQ	25. PAYMENT WILL BE MADE BY See Schedule G	CODE NRCPAYMENTS
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26. NAME OF CONTRACTING OFFICER (Type or print) ERIKA EAM	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARD DATE 02/28/2018
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CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
31310018C0004

PAGE OF
2 89

NAME OF OFFEROR OR CONTRACTOR
APPLIED PROGRAMMING TECHNOLOGY INC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00001	<p>Delivery: 03/11/2023 Delivery Location Code: NRCHQ NUCLEAR REGULATORY COMMISSION NUCLEAR REGULATORY COMMISSION WASHINGTON DC 20555-0001 USA</p> <p>Period of Performance: 03/12/2018 to 03/11/2023</p> <p>SNAP Line Item Ceiling: \$2,620,471.18 Incrementally Funded Amount: \$153,150.11</p> <p>Accounting Info: 2018-X0200-FEEBASED-60-60D003-60B301-1147-11-6-174 -252A-11-6-174-1147 Funded: \$80,000.00</p> <p>Accounting Info: 2018-X0200-FEEBASED-60-60D003-60B301-1147-17-6-161 -252A-17-6-161-1147 Funded: \$73,150.11</p> <p>The obligated amount of award: \$153,150.11. The total for this award is shown in box 20.</p>				2,620,471.18

SECTION B - Supplies or Services/Prices 5

 B.1 BRIEF PROJECT TITLE AND WORK DESCRIPTION 5

 B.2 CONSIDERATION AND OBLIGATION- LABOR-HOUR CONTRACT 5

 B.3 LINE ITEMS..... 6

SECTION C - Description/Specifications 7

SECTION D - Packaging and Marking.....22

 D.1 BRANDING.....22

 D.2 PACKAGING AND MARKING22

SECTION E - Inspection and Acceptance.....23

 E.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE.....23

 E.2 INSPECTION AND ACCEPTANCE BY THE NRC (SEP 2013).....23

SECTION F - Deliveries or Performance.....25

 F.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE.....25

 F.2 MONTHLY LETTER STATUS REPORT (MLSR)25

 F.3 PERIOD OF PERFORMANCE ALTERNATE III25

 F.4 PLACE OF DELIVERY-REPORTS25

SECTION G - Contract Administration Data.....27

 G.1 2052.215-71 PROJECT OFFICER AUTHORITY. (OCT 1999)27

 G.2 REGISTRATION IN FEDCONNECT® (JULY 2014)28

 G.3 ELECTRONIC PAYMENT (SEP 2014).....28

SECTION H - Special Contract Requirements.....30

 H.1 2052.200 AUTHORITY.30

 H.2 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST. (JAN 1993).....30

 H.3 2052.215-70 KEY PERSONNEL. (JAN 1993).....33

 H.4 2052.215-73 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS (OCT 1999).....33

 H.5 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999) - ALTERNATE I (OCT 1999)34

 H.6 2052.227-70 DRAWINGS, DESIGNS, SPECIFICATIONS, AND OTHER DATA. (JAN 1993).....34

 H.7 2052.235-71 SAFETY, HEALTH, AND FIRE PROTECTION. (JAN 1993)35

 H.8 2052.242-70 RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999)35

 H.9 2052.242-71 PROCEDURES FOR RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999).....36

 H.10 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS.....37

 H.11 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS.....37

 H.12 GREEN PURCHASING (SEP 2015).....38

 H.13 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORTS OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND GRANTS (JUL 2016)38

 H.14 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS.....39

 H.15 COPYRIGHT OF CODES – SPECIAL NUCLEAR PURPOSE LICENSE40

SECTION I - Contract Clauses.....41

 I.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE41

 I.2 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999).....43

 I.3 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT. (MAR 2000).....43

 I.4 52.222-35 EQUAL OPPORTUNITY FOR VETERANS. (OCT 2015)43

 I.5 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES. (JUL 2014) .44

 I.6 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE II (DEC 2007)44

I.7 52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL). (JUN 1987).....50
I.8 52.232-7 PAYMENTS UNDER TIME-AND-MATERIALS AND LABOR-HOUR
CONTRACTS. (AUG 2012).....50
I.9 SUBCONTRACTS. (OCT 2010).....25
I.10 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998).....57
I.11 COMPLIANCE WITH SECTION 508 OF THE REHABILITATION ACT OF 1973, AS
AMENDED (SEP 2013).....57
I.12 NRC ACQUISTION REGULATION (NRCAR) PROVISIONS AND CLAUSES (AUG 2011)
.....58
SECTION J - List of Documents, Exhibits and Other Attachments59

SECTION B - Supplies or Services/Prices

B.1 BRIEF PROJECT TITLE AND WORK DESCRIPTION

(a) The title of this project is: Symbolic Nuclear Analysis Package (SNAP)

(b) Summary work description: The objective of this contract is to provide continued support for the development of new SNAP code and feature plug-ins, as well as to maintain existing plug-ins to reflect changes in the supported analytic codes. This contract is also to support the development of any changes to the existing user interfaces for those SNAP code plug-ins, bug fixes, and user support activities including tutorial video development and user manual documents. The contractor may also be asked to modify the source code for analytical codes that support SNAP features.

(End of Clause)

B.2 CONSIDERATION AND OBLIGATION- LABOR-HOUR CONTRACT

(a) The ceiling price to the Government for full performance under this contract is NOT-TO-EXCEED \$2,620,471.18.

(b) The contract includes direct labor hours at specified fixed hourly rates, inclusive of wages, fringe, overhead, general and administrative expenses, and profit.

(c) It is estimated that the amount currently obligated will cover performance through TBD.

(d) This is an incrementally-funded contract and FAR 52.232-22 – “Limitation of Funds” applies.
(End of Clause)

B.3 LINE ITEMS

Position / Level	Burdened Labor Rates (FY 18-23)*											
	Year 1		Year 2		Year 3		Year 4		Year 5		Total	
	# of hours	Labor Rate	# of hours	Labor Rate	# of hours	Labor Rate	# of hours	Labor Rate	# of hours	Labor Rate	# of hours	Total
Software Architect	712	████████	712	████████	712	████████	712	████████	712	████████	3,560	████████
Software Engineer I	1,443	████████	1,443	████████	1,443	████████	1,443	████████	1,443	████████	7,215	████████
Software Engineer II	1,443	████████	1,443	████████	1,443	████████	1,443	████████	1,443	████████	7,215	████████
Software Developer II	1,202	████████	1,202	████████	1,202	████████	1,202	████████	1,202	████████	6,010	████████
Total Labor	4,800		4,800		4,800		4,800		4,800		24,000	
Total Labor Costs	████████		████████		████████		████████		████████		████████	
SNAP User Group Annual Membership	████████		████████		████████		████████		████████		████████	
Travel (Cost Reimbursable) The Government will pay up to the rates specified in the Government Federal Travel Regulations (FTR) for travel destination. NO PAYMENT WILL BE MADE WITHOUT BACKUP DOCUMENTATION/RECEIPTS. All travel must be approved in advance by the NRC Contracting Officer's Representative SEE SOW ENTITLED "TRAVEL"											\$4,000.00	
Total Labor, Membership, and Travel											\$2,620,471.18	

SECTION C - Description/Specifications

C.1 Title of Project

This is a non-personal services contract to provide developmental support for the Symbolic Nuclear Analysis Package (SNAP) as well as direct user level support for the use of SNAP.

C.2 Background

SNAP is a graphical user interface system designed to support NRC nuclear analysis codes. The nuclear analysis codes are used by our in-house staff and support contractors to evaluate safety concerns as well as review analyses presented in licensee submittals. The analytic codes are very complex and difficult to interact with on their own. SNAP was developed in response to a request made by several of the NRC regulatory offices to provide an easy to use, cross-platform, common graphical user interface to the analytic codes used by the agency.

SNAP includes pre-processor, job-submittal, and post-processor components. The pre-processor component of SNAP, the "Model Editor" application, allows code-specific models to be built using a custom graphical model editor that provides users with features such as: model error checking, context based code documentation lookup, model calculation notebook features, and graphical representation of analytic code based objects (nodes, cells, volumes, etc.). The job-submittal feature, the Model Editor "job-stream" along with the "Calculation Server", allow users to execute the analytical codes using SNAP-built models while keeping track of the inputs and outputs in a way that permits reproducing and recording of the analytical process. The job-submittal capabilities of SNAP also include the ability to perform sensitivity studies, parametric studies, and code validation functions. Post-processing features, handled by the Model Editor "Animation Plug-in" and the APTPlot tool, include the ability to animate the output of an analysis while providing the ability to generate publication quality plots and graphs for inclusion in reports.

Prior to 2003, a C++ version of SNAP existed but it was unstable, hard to extend to new analytic codes, and had an inconsistent and non-standard user interface. When SNAP development was transitioned from C++ to the Java programming language, it was redesigned into the modern plug-in based architecture used today. The SNAP "core" functionality was established to provide the application programming interface (API) that all SNAP plug-ins use today. The SNAP "core" is documented in "Symbolic Nuclear Analysis Package (SNAP): Common Application Framework for Engineering Analysis (CAFEAN) Preprocessor Plug-in Application Programming Interface", NUREG/CR-6974. CAFEAN is the copyrighted intellectual property of Applied Programming Technology, Inc. (APT). Note that while APT has granted the NRC a perpetual license to use CAFEAN via the SNAP core interface, the actual plug-in "code" for the various NRC code plug-ins belongs to the NRC. APTPlot, the post-processor portion of SNAP, is "copylefted" under the GNU Public License (GPL), and hence open and available to anyone for continued development or modification. An "analysis code support" (ACS) plug-in for APTPlot exists that allows APTPlot to interact with the various NRC analytic codes. The ACS plug-in source code is also owned by the NRC.

APT develops plug-ins for at least two other parties besides the NRC. While plug-in licensing generally restricts sharing of the plug-in codes with other parties, any changes that APT makes to the CAFEAN API are automatically made available to all parties. This code sharing has greatly improved the capabilities of SNAP as well as offsets the costs for new features. For

instance, the “Job-stream” feature in SNAP was developed for another party using their resources but the job-stream capability was made available to the NRC at no cost (except the cost to modify our code plug-ins to use the feature, which was minimal).

As stated above, SNAP is written in Java. Java is an object oriented modern software language that is currently supported by the Oracle company. Updates to Java occur regularly to provide new features as well as address any security issues. SNAP is tested with the newest version of Java as they become available in order to ensure compatibility; any issues that are found are resolved quickly to maintain compatibility with the common modern operating systems (Microsoft Windows, Linux derivatives, and UNIX derivatives). SNAP itself is designed to be object oriented and extensible via a plug-in based architecture.

The plug-in architecture that SNAP uses allows it to provide support to the various analytic codes using code “plug-ins”. A SNAP code plug-in is a self-contained “jar” file (java-archive file) that contains all the information about that code: the codes’ logical objects, editors for those objects, information about how to run that code, how the code saves its output, etc. Currently, SNAP code plug-ins exist for the following NRC-developed analytical codes: TRACE, RELAP5, MELCOR (1.8.6 and 2.1), PARCS, RADTRAD, FRAPCON, and FRAPTRAN. TRACE and RELAP5 are system-level thermal hydraulic codes. MELCOR is a system-level severe accident code. PARCS is a three-dimensional (3D) reactor core simulator which solves the steady-state and time-dependent, multi-group neutron diffusion and transport equations. RADTRAD is a code that predicts dose to populations based on radiological release from various scenarios. FRAPCON and FRAPTRAN are fuel phenomena codes.

SNAP also supports additional features through “feature” plug-ins. Feature plug-ins are also self-contained “jar” files. Feature plug-ins that are currently available for SNAP are: the “AVF” (auto-validation framework) plug-in and the “UQ” (uncertainty) plug-in. The AVF plug-in allows users to define validation and verification suites as well as code-to-code and code-to-data assessment cases. The UQ plug-in provides a framework for interfacing the analytical code plug-ins to the Design Analysis Kit for Optimizing and Terascale Applications (DAKOTA) code. DAKOTA is a multilevel parallel object-oriented framework for design optimization, parameter estimation, uncertainty quantification, and sensitivity analysis.

C.3 Objective

The objective of this contract is to provide continued support for the development of new SNAP code and feature plug-ins, as well as to maintain existing plug-ins to reflect changes in the supported analytic codes. This contract is also to support the development of any changes to the existing user interfaces for those SNAP code plug-ins, bug fixes, and user support activities including tutorial video development and user manual documents. The contractor may also be asked to modify the source code for analytical codes that support SNAP features.

In addition, secure distribution of the SNAP code via a non-government website is required as is maintenance of such a website according to established NRC security requirements (stated in the contract clauses associated with this statement of work). Online tutorials and user manuals shall also be developed and made available via the website.

C.4 Scope of Work/Tasks

The contractor shall provide all resources necessary (personnel, equipment and material) to accomplish the tasks and deliverables described in this Statement of Work (SOW).

C.4.1 Maintain SNAP Capabilities

The supported analytical codes are still undergoing modifications that may necessitate changes to their input format requirements. The contractor shall upgrade SNAP to fully support these modifications. The contractor shall maintain contact with the analytical code developers so that any changes may be identified and modifications made to the respective SNAP plug-in in a timely fashion. The NRC Contracting Officer's Representative (COR) shall be notified (by email) of any planned changes to any plug-in; the COR must approve of such changes before any changes are made. If a new plug-in version is required its development will be provided for in Task [C.4.11 "Develop, Maintain and Support new analytical code plug-ins."](#)

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 2 staff months

Period 2:

Estimated Effort: 2 staff months

Period 3:

Estimated Effort: 2 staff months

Period 4:

Estimated Effort: 2 staff months

Period 5:

Estimated Effort: 2 staff months

C.4.2 SNAP Application Testing and Distribution

1. SNAP plug-ins for analytical codes shall be tested to ensure that they are able to import and export the respective code input decks without causing changes in the calculated results. For each analytical code for which SNAP provides a plug-in, the contractor shall maintain and exercise a relevant suite of input decks to assure that the SNAP plug-in is performing input and output operations correctly. The contractor shall include in these test suites any decks that are provided by the COR as well as preparing any input decks needed to test input and output features related to the operation of the SNAP plug-in with the respective analytic code. The contractor shall correct errors discovered in the associated SNAP plug-in during testing, as necessary.
2. Maintain a multi-platform, SNAP installation package to support code distribution. SNAP shall be distributed from a web-site under strict control of the contractor. COR approval is required prior to the contractor granting users access to the NRC controlled SNAP plug-ins listed in Section H.15 COPYRIGHT OF CODES - SPECIAL NUCLEAR PURPOSE LICENSE.

3. Provide and maintain an online “error-tracking” system. This error-tracking system shall be available to SNAP users so that they are able to report new-found problems and review the status of any known existing problems. Users shall also be allowed to enter “feature-requests” through this tracking system. The developers shall review and update tracked items prior to every new code release.
4. Evaluate and correct errors reported by the SNAP user community. Errors shall be triaged and addressed as deemed appropriate. Errors reports and bug fixes will be documented and reported to the COR within 30 days (these reports shall be included in the MLSR and code release notes). If a code correction requires more than 30 days to implement then the COR shall be notified (by email) and the associated bug/error shall be entered into the online error tracking system so that other users are aware of the problem(s).
5. Maintain and update SNAP User's manuals and help files to reflect any code changes. Automate linkage to analysis code documentation. Updates to the manuals and help files shall be performed before the updated code is released.
6. Provide User Support via phone or email within 3 business days of receipt of the request. Assist users in SNAP usage issues as requested by the SNAP user community. User support is to be limited to resource availability. Implement user identified feature-requests for code improvements only once they are reviewed and approved by the COR. Reviews and approvals shall take place via email.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 5 staff months

Period 2:

Estimated Effort: 5 staff months

Period 3:

Estimated Effort: 5 staff months

Period 4:

Estimated Effort: 5 staff months

Period 5:

Estimated Effort: 5 staff months

C.4.3 Provide technical support to NRC

The contractor shall prepare and give presentations, attend meetings, review technical reports, and provide technical consultation and support as requested by the COR. There are two international Code Assessment and Maintenance Program (CAMP) meetings annually and up to six code planning and development meetings that the contractor shall be required to attend. Physical attendance at one of these meeting annually is required. The contractor may attend the remainder of the meetings that year via remote Go-to-Meeting or other internet means, unless otherwise directed by the COR.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 4 staff months

Period 2:

Estimated Effort: 4 staff months

Period 3:

Estimated Effort: 4 staff months

Period 4:

Estimated Effort: 4 staff months

Period 5:

Estimated Effort: 4 staff months

C.4.4 Prepare and maintain online tutorials and “how-to” videos

The contractor shall develop a set of tutorial videos, each one not to exceed 20-30 minutes in length, and make them available to the SNAP user community via the SNAP web-site. Videos shall be updated within 30 business days of the implementation of a code update. The subjects of the training videos shall include, at a minimum:

- 1 Installation, setup and configuration of SNAP
- 2 Overview of the SNAP components (ModelEditor, Calculation Server, APTPlot)
- 3 Use of the ModelEditor including an example of editing a model, submitting a job-stream, and basic post-processing methods
- 4 Advanced ModelEditor usage including examples of the different job-stream types, use of “numerics” in a model along with basic “numeric function” usage
- 5 Specific videos for each of the NRC supported SNAP code plug-ins emphasizing features particular to each plug-in

Other videos may be requested by the COR, the SNAP user community, or the SNAP contractor themselves. Before developing any video(s), the contractor shall provide the COR with the proposed video content and receive written approval to prepare the video(s) from the COR. Once approved, the contractor shall proceed with the development of the video(s). All videos shall be reviewed and approved by the COR before being made publicly available.

The contractor shall ensure that all video content is kept current with the current published version of SNAP and its associated plug-ins. New or changed features of SNAP and/or the plug-ins need to be addressed in the videos whenever a SNAP update is made available. Updates to the videos shall be completed before the associated code/feature is made available to users.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 3 staff months

Period 2:

Estimated Effort: 2 staff months

Period 3:

Estimated Effort: 2 staff months

Period 4:

Estimated Effort: 2 staff months

Period 5:

Estimated Effort: 2 staff months

C.4.5 Implement Advanced Support for DAKOTA Features

The DAKOTA (Design Analysis Kit for Optimization and Terascale Applications) code is currently being used in SNAP's UQ (uncertainty quantification) plug-in only for its uncertainty analysis features. However, DAKOTA offers much more functionality to analysts than what the UQ plug-in uses. The purpose of this task is for the SNAP contractor to collect and suggest features of DAKOTA that will be useful for NRC's purposes. The contractor shall document these features in a "software requirements specification" (SRS) document. The contractor shall then prepare a "software design document" (SDD) containing a software design for implementing the identified requirements into a DAKOTA plug-in for the SNAP user interface. The SRS and SDD shall be provided to the COR within 30 calendar days of COR request. After the COR approves the SRS/SDD documents (by email), the contractor shall implement the features into SNAP.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 2 staff months

Period 2:

Estimated Effort: 5 staff months

C.4.6 Implement TRACE user guidance into the SNAP-TRACE Plug-in

The NRC has been developing comprehensive guidelines for input model development for the TRACE code. The contractor shall implement these new guidelines into the SNAP-TRACE plug-in so that the guidelines will be graphically "popped up" as suggestions to a TRACE model developer. The suggestions shall be implemented in such a way that they can be toggled on and off both individually and in total.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 2 staff months

C.4.7 Develop, Maintain and Support “FAST” code plug-in

The contractor shall complete the development of the initial version of the SNAP-FAST code plug-in. The SNAP-FAST plug-in shall have all of the features of a standard code plug-in, including the ability to edit and run a FAST model. In addition, the contractor shall:

- 1 Create a graphic for the FAST plug-in so that when building a model, a graphic representation of the fuel rod will be shown (similar to the heat structure graphic used in TRACE, but with appropriate detail).
- 2 Develop the Animation model to work with FAST
- 3 Improve on the AVF functionality for FAST so that it has the ability to generate the same type of document that is generated by our prototype assessment code. The government will provide detailed output from the prototype assessment code to the contractor when needed.
- 4 Put the capability into FAST for SNAP to have hooks to control the code execution (in the same manner that SNAP is able to control TRACE executions). This is important for using SNAP to drive coupled calculations.
- 5 Implement the text editor “context sensitive” improvements for the SNAP-FAST plug-in.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 7 staff months

C.4.8 Improve or replace APTPlot [SNAP visualization improvements]

The APTPlot software is used as the post-processor portion of SNAP to provide 2-D plots and graphs of publication quality. APTPlot was derived from the XMGR/ACGrace software that ran under the X-windows windowing environment. APTPlot was created expeditiously; in doing so the developers tried to maintain the existing capabilities without changing the interface or functionality too much. A full refactorization of the APTPlot tool was anticipated to standardize the interface, improve user friendliness, improve maintainability, and to add much needed features.

The some of the required features are documented below:

1. Interface to the axial plotting feature. APTPlot allows TRACE users to plot values of data along the axis of a TRACE component, however, the current “axial plot” interface is not at all user friendly and needs to be refactored to provide a simple and easy to understand interface.
2. A 3-D plotting feature in APTPlot. NRC analysts frequently need to plot data in 3-dimensions. The 3-D implementation in APTPlot shall allow the user to quickly and easily set-up 3-D plots, rotate such plots through simple mouse actions, and print and export these plots to publication quality venues.
3. A contour plot feature. The NRC frequently needs the ability to show contours (paths of constant value) of properties in its reports. The contractor shall implement a contour plotting ability into APTPlot that shall allow the user to control, at a minimum:
 - a. the number of levels of contours to show on a plot
 - b. the colors and labels of the contour lines, including allowing contour bands

- c. the interpolation function that is used when needing to interpolate missing levels between data
 - d. the ability to overlay the contour lines onto a 3-D plot of the same data
4. Implementation of the Python/Jython scripting capability into APTPlot. Currently, APTPlot scripting support is a mixture of two scripting types. The first script type is designed to control plot visual characteristics, and the second script type is an advanced set of commands added to APTPlot to support NRC analysis requirements. The syntax for the current scripting capabilities is often non-intuitive and, in the case of the visual scripts, poorly documented. The contractor shall implement a python/jython script interface into APTPlot and provide python “hooks” to all of the scripting capabilities currently available in APTPlot. The contractor shall also ensure that the standard python libraries are able to be accessed from within the APTPlot python implementation.

The contractor shall either refactor APTPlot to provide the improved usability, improved maintainability, and extended features (described below), or shall replace APTPlot with another tool capable of meeting these standards and providing these capabilities. The contractor shall prepare a APTPlot Recommendation Report documenting the recommendation for replacement of APTPlot or repairing APTPlot and propose a preferred path forward. The contractor shall provide this report to the COR who will determine which option to pursue. The contractor shall obtain prior written approval via email from the COR as to whether to develop a new plotting tool or to continue modifying APTPlot. The APTPlot Recommendation Report shall be provided to the COR within 60 business days of contract award.

Level of Effort (LOE) Estimate(s):

Period 1:

Estimated Effort: 5 staff months

Period 2:

Estimated Effort: 8 staff months

C.4.9 Enhance the SNAP-Animation plug-in [SNAP visualization improvements]

The SNAP-Animation plug-in is widely used for visualizing the output of the analytic codes that SNAP supports as well as animating data from experimental facilities. The current animation plug-in is lacking in many regards and users have made various requests for new features over the years. Due to the focus of development on support of SNAP code plug-ins, many of the requested animation plug-in feature requests have not been addressed. This task outlines how the contractor shall implement new visualization features into the SNAP animation plug-in.

- 1 Enhanced editor support. Currently, the editors for the existing animation elements are somewhat limited and not always user friendly. The contractor shall review the existing animation element editors and ensure that all of the editors for tables, ranges, and multiple selections are consistent and easy to use. The “ease of use” aspect shall be judged by the COR and other NRC, staff as available. The COR will provide feedback on the suitability of the editor to the contractor, if applicable. Creation of improved editors in SNAP will be an iterative process since the analytic codes that SNAP supports frequently change their input structure and capabilities.

- 2 Table standardization and improvements. Tables shall allow copy and paste between text based clipboard structures and the SNAP interface when feasible.
- 3 Multiple-selection editing. When editing multiple selections, the contractor shall ensure that editors shall be able to edit common properties of the selection even if those properties currently contain different values.
- 4 Navigator view components. The animation navigator view shall be modified to show the contained graphic components/object as is done for the analytic code navigator views. This capability will be very useful for selecting graphic components that may be difficult to identify and find in the graphic views.
- 5 Import and export to other structured graphic formats. Other structured graphic tools such as “sketch-up”, or CAD-CAM programs are often used by analysts when preparing input models as well as when presenting results. The SNAP-animation plug-in shall be made capable of direct import and export of files from these formats. The exact formats to focus on will be determined by the COR after a survey of such structured graphics formats is conducted by the contractor and the results are provided to the COR in a written report to be titled “Structured Graphic Format Survey Report.” This report shall be provided to the COR within 5 business days of completion. The COR will approve a selection of the formats. Once the contractor receives COR approval (via email) the contractor shall implement support for SNAP to import and export the identified formats.
- 6 Additional features and modifications, as requested by users and approved by the COR. As stated earlier, SNAP-animation users often bring up issues and new feature requests that, until now, have been given lower development priority than other issues. SNAP-animation plug-in issues already on the development “to-do” list shall now be revisited and addressed. New issues that arise shall be prioritized by the COR.

Level of Effort (LOE) Estimate(s):

Period 2:

Estimated Effort: 4 staff months

Period 3:

Estimated Effort: 9 staff months

Period 4:

Estimated Effort: 9 staff months

Period 5:

Estimated Effort: 9 staff months

C.4.10 Develop, Maintain and Support cloud interface and job streaming feature plug-in

The NRC is migrating its analytical computation capabilities to the “cloud”. To support this migration the contractor shall implement within SNAP the ability to provision cloud virtual machines and then to submit jobs, collect results, and provide all of the other current SNAP capabilities through the SNAP “ModelEditor” interface.

The design of this feature plug-in shall be such that it has the ability to be extended to the various cloud platforms currently available commercially. The NRC will be using the Amazon “govCloud” cloud interface, but it is possible that other cloud providers will be used in the future. IT security will be an important aspect of this feature plug-in so it is anticipated that some interaction with the NRC cloud contractor and NRC IT security staff may be required. The government will supply any required information regarding special security aspects, as needed.

The contractor shall gather requirements for this feature plugin and prepare a “software requirements specification” (SRS) document. The contractor shall then prepare a “software design document” (SDD) containing a software design for implementing the identified requirements into a “cloud interface” feature plug-in for the SNAP user interface. The SRS and SDD shall be provided to the COR within 30 calendar days of COR request. After the COR approves the SRS/SDD documents (by email), the contractor shall implement the features into SNAP.

Level of Effort (LOE) Estimate(s):

Period 3:

Estimated Effort: 8 staff months

Period 4:

Estimated Effort: 8 staff months

C.4.11 Develop, Maintain and Support new analytical code plug-ins

During the span of this contract, several analytic codes are likely to require a SNAP plug-in to be developed to support them. For example, it is anticipated that MELCOR 3.0 will be developed during this time frame and would require a new SNAP plug-in. Also, recently it has been suggested that probabilistic risk assessment (PRA) capabilities be incorporated into a new plug-in. The purpose of this task to develop such SNAP plug-ins as requested by the COR.

More specifically, the contractor shall, for each analytical code requested by the COR:

- 1 Review the analytical code documentation.
- 2 Gather requirements for the code plugin and prepare a “software requirements specification” (SRS) document. The SRS shall be submitted to the COR within 30 calendar days of COR request.
- 3 Prepare a “software design document” (SDD) containing a software design for implementing the identified requirements into the code plug-in for the SNAP user interface. The SDD shall be submitted to the COR within 30 calendar days of COR request.
- 4 Before proceeding, obtain prior COR approval for the SRS/SDD documents (by email).
- 5 Complete a preliminary plug-in that would be capable of:
 - a. Import and export of the analytic code’s model definition files.
 - b. Performing at least “forms based” editing functions of the code’s model.
 - c. Submitting the model to the SNAP calculation server.
 - d. Collecting the results from the code execution and making them available to the analyst through the SNAP interface (APTPlot and/or SNAP-animation plug-in)
- 6 Deliver the new plug-in to the NRC for review and feedback.
- 7 Once the plug-in is accepted by the COR, further support for such plug-ins shall be provided under Task 4.1, “Maintain SNAP Capabilities”, of this contract.

Level of Effort (LOE) Estimate(s):

Period 5:

Estimated Effort: 8 staff months

C.5 Estimated Labor Categories, Key Personnel and Levels of Effort

Labor Categories, Requirements and Key Personnel. Personnel working under this contact shall meet the minimum requirements for experience and education, as follows:

Labor Category	Position Minimum Requirements	Key Personnel* (yes or no)
Software Architect	<ol style="list-style-type: none"> 1. Master's or Ph.D. degree in Nuclear Engineering. 2. A minimum of 10 years of code development experience. 3. A degree or certification in software design or software engineering is preferred but not required. 4. Demonstrated direct knowledge of Java and experience in designing and developing Java applications. 	yes
Software Engineer I	<ol style="list-style-type: none"> 1. Bachelor's degree in computer science related area. 2. A minimum of 1–2 years of experience in code development. 3. Demonstrated direct knowledge of Java and experience in developing Java applications. 	no
Software Engineer II	<ol style="list-style-type: none"> 1. Bachelor's degree in a computer science related area. 2. A minimum of 2–4 years of experience in code development. 3. Demonstrated direct knowledge of Java and experience in developing Java applications. 	no
Software Developer II	<ol style="list-style-type: none"> 1. Bachelor's degree in a computer science related area. 2. A minimum of 2–4 years of experience in code development. 3. Demonstrated direct knowledge of Java and experience in developing Java applications. 	no

*See NRCAR 2052.215-70, "Key Personnel"

Level-of-Effort (in hours)

	Base Year	Option 1	Option 2	Option 3	Option 4	Total
Labor Category	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	
Software Architect	712	712	712	712	712	3560
Software Engineer I	1,443	1,443	1,443	1,443	1,443	7215
Software Engineer II	1,443	1,443	1,443	1,443	1,443	7215
Software Developer II	1,202	1,202	1,202	1,202	1,202	6010
Total	4800	4800	4800	4800	4800	24,000

Please note that this Estimate of Effort information is advisory and is not to be considered as the sole basis for the development of the staffing plan/proposal. Offerors are permitted to make revisions to the proposed estimate of effort hours, and labor categories, based upon their own professional judgment and proposed technical approach to the requirement described in the SOW.

C.6 Certification and License Requirements

N/A

C.7 Reporting Requirements**C.7.1 Monthly Letter Status Report (MLSR)**

The contractor shall provide an electronic version of the Monthly Letter Status Report (MLSR) to the CO, NRC COR, RES Funds Certifying Official and Office of the Chief Financial Officer (OCFO) by the 15th of each month, in a format similar to the sample contained in Attachment X. The report shall provide the technical and financial status of the effort.

The technical status section of the MLSR shall contain a summary of the work performed during the reporting period; milestones reached, or for milestones missed, an explanation why; any problems or delays encountered or anticipated, with recommendations for resolution; and plans for the next reporting period. The status shall include information on any travel during the period, to include trip start and end dates, destination, and traveler for each trip.

The financial status section of the MLSR shall include the following information: the total contract ceiling amount; funds obligated to-date; total costs incurred in the reporting period, broken down by direct and other direct costs; and total cumulative costs incurred-to date. The MLSR shall also contain the balance of obligated funding remaining at the end of the reporting period, and the balance of funds required to complete the contract. Additionally, if applicable, the MLSR shall address the status of the Contractor Spending

Plan (CSP), showing the percentage of project completion and any significant changes in either projected expenditures or percentage of completion. The MLSR should also identify the acquisition cost, description (model number, manufacturer) and acquisition date of any property/equipment acquired for the project during the month with an acquisition cost greater than \$500.

In the event that the data in the MLSR indicates a need for additional funding beyond that already obligated to the task order for that reporting period, this information may only be used as support to the official request for funding required in accordance with the Limitation of Cost (LOC) Clause (FAR 52.232-20) or the Limitation of Funds (LOF) Clause FAR 52.232-22.

C.7.2 Final Report

This contract does not require a final report as the work being performed and the deliverables being produced are under continuous use and review by the COR and NRC staff.

C.8 List of Deliverables

Section #	Deliverable	Due Date	Format	Submit to
C.4	All new codes, code updates, associated documentation, and tutorial materials (including video files) shall be published on the SNAP distribution web-site	Within 5 business days of completion	As appropriate	COR shall be notified by email.
C.4.5	DAKOTA plugin SRS/SDD	Within 30 calendar days of COR request	Word Document	COR
C.4.8	APTPlot Recommendation Report	Within 60 business days of contract award	Word Document	COR
C.4.9	Structured Graphic Format Survey Report	Within 5 business days of completion	Word Document	COR
C.4.10	"Cloud Interface" plugin SRS/SDD	Within 30 calendar days of COR request	Word Document	COR
C.4.11	"Code Plugin" SRS/SDD	Within 30 calendar days of COR request	Word Document	COR
C.7.1	Monthly Letter Status Report (MLSR)	15 th of the following month	Word Document	CO/COR

C.9 Required Materials/Facilities

N/A

C.10 Release of Publications

Any documents generated by the contractor under this contract shall not be released for publication or dissemination without CO and COR prior written approval.

C.11 Place of Performance

The work to be performed under this contract will be primarily performed at the location of the contractor's facility.

C.12 Recognized Holidays

N/A

C.13 Hours of Operation

N/A

C.14 Contractor Travel

Anticipated contractor travel includes travel to a domestic location annually to participate in the Code Assessment and Maintenance Program (CAMP) meeting. The location of the CAMP meeting may change yearly, and will not always require the presence of contractor staff. The COR will advise the contractor whether their attendance is required at the annual CAMP meeting. It is anticipated that travel duration for CAMP meeting attendance is 2 days. Travel to other domestic locations for presenting SNAP tutorials is likely. The dates and destinations will be provided by the COR subsequent to contract award. Travel to other domestic locations to present tutorials related to this contract is possible, but is currently not planned. If additional travel plans are definitized, dates and destinations will be provided by the COR.

Contractor will be authorized travel expenses consistent with the Federal Travel Regulation (FTR) and the limitation of funds specified in the travel line item of this contract. All travel requires prior written approval from the COR.

C.15 Section 508 – Electronic and Information Technology Standards

In December 2000, the Architectural and Transportation Barriers Compliance Board (Access Board), pursuant to Section 508(2)(A) of the Rehabilitation Act Amendments of 1998, established information technology accessibility standards for the federal government. Section 508(a)(1) requires that when federal departments or agencies develop, procure, maintain, or use Electronic and Information Technology (EIT), they shall ensure that the EIT allows federal employees with disabilities to have access to and use of information and data that is comparable to the access to and use of information and data by other Federal employees. The Section 508 requirement also applies to members of the public seeking information or services

from a federal department or agency. Section 508 text is available at <http://www.opm.gov/HTML/508-textOfLaw.htm> or <http://www.section508.gov/>

The following standards are applicable to this contract/order (*Check those that apply*):

Subpart B – Technical Standards

- [Software Applications and Operating Systems \(1194.21\)](#)
- [Web-based Intranet and Internet Information and Applications\(1194.22\)](#)
- [Telecommunications Products \(1194.23\)](#)
- [Video and Multimedia Products \(1194.24\)](#)
- [Self-Contained, Closed Products \(1194.25\)](#)
- [Desktop and Portable Computers \(1194.26\)](#)

Subpart C – Functional Performance Criteria

- [Functional Performance Criteria \(1194.31\)](#)

[Subpart D – Information, Documentation, and Support](#)

- [Information, Documentation, and Support \(1194.41\)](#)

EIT purchased under this contract/order must be accessible to persons with disabilities, unless otherwise stipulated in the contract/order. Any product replacements contemplated under this contract/order must be equally as 508 compliant as (or more compliant than) the original product purchased. Also, the Government reserves the right to conduct hands-on testing to validate contractor 508 compliance claims.

A **Voluntary Product Accessibility Template (VPAT)** shall be provided along with EIT deliverables submitted to the Government, if available.

C.16 Applicable Publications (Current Editions)

N/A

SECTION D - Packaging and Marking

D.1 BRANDING

The Contractor is required to use the statement below in any publications, presentations, articles, products, or materials funded under this contract/order, to the extent practical, in order to provide NRC with recognition for its involvement in and contribution to the project. If the work performed is funded entirely with NRC funds, then the contractor must acknowledge that information in its documentation/presentation.

Work Supported by the U.S. Nuclear Regulatory Commission (NRC), Office of Research (RES), under Contract/order number 31310018C0004.

(End of Clause)

D.2 PACKAGING AND MARKING

(a) The Contractor shall package material for shipment to the NRC in such a manner that will ensure acceptance by common carrier and safe delivery at destination. Containers and closures shall comply with the Surface Transportation Board, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.

(b) On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

(c) Additional packaging and/or marking requirements are as follows: N/A.

(End of Clause)

SECTION E - Inspection and Acceptance**E.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 CLAUSES INCORPORATED BY REFERENCE" in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
	FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1)	

52.246-6 INSPECTION - TIME-AND-MATERIAL AND LABOR-HOUR. (MAY 2001)

E.2 INSPECTION AND ACCEPTANCE BY THE NRC (SEP 2013)

Inspection and acceptance of the deliverable items to be furnished hereunder shall be made by the NRC Contracting Officer's Representative (COR) at the destination, accordance with FAR 52.247-34 - F.o.b. Destination.

The schedule of deliverable of the Tasks is outlined below as per the Statement of Work (SOW):

Section #	Deliverable	Due Date	Format	Submit to
C.4	All new codes, code updates, associated documentation, and tutorial materials (including video files) shall be published on the SNAP distribution web-site	Within 5 business days of completion	As appropriate	COR shall be notified by email.
C.4.5	DAKOTA plugin SRS/SDD	Within 30 calendar days of COR request	Word Document	COR
C.4.8	APTPlot Recommendation Report	Within 60 business days of contract award	Word Document	COR
C.4.9	Structured Graphic Format Survey Report	Within 5 business days of completion	Word Document	COR
C.4.10	"Cloud Interface" plugin SRS/SDD	Within 30 calendar days of COR request	Word Document	COR
C.4.11	"Code Plugin" SRS/SDD	Within 30 calendar days of COR request	Word Document	COR
C.7.1	Monthly Letter Status Report	15 th of the following month	Word Document	CO/COR

	(MLSR)			
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(End of Clause)

SECTION F - Deliveries or Performance**F.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 CLAUSES INCORPORATED BY REFERENCE" in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
	FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1)	

52.242-15 STOP-WORK ORDER. (AUG 1989)

F.2 MONTHLY LETTER STATUS REPORT (MLSR)

The contractor shall provide a Monthly Letter Status Report which consists of a technical progress report and financial status report. This report will be used by the Government to assess the adequacy of the resources proposed by the contractor to accomplish the work contained in this SOW and provide status of contractor progress in achieving tasks and producing deliverables. The report shall include contract/order summary information, work completed during the specified period, milestone schedule information, problem resolution, travel plans, and staff hour summary (See Attachment 3)

(End of Clause)

F.3 PERIOD OF PERFORMANCE ALTERNATE III

This contract shall commence on TBD and will expire on sixty (60) months from date of award. The term of this contract may be extended at the option of the Government for an additional six (6) months, from the current expiration date to plus six (6) months.

The term of this contract may be extended at the option of the Government for an additional six (6) (not to exceed six months).

Base Period: **March 12, 2018 - March 11, 2023**

Option Period(s): **March 12, 2023 – August 11, 2013**

(End of Clause)

F.4 PLACE OF DELIVERY-REPORTS

The items to be furnished hereunder shall be delivered, with all charges paid by the Contractor, to:

- a. Name: Chester Gingrich (1 hard copy)
- b. Contracting Officer's Representative (COR)
- c. U.S. Nuclear Regulatory Commission
- d. Address:

Two White Flint North

11545 Rockville Pike, Mail Stop - TWFN/ 10 B56

Rockville, MD 20852-2738

e. Electronic copies to:

f. (List names and email addresses)

g. Name: Erika Eam (1 hard copy)

h. Contracting Officer (CO)

i. U.S. Nuclear Regulatory Commission

j. Address:

Two White Flint North

11545 Rockville Pike, Mail Stop - TWFN/08 C14

Rockville, MD 20852-2738

(End of Clause)

SECTION G - Contract Administration Data

G.1 2052.215-71 PROJECT OFFICER AUTHORITY. (OCT 1999)

(a) The contracting officer's authorized representative hereinafter referred to as the project officer for this contract is:

Name: Chester Gingrich

Address: Office of Research (RES); Mail Stop: T-10 B56; Washington, DC 20555-0001

Telephone Number: (301) 415-2173

(b) Performance of the work under this contract is subject to the technical direction of the NRC project officer. The term technical direction is defined to include the following:

(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work or changes to specific travel identified in the Statement of Work), fills in details, or otherwise serves to accomplish the contractual statement of work.

(2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.

(3) Review and, where required by the contract, approve technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

(c) Technical direction must be within the general statement of work stated in the contract. The project officer does not have the authority to and may not issue any technical direction which:

(1) Constitutes an assignment of work outside the general scope of the contract.

(2) Constitutes a change as defined in the "Changes" clause of this contract.

(3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions, or specifications of the contract.

(5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

(d) All technical directions must be issued in writing by the project officer or must be confirmed by the project officer in writing within ten (10) working days after verbal issuance. A copy of the written direction must be furnished to the contracting officer. A copy of NRC Form 445, Request for Approval of Official Foreign Travel, which has received final approval from the NRC must be furnished to the contracting officer.

(e) The contractor shall proceed promptly with the performance of technical directions duly issued by the project officer in the manner prescribed by this clause and within the project officer's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the project officer is within one of the categories defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working days after the receipt of any instruction or direction and shall request that contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

(g) 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 contract.

(h) 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 to the instruction or direction is subject to 52.233-1 - Disputes.

(i) 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 contracting officer 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 contracting officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

(End of Clause)

G.2 REGISTRATION IN FEDCONNECT® (JULY 2014)

The Nuclear Regulatory Commission (NRC) uses Compusearch Software Systems' secure and auditable two-way web portal, FedConnect®, to communicate with vendors and contractors. FedConnect® provides bi-directional communication between the vendor/contractor and the NRC throughout pre-award, award, and post-award acquisition phases. Therefore, in order to do business with the NRC, vendors and contractors must register to use FedConnect® at <https://www.fedconnect.net/FedConnect>. The individual registering in FedConnect® must have authority to bind the vendor/contractor. There is no charge for using FedConnect®. Assistance with FedConnect® is provided by Compusearch Software Systems, not the NRC. FedConnect® contact and assistance information is provided on the FedConnect® web site at <https://www.fedconnect.net/FedConnect>.

G.3 ELECTRONIC PAYMENT (DEC 2017)

The Debt Collection Improvement Act of 1996 requires that all payments except IRS tax refunds be made by Electronic Funds Transfer. Payment shall be made in accordance with FAR 52.232-33, entitled "Payment by Electronic Funds-Central Contractor Registration".

31310018C0004

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted through the Invoice Processing Platform (IPP) (<https://www.ipp.gov/>). Back up documentation shall be included as required by the NRC's Billing Instructions.

(End of Clause)

SECTION H - Special Contract Requirements

H.1 2052.200 AUTHORITY.

H.2 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST. (JAN 1993)

(a) Purpose. The primary purpose of this clause is to aid in ensuring that the contractor:

(1) Is not placed in a conflicting role because of current or planned interests (financial, contractual, organizational, or otherwise) which relate to the work under this contract; and

(2) Does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described apply to performance or participation by the contractor, as defined in 48 CFR 2009.570-2 in the activities covered by this clause.

(c) Work for others.

(1) Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe, with respect to itself or any employee, that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.

(2) The contractor may not represent, assist, or otherwise support an NRC licensee or applicant undergoing an NRC audit, inspection, or review where the activities that are the subject of the audit, inspection, or review are the same as or substantially similar to the services within the scope of this contract (or task order as appropriate) except where the NRC licensee or applicant requires the contractor's support to explain or defend the contractor's prior work for the utility or other entity which NRC questions.

(3) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site, the contractor shall neither solicit nor perform work in the same or similar technical area for that licensee or applicant organization for a period commencing with the award of the task order or beginning of work on the site (if not a task order contract) and ending one year after completion of all work under the associated task order, or last time at the site (if not a task order contract).

(4) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site,

(i) The contractor may not solicit work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate.

(ii) The contractor may not perform work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate, and for one year thereafter.

(iii) Notwithstanding the foregoing, the contracting officer may authorize the contractor to solicit or perform this type of work (except work in the same or similar technical area) if the contracting officer determines that the situation will not pose a potential for technical bias or unfair competitive advantage.

(d) Disclosure after award.

(1) The contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in this contract, that it does not have any organizational conflicts of interest as defined in 48 CFR 2009.570-2.

(2) The contractor agrees that if, after award, it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the contracting officer. This statement must include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract if termination is in the best interest of the Government.

(3) It is recognized that the scope of work of a task-order-type contract necessarily encompasses a broad spectrum of activities. Consequently, if this is a task-order-type contract, the contractor agrees that it will disclose all proposed new work involving NRC licensees or applicants which comes within the scope of work of the underlying contract. Further, if this contract involves work at a licensee or applicant site, the contractor agrees to exercise diligence to discover and disclose any new work at that licensee or applicant site. This disclosure must be made before the submission of a bid or proposal to the utility or other regulated entity and must be received by the NRC at least 15 days before the proposed award date in any event, unless a written justification demonstrating urgency and due diligence to discover and disclose is provided by the contractor and approved by the contracting officer. The disclosure must include the statement of work, the dollar value of the proposed contract, and any other documents that are needed to fully describe the proposed work for the regulated utility or other regulated entity. NRC may deny approval of the disclosed work only when the NRC has issued a task order which includes the technical area and, if site-specific, the site, or has plans to issue a task order which includes the technical area and, if site-specific, the site, or when the work violates paragraphs (c)(2), (c)(3) or (c)(4) of this section.

(e) Access to and use of information.

(1) If, in the performance of this contract, the contractor obtains access to information, such as NRC plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), the contractor agrees not to:

(i) Use this information for any private purpose until the information has been released to the public;

(ii) Compete for work for the Commission based on the information for a period of six months after either the completion of this contract or the release of the information to the public, whichever is first;

(iii) Submit an unsolicited proposal to the Government based on the information until one year after the release of the information to the public; or

(iv) Release the information without prior written approval by the contracting officer unless the information has previously been released to the public by the NRC.

(2) In addition, the contractor agrees that, to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), or other confidential or privileged technical, business, or financial information under this contract, the contractor shall treat the information in accordance with restrictions placed on use of the information.

(3) Subject to patent and security provisions of this contract, the contractor shall have the right to use technical data it produces under this contract for private purposes provided that all requirements of this contract have been met.

(f) Subcontracts. Except as provided in 48 CFR 2009.570-2, the contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms contract, contractor, and contracting officer, must be appropriately modified to preserve the Government's rights.

(g) Remedies. For breach of any of the above restrictions, or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract or for such erroneous representations that necessarily imply bad faith, the Government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies permitted by law or this contract.

(h) Waiver. A request for waiver under this clause must be directed in writing to the contracting officer in accordance with the procedures outlined in 48 CFR 2009.570-9.

(i) Follow-on effort. The contractor shall be ineligible to participate in NRC contracts, subcontracts, or proposals therefor (solicited or unsolicited) which stem directly from the contractor's performance of work under this contract. Furthermore, unless so directed in writing by the contracting officer, the contractor may not perform any technical consulting or management support services work or evaluation activities under this contract on any of its products or services or the products or services of another firm if the contractor has been substantially involved in the development or marketing of the products or services.

(1) If the contractor under this contract, prepares a complete or essentially complete statement of work or specifications, the contractor is not eligible to perform or participate in the initial contractual effort which is based on the statement of work or specifications. The contractor may not incorporate its products or services in the statement of work or specifications unless so directed in writing by the contracting officer, in which case the restrictions in this paragraph do not apply.

(2) Nothing in this paragraph precludes the contractor from offering or selling its standard commercial items to the Government.

(End of Clause)

H.3 2052.215-70 KEY PERSONNEL. (JAN 1993)

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

Software Architect

*The contractor agrees that personnel may not be removed from the contract work or replaced without compliance with paragraphs (b) and (c) of this section.

(b) If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding 30 work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, the contractor shall immediately notify the contracting officer and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

(c) Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the contracting officer to evaluate the proposed substitution. The contracting officer and the project officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

(d) If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

(End of Clause)

* To be incorporated into any resultant contract

H.4 2052.215-73 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS (OCT 1999)

(a) All offerors will be notified of their exclusion from the competitive range in accordance with FAR 15.503(a)(1). Under the requirements of FAR 15.503(a)(2), preliminary notification will be provided before award for small business set-aside procurements on negotiated procurements. The contracting officer shall provide written postaward notice to each unsuccessful offeror in accordance with FAR 15.503(b).

(b) The contracting officer is the only individual who can legally commit the NRC to the expenditure of public funds in connection with this procurement. This means that, unless provided in a contract document or specifically authorized by the contracting officer, NRC technical personnel may not issue contract modifications, give informal contractual commitments, or otherwise bind, commit, or obligate the NRC contractually. Informal contractual commitments include:

- (1) Encouraging a potential contractor to incur costs before receiving a contract;
- (2) Requesting or requiring a contractor to make changes under a contract without formal contract modifications;
- (3) Encouraging a contractor to incur costs under a cost-reimbursable contract in excess of those costs contractually allowable; and
- (4) Committing the Government to a course of action with regard to a potential contract, contract change, claim, or dispute.

(End of Clause)

H.5 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999) - ALTERNATE I (OCT 1999)

- (a) Total expenditure for travel may not exceed **\$4,000 over the life of the contract** without the prior approval of the contracting officer.
- (b) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days prior to the commencement of travel.
- (c) The contractor will be reimbursed only for travel costs incurred that are directly related to this contract and are allowable subject to the limitations prescribed in FAR 31.205-46.
- (d) It is the responsibility of the contractor to notify the contracting officer in accordance with the FAR Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the travel ceiling amount identified in paragraph (a) of this clause.
- (e) Reasonable travel costs for research and related activities performed at State and nonprofit institutions, in accordance with Section 12 of Pub. L. 100-679, must be charged in accordance with the contractor's institutional policy to the degree that the limitations of Office of Management and Budget (OMB) guidance are not exceeded. Applicable guidance documents include OMB Circular A-87, Cost Principles for State and Local Governments; OMB Circular A-122, Cost Principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

*To be incorporated into any resultant contract

(End of Clause)

H.6 2052.227-70 DRAWINGS, DESIGNS, SPECIFICATIONS, AND OTHER DATA. (JAN 1993)

All drawings, sketches, designs, design data, specifications, notebooks, technical and scientific data, and all photographs, negatives, reports, findings, recommendations, other data and memoranda of every description relating thereto, as well as all copies of the foregoing relating to the work or any part thereto, are subject to inspection by the Commission at all reasonable times. Inspection of the proper facilities must be afforded the Commission by the contractor and

its subcontractors. These data are the property of the Government and may be used by the Government for any purpose whatsoever without any claim on the part of the contractor and its subcontractors and vendors for additional compensation and must, subject to the right of the contractor to retain a copy of the material for its own use, be delivered to the Government, or otherwise disposed of by the contractor as the contracting officer may direct during the progress of the work or upon completion or termination of this contract. The contractor's right of retention and use is subject to the security, patent, and use of information provisions, if any, of this contract.

(End of Clause)

H.7 2052.235-71 SAFETY, HEALTH, AND FIRE PROTECTION. (JAN 1993)

The contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of its employees and of members of the public, including NRC employees and contractor personnel, and to minimize danger from all hazards to life and property. The contractor shall comply with all applicable health, safety, and fire protection regulations and requirements (including reporting requirements) of the Commission and the Department of Labor. If the contractor fails to comply with these regulations or requirements, the contracting officer may, without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work. Thereafter, a start work order for resumption of work may be issued at the discretion of the contracting officer. The contractor may not make a claim for an extension of time or for compensation or damages by reason of, or in connection with, this type of work stoppage.

(End of Clause)

H.8 2052.242-70 RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999)

(a) The Nuclear Regulatory Commission's (NRC) policy is to support the contractor's expression of professional health and safety related concerns associated with the contractor's work for NRC that may differ from a prevailing NRC staff view, disagree with an NRC decision or policy position, or take issue with proposed or established agency practices. An occasion may arise when an NRC contractor, contractor's personnel, or subcontractor personnel believes that a conscientious expression of a competent judgement is required to document such concerns on matters directly associated with its performance of the contract. The NRC's policy is to support these instances as Differing Professional Views (DPVs).

(b) The procedure that will be used provides for the expression and resolution of differing professional views (DPVs) of health and safety related concerns associated with the mission of the agency by NRC contractors, contractor personnel or subcontractor personnel on matters directly associated with its performance of the contract. This procedure may be found in Attachments to this document. The contractor shall provide a copy of the NRC DPV procedure to all of its employees performing under this contract and to all subcontractors who shall, in turn, provide a copy of the procedure to its employees. The prime contractor or subcontractor shall submit all DPV's received but need not endorse them.

(End of Clause)

**H.9 2052.242-71 PROCEDURES FOR RESOLVING DIFFERING PROFESSIONAL VIEWS.
(OCT 1999)**

(a) The following procedure provides for the expression and resolution of differing professional views (DPVs) of health and safety related concerns of NRC contractors and contractor personnel on matters connected to the subject of the contract. Subcontractor DPVs must be submitted through the prime contractor. The prime contractor or subcontractor shall submit all DPV's received but need not endorse them.

(b) The NRC may authorize up to eight reimbursable hours for the contractor to document, in writing, a DPV by the contractor, the contractor's personnel, or subcontractor personnel. The contractor shall not be entitled to any compensation for effort on a DPV which exceeds the specified eight hour limit.

(c) Before incurring costs to document a DPV, the contractor shall first determine whether there are sufficient funds obligated under the contract which are available to cover the costs of writing a DPV. If there are insufficient obligated funds under the contract, the contractor shall first request the NRC contracting officer for additional funding to cover the costs of preparing the DPV and authorization to proceed.

(d) Contract funds shall not be authorized to document an allegation where the use of this NRC contractor DPV process is inappropriate. Examples of such instances are: allegations of wrongdoing which should be addressed directly to the NRC Office of the Inspector General (OIG), issues submitted anonymously, or issues raised which have already been considered, addressed, or rejected, absent significant new information. This procedure does not provide anonymity. Individuals desiring anonymity should contact the NRC OIG or submit the information under NRC's Allegation Program, as appropriate.

(e) When required, the contractor shall initiate the DPV process by submitting a written statement directly to the NRC Office Director or Regional Administrator responsible for the contract, with a copy to the Contracting Officer, Division of Contracts and Property Management, Office of Administration. Each DPV submitted will be evaluated on its own merits.

(f) The DPV, while being brief, must contain the following as it relates to the subject matter of the contract:

(1) A summary of the prevailing NRC view, existing NRC decision or stated position, or the proposed or established NRC practice.

(2) A description of the submitter's views and how they differ from any of the above items.

(3) The rationale for the submitter's views, including an assessment based on risk, safety and cost benefit considerations of the consequences should the submitter's position not be adopted by NRC.

(g) The Office Director or Regional Administrator will immediately forward the submittal to the NRC DPV Review Panel and acknowledge receipt of the DPV, ordinarily within five (5) calendar days of receipt.

(h) The panel will normally review the DPV within seven calendar days of receipt to determine whether enough information has been supplied to undertake a detailed review of the issue. Typically, within 30 calendar days of receipt of the necessary information to begin a review, the

panel will provide a written report of its findings to the Office Director or Regional Administrator and to the Contracting Officer, which includes a recommended course of action.

(i) The Office Director or Regional Administrator will consider the DPV Review Panel's report, make a decision on the DPV and provide a written decision to the contractor and the Contracting Officer normally within seven calendar days after receipt of the panel's recommendation.

(j) Subsequent to the decision made regarding the DPV Review Panel's report, a summary of the issue and its disposition will be included in the NRC Weekly Information Report submitted by the Office Director. The DPV file will be retained in the Office or Region for a minimum of one year thereafter. For purposes of the contract, the DPV shall be considered a deliverable under the contract. Based upon the Office Director or Regional Administrator's report, the matter will be closed.

(End of Clause)

H.10 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS

(a) All offerors will receive preaward and postaward notices in accordance with FAR 15.503.

(b) It is also brought to your attention that the contracting officer is the only individual who can legally obligate funds or commit the NRC to the expenditure of public funds in connection with this procurement. This means that unless provided in a contract document or specifically authorized by the contracting officer, NRC technical personnel may not issue contract modifications, give formal contractual commitments, or otherwise bind, commit, or obligate the NRC contractually. Informal unauthorized commitments, which do not obligate the NRC and do not entitle the contractor to payment, may include:

(1) Encouraging a potential contractor to incur costs prior to receiving a contract;

(2) Requesting or requiring a contractor to make changes under a contract without formal contract modifications;

(3) Encouraging a contractor to incur costs under a cost-reimbursable contract in excess of those costs contractually allowable; and

(4) Committing the Government to a course of action with regard to a potential contract, contract change, claim, or dispute.

(End of Clause)

H.11 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS

The Debt Collection Improvement Act of 1996 requires that all Federal payments except IRS tax refunds be made by Electronic Funds Transfer. It is the policy of the Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system. Item 15C of the Standard Form 33 may be disregarded.

(End of Clause)

H.12 GREEN PURCHASING (SEP 2015)

(a) In furtherance of the sustainable acquisition goals of Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade," products and services provided under this contract/order shall be energy efficient (EnergyStar® or Federal Energy Management Program - FEMP-designated products), water efficient, biobased, environmentally preferable (excluding EPEAT®-registered products), non-ozone depleting, contain recycled content, or are non- or low toxic alternatives or hazardous constituents (e.g., non-VOC paint), where such products and services meet agency performance requirements. See: Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade."

(b) The NRC and contractor may negotiate during the contract term to permit the substitution or addition of designated recycled content products (i.e., Comprehensive Procurement Guidelines - CPG), EPEAT®-registered products, EnergyStar®- and FEMP designated energy efficient products and appliances, USDA designated biobased products (Biopreferred® program), environmentally preferable products, WaterSense and other water efficient products, products containing non- or lower-ozone depleting substances (i.e., SNAP), and products containing non- or low-toxic or hazardous constituents (e.g., non-VOC paint), when such products and services are readily available at a competitive cost and satisfy the NRC's performance needs.

(c) The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order.

(End of Clause)

H.13 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORTS OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND GRANTS (JUL 2016)

Review and Approval of Reports

(a) Reporting Requirements. The contractor/grantee shall comply with the terms and conditions of the contract/grant regarding the contents of the draft and final report, summaries, data, and related documents, to include correcting, deleting, editing, revising, modifying, formatting, and supplementing any of the information contained therein, at no additional cost to the NRC. Performance under the contract/grant will not be deemed accepted or completed until it complies with the NRC's directions, as applicable. The reports, summaries, data, and related documents will be considered draft until approved by the NRC. The contractor/grantee agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data, and related documents created under this contract/grant remain solely within the discretion of the NRC.

(b) Publication of Results. Prior to any dissemination, display, publication, or release of articles, reports, summaries, data, or related documents developed under the contract/grant, the contractor/grantee shall submit them to the NRC for review and approval. The contractor/grantee shall not release, disseminate, display or publish articles, reports, summaries, data, and related documents, or the contents therein, that have not been reviewed and approved by the NRC for release, display, dissemination or publication. The contractor/grantee agrees to conspicuously place any disclaimers, markings or notices, directed by the NRC, on any articles, reports, summaries, data, and related documents that the contractor/grantee intends to release, display, disseminate or publish to other persons, the public, or any other entities. The contractor/grantee agrees, and grants, a royalty-free, nonexclusive, irrevocable worldwide

license to the government, to use, reproduce, modify, distribute, prepare derivative works, release, display or disclose the articles, reports, summaries, data, and related documents developed under the contract/grant, for any governmental purpose and to have or authorize others to do so.

(c) Identification/Marking of Sensitive Unclassified Non-Safeguards Information (SUNSI) and Safeguards Information (SGI). The decision, determination, or direction by the NRC that information possessed, formulated or produced by the contractor/grantee constitutes SUNSI or SGI is solely within the authority and discretion of the NRC. In performing the contract/grant, the contractor/grantee shall clearly mark SUNSI and SGI, to include for example, OOU-Allegation Information or OOU-Security Related Information on any reports, documents, designs, data, materials, and written information, as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet (e.g., NRC Form 461 Safeguards Information) in maintaining these records and documents. The contractor/grantee shall ensure that SUNSI and SGI is handled, maintained and protected from unauthorized disclosure, consistent with NRC policies and directions. The contractor/grantee shall comply with the requirements to mark, maintain, and protect all information, including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954 as amended, its implementing regulations (10 CFR 73.21), Sensitive Unclassified Non-Safeguards and Safeguards Information policies, and NRC Management Directives and Handbooks 12.5, 12.6 and 12.7.

(d) Remedies. In addition to any civil, criminal, and contractual remedies available under the applicable laws and regulations, failure to comply with the above provisions, and/or NRC directions, may result in suspension, withholding, or offsetting of any payments invoiced or claimed by the contractor/grantee.

(e) Flowdown. If the contractor/grantee intends to enter into any subcontracts or other agreements to perform this contract/grant, the contractor/grantee shall include all of the above provisions in any subcontracts or agreements.

H.14 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS

Annual and final evaluations of contractor performance under this contract will be prepared in accordance with FAR Subpart 42.15, "Contractor Performance Information," normally at or near the time the contractor is notified of the NRC's intent to exercise the contract option. If the multi-year contract does not have option years, then an annual evaluation will be prepared on or about the anniversary date of the contract. Final evaluations of contractor performance will be prepared at the expiration of the contract during the contract closeout process.

The Contracting Officer will transmit the NRC Contracting Officer's Representative's (COR) annual and final contractor performance evaluations to the contractor's Project Manager, unless otherwise instructed by the contractor. The contractor will be permitted thirty days to review the document and submit comments, rebutting statements, or additional information.

Where a contractor concurs with, or takes no exception to an annual performance evaluation, the Contracting Officer will consider such evaluation final and releasable for source selection purposes. Disagreements between the parties regarding a performance evaluation will be referred to an individual one level above the Contracting Officer, whose decision will be final.

The Contracting Officer will send a copy of the completed evaluation report, marked "Source Selection Information", to the contractor's Project Manager for their records as soon as

practicable after it has been finalized. The completed evaluation report also will be used as a tool to improve communications between the NRC and the contractor and to improve contract performance.

The completed annual performance evaluation will be used to support future award decisions in accordance with FAR 42.1502 and 42.1503. During the period the information is being used to provide source selection information, the completed annual performance evaluation will be released to only two parties - the Federal government personnel performing the source selection evaluation and the contractor under evaluation if the contractor does not have a copy of the report already.

(End of Clause)

H.15 COPYRIGHT OF CODES - SPECIAL NUCLEAR PURPOSE LICENSE

(A) The NRC may, pursuant to Section (c) of FAR Clause 52-227-14, direct the contractor to claim a copyright in computer software and associated data first produced in the performance of this contract. More specifically, the SNAP plug-ins for the following codes: TRACE, MELCOR (1.8.6 and 2.1), PARCS, RADTRAD, CONTAIN, FRAPCON, FRAPTRAN, and any future code plug-ins that are directly developed with resources of the USNRC, unless SPECIFICALLY excepted, in a letter from an USNRC representative. In addition to the general government license rights identified in Section (c) of FAR Clause 52-227-14, such copyright shall be subject to the following Special Nuclear Purpose License rights:

In addition to the license rights granted the government under paragraph (c) of Section I of the contract, 52.227-14 RIGHTS IN DATA-GENERAL (JUN 1987), the contractor grants the NRC and others acting on its behalf an exclusive, paid up, worldwide, irrevocable license to distribute the specific plug-ins listed above for nuclear health and safety purposes, which may include analyses of operational, decommissioned, or designs of nuclear reactor systems and other such facilities involving nuclear technology performed by parties which may include but are not limited to licensees, vendors, contractors, educational institutions, public interest groups, participants in NRC international agreement programs and other government agencies. Further, consistent with NRCAR 2052.209-73 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST, the contractor agrees that it will not sell or distribute the specific plug-ins listed above to or for the use of such parties or participants and that it will not provide technical services relating to these plug-ins to such parties or participants, unless authorized by NRC. In addition, NRC retains the right to improvements made to these plug-ins resulting from the contractor's commercial activity that the NRC contracting officer determines are of use for nuclear health and safety purposes. Further, the contractor agrees to include in any licensing agreement that it may enter into with a third party such limitations as are necessary to preserve the rights of the government, and limit the sale and distribution of the software as described above and as limited by the U.S. Departments of Commerce and State concerning foreign sales.

(B) The NRC reserves the right to direct the contractor to transfer the copyright in for the specific plug-ins listed above to successor contractors subject to the above general government and special license rights. Should NRC determine that it is in the government's interest to have NRC staff perform the software development and maintenance work required under this contract, the contractor agrees to maintain the copyright subject to the above general government and special license rights.

(End of Clause)

SECTION I - Contract Clauses**I.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 CLAUSES INCORPORATED BY REFERENCE" in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
	FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1)	
52.202-1	DEFINITIONS.	(NOV 2013)
52.203-3	GRATUITIES.	(APR 1984)
52.203-5	COVENANT AGAINST CONTINGENT FEES.	(MAY 2014)
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT.	(SEP 2006)
52.203-7	ANTI-KICKBACK PROCEDURES.	(MAY 2014)
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY.	(MAY 2014)
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY.	(MAY 2014)
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS.	(OCT 2010)
52.203-13	CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT.	(OCT 2015)
52.203-17	CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS.	(APR 2014)
52.203-19	PROHIBITION ON REQUIRING CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS OR STATEMENTS. (JAN 2017)	
52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER.	(MAY 2011)
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS.	(OCT 2016)
52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE.	(OCT 2016)
52.204-22	ALTERNATIVE LINE ITEM PROPOSAL.	(JAN 2017)
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT. (OCT 2015)	
52.209-9	UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS.	(JUL 2013)
52.209-10	PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS.	(NOV 2015)
52.215-2	AUDIT AND RECORDS - NEGOTIATION.	(OCT 2010)
52.215-8	ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT.	(OCT 1997)
52.215-10	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA.	(AUG 2011)
52.215-11	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA - MODIFICATIONS.	(AUG 2011)
52.215-12	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA.	

		(OCT 2010)
52.215-13	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA - MODIFICATIONS.	(OCT 2010)
52.215-14	INTEGRITY OF UNIT PRICES.	(OCT 2010)
52.215-14	INTEGRITY OF UNIT PRICES. (OCT 2010) - ALTERNATE I	(OCT 1997)
52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS.	(OCT 2010)
52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY.	(OCT 1997)
52.215-19	NOTIFICATION OF OWNERSHIP CHANGES.	(OCT 1997)
52.215-21	REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA - MODIFICATIONS.	(OCT 2010)
52.217-2	CANCELLATION UNDER MULTI-YEAR CONTRACTS.	(OCT 1997)
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS.	(NOV 2016)
52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN.	(JAN 2017)
52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN. (JAN 2017) - ALTERNATE II	(NOV 2016)
52.219-16	LIQUIDATED DAMAGES - SUBCONTRACTING PLAN.	(JAN 1999)
52.222-3	CONVICT LABOR.	(JUN 2003)
52.222-17	NONDISPLACEMENT OF QUALIFIED WORKERS.	(MAY 2014)
52.222-21	PROHIBITION OF SEGREGATED FACILITIES.	(APR 2015)
52.222-26	EQUAL OPPORTUNITY.	(SEP 2016)
52.222-37	EMPLOYMENT REPORTS ON VETERANS.	(FEB 2016)
52.222-40	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT.	(DEC 2010)
52.222-50	COMBATING TRAFFICKING IN PERSONS.	(MAR 2015)
52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION.	(OCT 2015)
52.223-6	DRUG-FREE WORKPLACE.	(MAY 2001)
52.223-18	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING.	(AUG 2011)
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES.	(JUN 2008)
52.227-1	AUTHORIZATION AND CONSENT.	(DEC 2007)
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT.	(DEC 2007)
52.227-14	RIGHTS IN DATA-GENERAL.	(MAY 2014)
52.227-14	RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE III	(DEC 2007)
52.230-2	COST ACCOUNTING STANDARDS.	(OCT 2015)
52.230-3	DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES.	(OCT 2015)
52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS.	(JUN 2010)
52.232-17	INTEREST.	(MAY 2014)
52.232-18	AVAILABILITY OF FUNDS.	(APR 1984)
52.232-23	ASSIGNMENT OF CLAIMS.	(MAY 2014)
52.232-25	PROMPT PAYMENT.	(JAN 2017)
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER - SYSTEM FOR AWARD MANAGEMENT.	(JUL 2013)
52.232-39	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS.	(JUN 2013)

52.232-40	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS.	(DEC 2013)
52.233-1	DISPUTES.	(MAY 2014)
52.233-3	PROTEST AFTER AWARD.	(AUG 1996)
52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM.	(OCT 2004)
52.242-3	PENALTIES FOR UNALLOWABLE COSTS.	(MAY 2014)
52.242-5	PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS.	(JAN 2017)
52.242-13	BANKRUPTCY.	(JUL 1995)
52.243-3	CHANGES - TIME-AND-MATERIALS OR LABOR-HOURS.	(SEP 2000)
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS.	(NOV 2017)
52.245-1	GOVERNMENT PROPERTY.	(JAN 2017)
52.245-9	USE AND CHARGES	(APR 2012)
52.246-25	LIMITATION OF LIABILITY - SERVICES.	(FEB 1997)
52.249-6	TERMINATION (COST-REIMBURSEMENT). (MAY 2004) – ALTERNATE IV	(SEP 1996)
52.249-14	EXCUSABLE DELAYS.	(APR 1984)
52.253-1	COMPUTER GENERATED FORMS.	(JAN 1991)

I.2 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within one (1) month.

(End of clause)

I.3 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT. (MAR 2000)

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years, 6 months.

(End of clause)

I.4 52.222-35 EQUAL OPPORTUNITY FOR VETERANS. (OCT 2015)

- (a) Definitions. As used in this clause-

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at FAR 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

I.5 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES. (JUL 2014)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

I.6 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE II (DEC 2007)

(a) *Definitions.* As used in this clause-

Computer database or *database* means a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

Computer software- (1) Means (i) Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and

(ii) Recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that

would enable the computer program to be produced, created, or compiled.

(2) Does not include computer databases or computer software documentation.

Computer software documentation means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

Data means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

Form, fit, and function data means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

Limited rights means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of paragraph (g)(3) if included in this clause.

Limited rights data means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.

Restricted computer software means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

Restricted rights, as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of paragraph (g) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

Technical data, means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. The term includes recorded information of a scientific or technical nature that is included in computer databases. (See 41 U.S.C. 116).

Unlimited rights means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of rights.* (1) Except as provided in paragraph (c) of this clause, the Government shall have unlimited rights in-

- (i) Data first produced in the performance of this contract;
- (ii) Form, fit, and function data delivered under this contract;
- (iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and
- (iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to-

- (i) Assert copyright in data first produced in the performance of this contract to the extent provided in paragraph (c)(1) of this clause;
- (ii) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;
- (iii) Substantiate the use of, add, or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and
- (iv) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause.

(c) *Copyright-* (1) Data first produced in the performance of this contract. (i) Unless provided otherwise in paragraph (d) of this clause, the Contractor may, without prior approval of the Contracting Officer, assert copyright in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works. The prior, express written permission of the Contracting Officer is required to assert copyright in all other data first produced in the performance of this contract.

- (ii) When authorized to assert copyright to the data, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including contract number).
- (iii) For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government. For

computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly (but not to distribute copies to the public) by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without the prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract unless the Contractor-

(i) Identifies the data; and

(ii) Grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause or, if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government will not remove any authorized copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(d) *Release, publication, and use of data.* The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except-

(1) As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);

(2) As expressly set forth in this contract; or

(3) If the Contractor receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.

(e) *Unauthorized marking of data.* (1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in paragraph (g)(3) or (g) (4) if included in this clause, and use of the notices is not authorized by this clause, or if the data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, pursuant to 41 U.S.C. 4703, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer will make written inquiry to the Contractor affording the Contractor 60 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 60-day period (or a longer time approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in paragraph (e)(1)(i) of this clause, the Contracting Officer will consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor will be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer will furnish the Contractor a written determination, which determination will become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government will continue to abide by the markings under this paragraph (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government will thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in paragraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by paragraph (e) of the clause from bringing a claim, in accordance with the Disputes clause of this contract, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) *Omitted or incorrect markings.* (1) Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights. The Government is not liable for the disclosure, use, or reproduction of such data.

(2) If the unmarked data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on the data at the Contractor's expense. The Contracting Officer may agree to do so if the Contractor-

(i) Identifies the data to which the omitted notice is to be applied;

- (ii) Demonstrates that the omission of the notice was inadvertent;
- (iii) Establishes that the proposed notice is authorized; and
- (iv) Acknowledges that the Government has no liability for the disclosure, use, or reproduction of any data made prior to the addition of the notice or resulting from the omission of the notice.

(3) If data has been marked with an incorrect notice, the Contracting Officer may-

- (i) Permit correction of the notice at the Contractor's expense if the Contractor identifies the data and demonstrates that the correct notice is authorized; or
- (ii) Correct any incorrect notices.

(g) *Protection of limited rights data and restricted computer software.* (1) The Contractor may withhold from delivery qualifying limited rights data or restricted computer software that are not data identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Contractor shall-

- (i) Identify the data being withheld; and
- (ii) Furnish form, fit, and function data instead.

(2) Limited rights data that are formatted as a computer database for delivery to the Government shall be treated as limited rights data and not restricted computer software.

(3) Notwithstanding paragraph (g)(1) of this clause, the contract may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be entitled to be withheld. If delivery of that data is required, the Contractor shall affix the following "Limited Rights Notice" to the data and the Government will treat the data, subject to the provisions of paragraphs (e) and (f) of this clause, in accordance with the notice:

LIMITED RIGHTS NOTICE (DEC 2007)

(a) These data are submitted with limited rights under Government Contract No. **31310018C0004** (and subcontract, if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any; provided that the Government makes such disclosure subject to prohibition against further use and disclosure: [](Agencies may list additional purposes as set forth in 27.404-2(c)(1) or if none, so state.)

(b) This notice shall be marked on any reproduction of these data, in whole or in part.

(End of notice)

(h) *Subcontracting*. The Contractor shall obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government those rights, the Contractor shall promptly notify the Contracting Officer of the refusal and shall not proceed with the subcontract award without authorization in writing from the Contracting Officer.

(i) *Relationship to patents or other rights*. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(End of clause)

I.7 52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL). (JUN 1987)

Except for data contained on pages [], it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated January 16, 2016, upon which this contract is based.

(End of clause)

I.8 52.232-7 PAYMENTS UNDER TIME-AND-MATERIALS AND LABOR-HOUR CONTRACTS. (AUG 2012)

The Government will pay the Contractor as follows upon the submission of vouchers approved by the Contracting Officer or the authorized representative:

(a) Hourly rate. (1) Hourly rate means the rate(s) prescribed in the contract for payment for labor that meets the labor category qualifications of a labor category specified in the contract that are-

(i) Performed by the Contractor;

(ii) Performed by the subcontractors; or

(iii) Transferred between divisions, subsidiaries, or affiliates of the Contractor under a common control.

(2) The amounts shall be computed by multiplying the appropriate hourly rates prescribed in the Schedule by the number of direct labor hours performed.

(3) The hourly rates shall be paid for all labor performed on the contract that meets the labor qualifications specified in the contract. Labor hours incurred to perform tasks for which labor qualifications were specified in the contract will not be paid to the extent the work is performed by employees that do not meet the qualifications specified in the contract, unless specifically authorized by the Contracting Officer.

(4) The hourly rates shall include wages, indirect costs, general and administrative expense, and profit. Fractional parts of an hour shall be payable on a prorated basis.

(5) Vouchers may be submitted not more than once every two weeks, to the Contracting Officer or authorized representative. A small business concern may receive more frequent payments than every two weeks. The Contractor shall substantiate vouchers (including any subcontractor hours reimbursed at the hourly rate in the schedule) by evidence of actual payment and by-

(i) Individual daily job timekeeping records;

(ii) Records that verify the employees meet the qualifications for the labor categories specified in the contract; or

(iii) Other substantiation approved by the Contracting Officer.

(6) Promptly after receipt of each substantiated voucher, the Government shall, except as otherwise provided in this contract, and subject to the terms of paragraph (e) of this clause, pay the voucher as approved by the Contracting Officer or authorized representative.

(7) Unless otherwise prescribed in the Schedule, the Contracting Officer may unilaterally issue a contract modification requiring the Contractor to withhold amounts from its billings until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interests. The Contracting Officer may require a withhold of 5 percent of the amounts due under paragraph (a) of this clause, but the total amount withheld for the contract shall not exceed \$50,000. The amounts withheld shall be retained until the Contractor executes and delivers the release required by paragraph (g) of this clause.

(8) Unless the Schedule prescribes otherwise, the hourly rates in the Schedule shall not be varied by virtue of the Contractor having performed work on an overtime basis. If no overtime rates are provided in the Schedule and overtime work is approved in advance by the Contracting Officer, overtime rates shall be negotiated. Failure to agree upon these overtime rates shall be treated as a dispute under the Disputes clause of this contract. If the Schedule provides rates for overtime, the premium portion of those rates will be reimbursable only to the extent the overtime is approved by the Contracting Officer.

(b) Materials. (1) For the purposes of this clause-

(i) Direct materials means those materials that enter directly into the end product, or that are used or consumed directly in connection with the furnishing of the end product or service.

(ii) Materials means-

(A) Direct materials, including supplies transferred between divisions, subsidiaries, or affiliates of the Contractor under a common control;

31310018C0004

(B) Subcontracts for supplies and incidental services for which there is not a labor category specified in the contract;

(C) Other direct costs (e.g., incidental services for which there is not a labor category specified in the contract, travel, computer usage charges, etc.); and

(D) Applicable indirect costs.

(2) If the Contractor furnishes its own materials that meet the definition of a commercial item at 2.101, the price to be paid for such materials shall not exceed the Contractor's established catalog or market price, adjusted to reflect the-

(i) Quantities being acquired; and

(ii) Actual cost of any modifications necessary because of contract requirements.

(3) Except as provided for in paragraph (b)(2) of this clause, the Government will reimburse the Contractor for allowable cost of materials provided the Contractor-

(i) Has made payments for materials in accordance with the terms and conditions of the agreement or invoice; or

(ii) Ordinarily makes these payments within 30 days of the submission of the Contractor's payment request to the Government and such payment is in accordance with the terms and conditions of the agreement or invoice.

(4) Payment for materials is subject to the Allowable Cost and Payment clause of this contract. The Contracting Officer will determine allowable costs of materials in accordance with Subpart 31.2 of the Federal Acquisition Regulation (FAR) in effect on the date of this contract.

(5) The Contractor may include allocable indirect costs and other direct costs to the extent they are-

(i) Comprised only of costs that are clearly excluded from the hourly rate;

(ii) Allocated in accordance with the Contractor's written or established accounting practices; and

(iii) Indirect costs are not applied to subcontracts that are paid at the hourly rates.

(6) To the extent able, the Contractor shall-

(i) Obtain materials at the most advantageous prices available with due regard to securing prompt delivery of satisfactory materials; and

(ii) Take all cash and trade discounts, rebates, allowances, credits, salvage, commissions, and other benefits. When unable to take advantage of the benefits, the Contractor shall promptly notify the

Contracting Officer and give the reasons. The Contractor shall give credit to the Government for cash and trade discounts, rebates, scrap, commissions, and other amounts that have accrued to the benefit of the Contractor, or would have accrued except for the fault or neglect of the Contractor. The Contractor shall not deduct from gross costs the benefits lost without fault or neglect on the part of the Contractor, or lost through fault of the Government.

(7) Except as provided for in 31.205-26(e) and (f), the Government will not pay profit or fee to the prime Contractor on materials.

(c) If the Contractor enters into any subcontract that requires consent under the clause at 52.244-2, Subcontracts, without obtaining such consent, the Government is not required to reimburse the Contractor for any costs incurred under the subcontract prior to the date the Contractor obtains the required consent. Any reimbursement of subcontract costs incurred prior to the date the consent was obtained shall be at the sole discretion of the Government.

(d) Total cost. It is estimated that the total cost to the Government for the performance of this contract shall not exceed the ceiling price set forth in the Schedule, and the Contractor agrees to use its best efforts to perform the work specified in the Schedule and all obligations under this contract within such ceiling price. If at any time the Contractor has reason to believe that the hourly rate payments and material costs that will accrue in performing this contract in the next succeeding 30 days, if added to all other payments and costs previously accrued, will exceed 85 percent of the ceiling price in the Schedule, the Contractor shall notify the Contracting Officer giving a revised estimate of the total price to the Government for performing this contract with supporting reasons and documentation. If at any time during performing this contract, the Contractor has reason to believe that the total price to the Government for performing this contract will be substantially greater or less than the then stated ceiling price, the Contractor shall so notify the Contracting Officer, giving a revised estimate of the total price for performing this contract, with supporting reasons and documentation. If at any time during performing this contract, the Government has reason to believe that the work to be required in performing this contract will be substantially greater or less than the stated ceiling price, the Contracting Officer will so advise the Contractor, giving the then revised estimate of the total amount of effort to be required under the contract.

(e) Ceiling price. The Government will not be obligated to pay the Contractor any amount in excess of the ceiling price in the Schedule, and the Contractor shall not be obligated to continue performance if to do so would exceed the ceiling price set forth in the Schedule, unless and until the Contracting Officer notifies the Contractor in writing that the ceiling price has been increased and specifies in the notice a revised ceiling that shall constitute the ceiling price for performance under this contract. When and to the extent that the ceiling price set forth in the Schedule has been increased, any hours expended and material costs incurred by the Contractor in excess of the ceiling price before the increase shall be allowable to the same extent as if the hours expended and material costs had been incurred after the increase in the ceiling price.

(f) Audit. At any time before final payment under this contract, the Contracting Officer may request audit of the vouchers and supporting documentation. Each payment previously made shall be subject to reduction to the extent of amounts, on preceding

vouchers, that are found by the Contracting Officer or authorized representative not to have been properly payable and shall also be subject to reduction for overpayments or to increase for underpayments. Upon receipt and approval of the voucher designated by the Contractor as the "completion voucher" and supporting documentation, and upon compliance by the Contractor with all terms of this contract (including, without limitation, terms relating to patents and the terms of paragraph (g) of this clause), the Government shall promptly pay any balance due the Contractor. The completion voucher, and supporting documentation, shall be submitted by the Contractor as promptly as practicable following completion of the work under this contract, but in no event later than 120 days (or such longer period as the Contracting Officer may approve in writing) from the date of completion.

(g) Assignment and Release of Claims. The Contractor, and each assignee under an assignment entered into under this contract and in effect at the time of final payment under this contract, shall execute and deliver, at the time of and as a condition precedent to final payment under this contract, a release discharging the Government, its officers, agents, and employees of and from all liabilities, obligations, and claims arising out of or under this contract, subject only to the following exceptions:

(1) Specified claims in stated amounts, or in estimated amounts if the amounts are not susceptible of exact statement by the Contractor.

(2) Claims, together with reasonable incidental expenses, based upon the liabilities of the Contractor to third parties arising out of performing this contract, that are not known to the Contractor on the date of the execution of the release, and of which the Contractor gives notice in writing to the Contracting Officer not more than 6 years after the date of the release or the date of any notice to the Contractor that the Government is prepared to make final payment, whichever is earlier.

(3) Claims for reimbursement of costs (other than expenses of the Contractor by reason of its indemnification of the Government against patent liability), including reasonable incidental expenses, incurred by the Contractor under the terms of this contract relating to patents.

(h) Interim payments on contracts for other than services. (1) Interim payments made prior to the final payment under the contract are contract financing payments. Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act.

(2) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(i) Interim payments on contracts for services. For interim payments made prior to the final payment under this contract, the Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(End of Clause)

I.9 52.244-2 SUBCONTRACTS. (OCT 2010)

(a) *Definitions.* As used in this clause-

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that-

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds-

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: []

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c) or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting-

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c) or (d) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination-

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: []

(End of clause)

I.10 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): <https://www.acquisition.gov/?q=browsefar>

(End of clause)

I.11 COMPLIANCE WITH SECTION 508 OF THE REHABILITATION ACT OF 1973, AS AMENDED (SEP 2013)

In 1998, Congress amended the Rehabilitation Act of 1973 (29 U.S.C. §794d) as amended by the Workforce Investment Act of 1998 (P.L. 105 - 220), August 7, 1998 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. Inaccessible technology interferes with an ability to obtain and use information quickly and easily. Section 508 was enacted to eliminate barriers in information technology, open new opportunities for people with disabilities, and encourage development of technologies that will help achieve these goals. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508 (29 U.S.C. §794d), agencies must give disabled employees and members of the public access to information that is comparable to access available to others.

Specifically, Section 508 of that Act requires that when Federal agencies develop, procure, maintain, or use EIT, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. (36 C.F.R. §1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, and is viewable at: <http://www.access-board.gov/sec508/standards.htm>)

Exceptions.

All EIT that the government acquires by purchase or by lease/rental under this contract must meet the applicable accessibility standards at 36 C.F.R. Part 1194, unless one or more of the following exceptions at FAR 39.204 applies to this acquisition (applicable if checked):

The EIT is for a national security system.

The EIT is acquired by a contractor incidental to a contract.

The EIT is located in spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment.

Compliance with the applicable 36 C.F.R. Part 1194 provisions would impose an undue burden on the agency.

Applicable Standards.

The following accessibility standards from 36 C.F.R. Part 1194 have been determined to be applicable to this contract/order. See www.section508.gov for more information:

1194.21 Software applications and operating systems.

1194.22 Web-based intranet and internet information and applications. 16 rules.

1194.23 Telecommunications products.

1194.24 Video and multimedia products.

1194.25 Self contained, closed products.

1194.26 Desktop and portable computers.

1194.31 Functional performance criteria.

1194.41 Information, documentation, and support.

Note: Under the Exceptions paragraph, the Contracting Officer should check the boxes for any exceptions that apply. If no exceptions apply, then the Contracting Officer should, under the Applicable Standards paragraph, check the boxes that indicate which of the standards apply. See FAR Subpart 39.2 and www.section508.gov for additional guidance.

(End of Clause)

I.12 NRC ACQUISITION REGULATION (NRCAR) PROVISIONS AND CLAUSES (AUG 2011)

Applicable NRCAR provisions and clauses located in 48 CFR Chapter 20 are hereby incorporated by reference into this contract/order.

(End of Clause)

SECTION J - List of Documents, Exhibits and Other Attachments**J.1 List of Documents, Exhibits, and Other Attachments**

Attachment Number	Title	Date
Attachment 1	Subpart 2009.5 Organizational Conflicts of Interest	N/A
Attachment 2	Template Contractor Spending Plan	05/01/2012
Attachment 3	Monthly Letter Status Report (MLSR) Instructions for Contracts	N/A
Attachment 4	Billing Instructions Time-and-Materials/Labor-Hour Type Contracts	08/2017
Attachment 5	SNAP User's Group Membership Software License Agreement	09/16/2013

ATTACHMENT 1

Subpart 2009.5 Organizational Conflicts of Interest

§2009.500 Scope of subpart.

In accordance with 42 U.S.C. 2210a., NRC acquisitions are processed in accordance with §2009.570, which takes precedence over FAR 9.5 with respect to organizational conflicts of interest. Where non-conflicting guidance appears in FAR 9.5, that guidance must be followed.

§2009.570 NRC organizational conflicts of interest.

§2009.570-1 Scope of policy.

(a) It is the policy of NRC to avoid, eliminate, or neutralize contractor organizational conflicts of interest. The NRC achieves this objective by requiring all prospective contractors to submit information describing relationships, if any, with organizations or persons (including those regulated by the NRC) which may give rise to actual or potential conflicts of interest in the event of contract award.

(b) Contractor conflict of interest determinations cannot be made automatically or routinely. The application of sound judgment on virtually a case-by-case basis is necessary if the policy is to be applied to satisfy the overall public interest. It is not possible to prescribe in advance a specific method or set of criteria which would serve to identify and resolve all of the contractor conflict of interest situations that might arise. However, examples are provided in these regulations to guide application of this policy guidance. The ultimate test is as follows: Might the contractor, if awarded the contract, be placed in a position where its judgment may be biased, or where it may have an unfair competitive advantage?

(c) The conflict of interest rule contained in this subpart applies to contractors and offerors only. Individuals or firms who have other relationships with the NRC (e.g., parties to a licensing proceeding) are not covered by this regulation. This rule does not apply to the acquisition of consulting services through the personnel appointment process, NRC agreements with other Government agencies, international organizations, or state, local, or foreign Governments. Separate procedures for avoiding conflicts of interest will be employed in these agreements, as appropriate.

§2009.570-2 Definitions.

Affiliates means business concerns which are affiliates of each other when either directly or indirectly one concern or individual controls or has the power to control another, or when a third party controls or has the power to control both.

Contract means any contractual agreement or other arrangement with the NRC except as provided in §2009.570-1(c).

Contractor means any person, firm, unincorporated association, joint venture, co-sponsor, partnership, corporation, affiliates thereof, or their successors in interest, including their chief executives, directors, key personnel (identified in the contract), proposed consultants or subcontractors, which are a party to a contract with the NRC.

Evaluation activities means any effort involving the appraisal of a technology, process, product, or policy.

Offeror or prospective contractor means any person, firm, unincorporated association, joint venture, co-

sponsor, partnership, corporation, or their affiliates or successors in interest, including their chief executives, directors, key personnel, proposed consultants, or subcontractors, submitting a bid or proposal, solicited or unsolicited, to the NRC to obtain a contract.

Organizational conflicts of interest means that a relationship exists whereby a contractor or prospective contractor has present or planned interests related to the work to be performed under an NRC contract which:

- (1) May diminish its capacity to give impartial, technically sound, objective assistance and advice, or may otherwise result in a biased work product; or
- (2) May result in its being given an unfair competitive advantage.

Potential conflict of interest means that a factual situation exists that suggests that an actual conflict of interest may arise from award of a proposed contract. The term potential conflict of interest is used to signify those situations that

- (1) Merit investigation before contract award to ascertain whether award would give rise to an actual conflict; or
- (2) Must be reported to the contracting officer for investigation if they arise during contract performance.

Research means any scientific or technical work involving theoretical analysis, exploration, or experimentation.

Subcontractor means any subcontractor of any tier who performs work under a contract with the NRC except subcontracts for supplies and subcontracts in amounts not exceeding \$10,000.

Technical consulting and management support services means internal assistance to a component of the NRC in the formulation or administration of its programs, projects, or policies which normally require that the contractor be given access to proprietary information or to information that has not been made available to the public. These services typically include assistance in the preparation of program plans, preliminary designs, specifications, or statements of work.

§2009.570-3 Criteria for recognizing contractor organizational conflicts of interest.

(a) General.

(1) Two questions will be asked in determining whether actual or potential organizational conflicts of interest exist:

- (i) Are there conflicting roles which might bias an offeror's or contractor's judgment in relation to its work for the NRC?
- (ii) May the offeror or contractor be given an unfair competitive advantage based on the performance of the contract?

(2) NRC's ultimate determination that organizational conflicts of interest exist will be made in light of common sense and good business judgment based upon the relevant facts. While it is difficult to identify and to prescribe in advance a specific method for avoiding all of the various situations or relationships that might

involve potential organizational conflicts of interest, NRC personnel will pay particular attention to proposed contractual requirements that call for the rendering of advice, consultation or evaluation activities, or similar activities that directly lay the groundwork for the NRC's decisions on regulatory activities, future procurements, and research programs. Any work performed at an applicant or licensee site will also be closely scrutinized by the NRC staff.

(b) Situations or relationships. The following situations or relationships may give rise to organizational conflicts of interest:

(1) The offeror or contractor shall disclose information that may give rise to organizational conflicts of interest under the following circumstances. The information may include the scope of work or specification for the requirement being performed, the period of performance, and the name and telephone number for a point of contact at the organization knowledgeable about the commercial contract.

(i) Where the offeror or contractor provides advice and recommendations to the NRC in the same technical area where it is also providing consulting assistance to any organization regulated by the NRC.

(ii) Where the offeror or contractor provides advice to the NRC on the same or similar matter on which it is also providing assistance to any organization regulated by the NRC.

(iii) Where the offeror or contractor evaluates its own products or services, or has been substantially involved in the development or marketing of the products or services of another entity.

(iv) Where the award of a contract would result in placing the offeror or contractor in a conflicting role in which its judgment may be biased in relation to its work for the NRC, or would result in an unfair competitive advantage for the offeror or contractor.

(v) Where the offeror or contractor solicits or performs work at an applicant or licensee site while performing work in the same technical area for the NRC at the same site.

(2) The contracting officer may request specific information from an offeror or contractor or may require special contract clauses such as provided in §2009.570-5(b) in the following circumstances:

(i) Where the offeror or contractor prepares specifications that are to be used in competitive procurements of products or services covered by the specifications.

(ii) Where the offeror or contractor prepares plans for specific approaches or methodologies that are to be incorporated into competitive procurements using the approaches or methodologies.

(iii) Where the offeror or contractor is granted access to information not available to the public concerning NRC plans, policies, or programs that could form the basis for a later procurement action.

(iv) Where the offeror or contractor is granted access to proprietary information of its competitors.

(v) Where the award of a contract might result in placing the offeror or contractor in a conflicting role in which its judgment may be biased in relation to its work for the NRC or might result in an unfair competitive advantage for the offeror or contractor.

(c) Policy application guidance. The following examples are illustrative only and are not intended to identify and resolve all contractor organizational conflict of interest situations.

(1)(i) Example. The ABC Corp., in response to a Request For Proposal (RFP), proposes to undertake certain analyses of a reactor component as called for in the RFP. The ABC Corp. is one of several companies considered to be technically well qualified. In response to the inquiry in the RFP, the ABC Corp. advises that it is currently performing similar analyses for the reactor manufacturer.

(ii) Guidance. An NRC contract for that particular work normally would not be awarded to the ABC Corp. because the company would be placed in a position in which its judgment could be biased in relationship to its work for the NRC. Because there are other well-qualified companies available, there would be no reason for considering a waiver of the policy.

(2)(i) Example. The ABC Corp., in response to an RFP, proposes to perform certain analyses of a reactor component that is unique to one type of advanced reactor. As is the case with other technically qualified companies responding to the RFP, the ABC Corp. is performing various projects for several different utility clients. None of the ABC Corp. projects have any relationship to the work called for in the RFP. Based on the NRC evaluation, the ABC Corp. is considered to be the best qualified company to perform the work outlined in the RFP.

(ii) Guidance. An NRC contract normally could be awarded to the ABC Corp. because no conflict of interest exists which could motivate bias with respect to the work. An appropriate clause would be included in the contract to preclude the ABC Corp. from subsequently contracting for work with the private sector that could create a conflict during the performance of the NRC contract. For example, ABC Corp. would be precluded from the performance of similar work for the company developing the advanced reactor mentioned in the example.

(3)(i) Example. The ABC Corp., in response to a competitive RFP, submits a proposal to assist the NRC in revising NRC's guidance documents on the respiratory protection requirements of [10 CFR Part 20](#). ABC Corp. is the only firm determined to be technically acceptable. ABC Corp. has performed substantial work for regulated utilities in the past and is expected to continue similar efforts in the future. The work has and will cover the writing, implementation, and administration of compliance respiratory protection programs for nuclear power plants.

(ii) Guidance. This situation would place the firm in a role where its judgment could be biased in relationship to its work for the NRC. Because the nature of the required work is vitally important in terms of the NRC's responsibilities and no reasonable alternative exists, a waiver of the policy, in accordance with §2009.570-9 may be warranted. Any waiver must be fully documented in accordance with the waiver provisions of this policy with particular attention to the establishment of protective mechanisms to guard against bias.

(4)(i) Example. The ABC Corp. submits a proposal for a new system to evaluate a specific reactor component's performance for the purpose of developing standards that are important to the NRC program. The ABC Corp. has advised the NRC that it intends to sell the new system to industry once its practicability has been demonstrated. Other companies in this business are using older systems for evaluation of the specific reactor component.

(ii) Guidance. A contract could be awarded to the ABC Corp. if the contract stipulates that no information produced under the contract will be used in the contractor's private activities unless this information has been reported to the NRC. Data on how the reactor component performs, which is reported to the NRC by contractors, will normally be disseminated by the NRC to others to preclude an unfair competitive advantage. When the NRC furnishes information about the reactor component to the contractor for the

performance of contracted work, the information may not be used in the contractor's private activities unless the information is generally available to others. Further, the contract will stipulate that the contractor will inform the NRC contracting officer of all situations in which the information, developed about the performance of the reactor component under the contract, is proposed to be used.

(5)(i) Example. The ABC Corp., in response to a RFP, proposes to assemble a map showing certain seismological features of the Appalachian fold belt. In accordance with the representation in the RFP and §2009.570-3(b)(1)(i), ABC Corp. informs the NRC that it is presently doing seismological studies for several utilities in the eastern United States, but none of the sites are within the geographic area contemplated by the NRC study.

(ii) Guidance. The contracting officer would normally conclude that award of a contract would not place ABC Corp. in a conflicting role where its judgment might be biased. Section 2052.209- 72(c) Work for Others, would preclude ABC Corp. from accepting work which could create a conflict of interest during the term of the NRC contract.

(6)(i) Example. AD Division of ABC Corp., in response to a RFP, submits a proposal to assist the NRC in the safety and environmental review of applications for licenses for the construction, operation, and decommissioning of fuel cycle facilities. ABC Corp. is divided into two separate and distinct divisions, AD and BC. The BC Division performs the same or similar services for industry. The BC Division is currently providing the same or similar services required under the NRC's contract for an applicant or licensee.

(ii) Guidance. An NRC contract for that particular work would not be awarded to the ABC Corp. The AD Division could be placed in a position to pass judgment on work performed by the BC Division, which could bias its work for NRC. Further, the Conflict of Interest provisions apply to ABC Corp. and not to separate or distinct divisions within the company. If no reasonable alternative exists, a waiver of the policy could be sought in accordance with §2009.570-9.

(7)(i) Example. The ABC Corp. completes an analysis for NRC of steam generator tube leaks at one of a utility's six sites. Three months later, ABC Corp. is asked by this utility to perform the same analysis at another of its sites.

(ii) Guidance. Section 2052.290-72(c)(3) would prohibit the contractor from beginning this work for the utility until one year after completion of the NRC work at the first site.

(8)(i) Example. ABC Corp. is assisting NRC in a major on-site analysis of a utility's redesign of the common areas between its twin reactors. The contract is for two years with an estimated value of \$5 million. Near the completion of the NRC work, ABC Corp. requests authority to solicit for a \$100K contract with the same utility to transport spent fuel to a disposal site. ABC Corp. is performing no other work for the utility.

(ii) Guidance. The Contracting Officer would allow the contractor to proceed with the solicitation because it is not in the same technical area as the NRC work; and the potential for technical bias by the contractor because of financial ties to the utility is slight due to the relative value of the two contracts.

(9)(i) Example. The ABC Corp. is constructing a turbine building and installing new turbines at a reactor site. The contract with the utility is for five years and has a total value of \$100 million. ABC Corp. has responded to an NRC Request For Proposal requiring the contractor to participate in a major team inspection unrelated to the turbine work at the same site. The estimated value of the contract is \$75K.

(ii) Guidance. An NRC contract would not normally be awarded to ABC Corp. because these factors create

the potential for financial loyalty to the utility that may bias the technical judgment of the contractor.

(d) Other considerations.

(1) The fact that the NRC can identify and later avoid, eliminate, or neutralize any potential organizational conflicts arising from the performance of a contract is not relevant to a determination of the existence of conflicts prior to the award of a contract.

(2) It is not relevant that the contractor has the professional reputation of being able to resist temptations which arise from organizational conflicts of interest, or that a follow-on procurement is not involved, or that a contract is awarded on a competitive or a sole source basis.

§2009.570-4 Representation.

(a) The following procedures are designed to assist the NRC contracting officer in determining whether situations or relationships exist which may constitute organizational conflicts of interest with respect to a particular offeror or contractor. The procedures apply to small purchases meeting the criteria stated in the following paragraph (b) of this section.

(b) The organizational conflicts of interest representation provision at §2052.209-71 must be included in solicitations and contracts resulting from unsolicited proposals. The contracting officer must also include this provision for task orders and contract modifications for newwork for:

(1) Evaluation services or activities;

(2) Technical consulting and management support services;

(3) Research; and

(4) Other contractual situations where special organizational conflicts of interest provisions are noted in the solicitation and would be included in the resulting contract. This representation requirement also applies to all modifications for additional effort under the contract except those issued under the "Changes" clause. Where, however, a statement of the type required by the organizational conflicts of interest representation provisions has previously been submitted with regard to the contract being modified, only an updating of the statement is required.

(c) The offeror may, because of actual or potential organizational conflicts of interest, propose to exclude specific kinds of work contained in a RFP unless the RFP specifically prohibits the exclusion. Any such proposed exclusion by an offeror will be considered by the NRC in the evaluation of proposals. If the NRC considers the proposed excluded work to be an essential or integral part of the required work and its exclusion would be to the detriment of the competitive posture of the other offerors, the NRC shall reject the proposal as unacceptable.

(d) The offeror's failure to execute the representation required by paragraph (b) of this section with respect to an invitation for bids is considered to be a minor informality. The offeror will be permitted to correct the omission.

§2009.570-5 Contract clauses.

(a) General contract clause. All contracts and simplified acquisitions of the types set forth in §2009.570-4(b) must include the clause entitled, "Contractor Organizational Conflicts of Interest,"

set forth in §2052.209-72.

(b) Other special contract clauses. If it is determined from the nature of the proposed contract that an organizational conflict of interest exists, the contracting officer may determine that the conflict can be avoided, or, after obtaining a waiver in accordance with §2009.570-9, neutralized through the use of an appropriate special contract clause. If appropriate, the offeror may negotiate the terms and conditions of these clauses, including the extent and time period of any restriction. These clauses include but are not limited to:

(1) Hardware exclusion clauses which prohibit the acceptance of production contracts following a related non-production contract previously performed by the contractor;

(2) Software exclusion clauses;

(3) Clauses which require the contractor (and certain of its key personnel) to avoid certain organizational conflicts of interest; and

(4) Clauses which provide for protection of confidential data and guard against its unauthorized use.

§2009.570-6 Evaluation, findings, and contract award.

The contracting officer shall evaluate all relevant facts submitted by an offeror and other relevant information. After evaluating this information against the criteria of §2009.570-3, the contracting officer shall make a finding of whether organizational conflicts of interest exist with respect to a particular offeror. If it has been determined that real or potential conflicts of interest exist, the contracting officer shall:

(a) Disqualify the offeror from award;

(b) Avoid or eliminate such conflicts by appropriate measures; or

(c) Award the contract under the waiver provision of §2009.570-9.

§2009.570-7 Conflicts identified after award.

If potential organizational conflicts of interest are identified after award with respect to a particular contractor and the contracting officer determines that conflicts do exist and that it would not be in the best interest of the Government to terminate the contract, as provided in the clauses required by §2009.570-5, the contracting officer shall take every reasonable action to avoid, eliminate, or, after obtaining a waiver in accordance with §2009.570-9, neutralize the effects of the identified conflict.

§2009.570-8 Subcontracts.

The contracting officer shall require offerors and contractors to submit a representation statement from all subcontractors (other than a supply subcontractor) and consultants performing services in excess of \$10,000 in accordance with §2009.570-4(b). The contracting officer shall require the contractor to include contract clauses in accordance with §2009.570-5 in consultant agreements or subcontracts involving performance of work under a prime contract.

§2009.570-9 Waiver.

(a) The contracting officer determines the need to seek a waiver for specific contract awards with the advice and concurrence of the program office director and legal counsel. Upon the recommendation of the Senior Procurement Executive, and after consultation with legal counsel, the Executive Director for Operations may waive the policy in specific cases if he determines that it is in the best interest of the United States to do so.

(b) Waiver action is strictly limited to those situations in which:

(1) The work to be performed under contract is vital to the NRC program;

(2) The work cannot be satisfactorily performed except by a contractor whose interests give rise to a question of conflict of interest.

(3) Contractual and/or technical review and surveillance methods can be employed by the NRC to neutralize the conflict.

(c) The justification and approval documents for any waivers must be placed in the NRC Public Document Room.

§2009.570-10 Remedies.

In addition to other remedies permitted by law or contract for a breach of the restrictions in this subpart or for any intentional misrepresentation or intentional nondisclosure of any relevant interest required to be provided for this section, the NRC may debar the contractor from subsequent NRC contracts.

ATTACHMENT 2

CONTRACTOR SPENDING PLAN (CSP)

(TO BE COMPLETED AS A PART OF THE OFFEROR'S COST PROPOSAL FOR EACH COST REIMBURSEMENT CONTRACT OR INDIVIDUAL TASK ORDER OR FOR ANY CONTRACT OR TASK ORDER MODIFICATION WHICH EXCEEDS \$100,000 AND HAS A PERFORMANCE PERIOD EXCEEDING 6 MONTHS)

Solicitation No. 31310018R0004

Period of Performance: Base Year

Contract No. 31310018C0004

Task Order No.

Modification No. _____

Total Estimated Costs (including fixed fee, [REDACTED] if any) of the Proposed Contract/Task Order/Modification (to a contract or task order) at the time of proposal submission. Does not include options.

Offerer/Contractor Name: Applied Programming Technology, Inc.

Provide cost details by month for the total contract/task order/or task order modification

Cost Elements	<u>1st Month</u>	<u>2nd Month</u>	<u>3rd Month</u>	<u>4th Month</u>	<u>5th Month</u>	<u>6th Month</u>
Total Estimated Costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Projected Completion	<u>8.3%</u>	<u>17%</u>	<u>25%</u>	<u>33%</u>	<u>42%</u>	<u>50%</u>

Cost Elements	<u>7th Month</u>	<u>8th Month</u>	<u>9th Month</u>	<u>10th Month</u>	<u>11th Month</u>	<u>12th Month</u>
Total Estimated Costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Projected Completion	<u>58%</u>	<u>67%</u>	<u>75%</u>	<u>83%</u>	<u>92%</u>	<u>100</u>

ATTACHMENT 3**MONTHLY LETTER STATUS REPORT INSTRUCTIONS FOR CONTRACTS AND ORDERS**

The contractor shall submit an electronic Monthly Letter Status Report (MLSR) by the 20th day of each month to the Contracting Officer's Representative (COR) and the Contracting Officer (CO). If orders are issued under the contract, a separate MLSR must be provided for each order. MLSRs are not required once the NRC determines that work under the contract/order is complete, and the final costs are acceptable. A SAMPLE TEMPLATE, WHICH MAY BE USED TO COMPLETE THE MLSR, IS ENCLOSED.

Provide the information requested in each of the following sections if applicable.

I. CONTRACT/ORDER IDENTIFICATION & CONTACT INFORMATION

- Reporting period:
- Contract number:
- Order number:
- Contract title and period of performance:
- Order title and period of performance:
- COR's name, telephone number, and e-mail address:
- Full name and address of the contractor:
- Name, telephone numbers and email addresses of the Contractor Project Manager(s)/Contractor Lead Reviewer:

II. FINANCIAL STATUS**A. Overall Funding Information**

- Total Ceiling Amount: \$
- Total Amount of Funds Obligated to Date: \$
- Total Invoiced for this Reporting Period: \$
- Total Amount Invoiced - Cumulative Amount to Date: \$
- Total Amount of Funds Expended to Date (Based on Obligated Funds): \$
- Percentage of Funds Expended to Date (Based on Obligated Funds): %
- Balance of Obligated Funds Remaining (Based on Invoiced Amount): \$
- Total Amount Invoiced & Costs Incurred (Invoiced amounts & amounts not yet invoiced—e.g. pending /outstanding to subcontractor): \$
- Balance of Obligated Funds Remaining After Deducting Total Amount Invoiced & Amounts Not Yet Invoiced (Costs Incurred): \$
- Balance of Funds Required for Completion: \$

B. Contractor Acquired Property

Report all property with an acquisition cost of \$5,000 or more (including Information Technology (IT) hardware and software), acquired for the project during the month. Report all sensitive property regardless of cost. The following information is required for each reported item:

- Item/property description;
- Manufacturer, model number, and serial number, if applicable;
- Acquisition cost or development cost; and
- Date received.

If property was not acquired during the reporting month, include a negative statement to that effect in

the MLSR.

The final MLSR for the contract shall include a closeout property report certifying that property with an acquisition cost of greater than \$5,000 (including IT hardware and software) and sensitive property regardless of cost is included in the final property report and that the list is complete. For each item listed, the report shall contain:

- Item/property description;
- Manufacturer; the model number, & the serial number, if applicable;
- Acquisition or development cost; and
- Date received.

The closeout property report shall identify any ongoing or contemplated NRC projects on which the property could be utilized. If no property was acquired under the contract, include a negative report. Note any property requiring special handling based on security, health, safety, or other reasons as part of the report.

C. NRC-Funded Software

Report NRC funded software with a useful life of 2 years or more and a development cost of greater than \$5,000. Provide the following information for each item of NRC funded software:

- Software name and function:
- Development cost:
- Computer language used:
- Operating system:
- Physical location of the software and/or the hardware system:
- Date the software development was completed:
- Scheduled replacement date or projected useful life. If the useful life is not readily apparent, the useful life is considered to be 5 years from the day the software was considered operational:

III. TECHNICAL STATUS

A. Deliverables/Milestones Schedule

Provide the following information for each deliverable/milestone identified in the SOW:

- Task/subtask:
- Description:
- Planned completion date:
- Revised completion date if applicable:
- Actual completion date:

The deliverables/milestones schedule shall be revised as necessary. **Any variance in schedule shall be identified and discussed in detail. Discussion shall include the cause for the variance, together with any proposed solution to bring the dates within the original planned dates.**

B. Progress During Reporting Period

Provide a clear and concise discussion of the work performed during the reporting period. Include sufficient detail to support the costs reported for the reporting period. A summary of significant meetings and conference calls must be included. In addition, the current status of each deliverable, task, or service shall be identified. **Progress reported as "worked on all tasks" is not acceptable.**

C. Travel

Travel taken during the reporting period shall be fully described and shall include, at a minimum, the purpose of the travel, whether prior NRC authorization was required and obtained, the names of all travelers, the beginning and ending dates of the travel, and the destination point.

D. Anticipated and Encountered Problem Areas

Problems encountered during the reporting period and anticipated in subsequent period(s) (*to include, for example, problems or circumstances that require a change in the level of effort or estimated cost, scope of work, or travel requirements*) shall be identified.

Discussion of problems encountered during the reporting period shall include the actual solution. If the solution was not implemented during the reporting period, a detailed discussion of the proposed solution shall be included. The status of the problem shall be updated in subsequent MLSRs until problem resolution is achieved and reported. **Clearly identify the person(s) and/or organization(s) with responsibility to address the problem.** If NRC is required to take action to resolve a problem or concern, the COR should be notified separately.

A discussion of the impact on the projected cost and schedule of the project or task order shall be included. If the projected actual cost is expected to be greater than or less than the planned cost and/or if the schedule is projected to be longer than or less than the planned schedule, an in depth rationale for the difference(s) shall be provided. Actions to mitigate schedule delays and/or cost/price increases shall be thoroughly described.

Problems or circumstances requiring a modification to the level of effort, estimated cost, scope of work, or travel requirements shall also be discussed in the MLSR. The COR should be notified separately if a modification is needed. **Such notification shall not be delayed until issuance of the MLSR.**

E. Plans for the Next Reporting Period

Provide a concise discussion of work to be performed and a description of anticipated travel during the next reporting period. Describe milestones anticipated to be completed in the next reporting period.

F. Staff Hours Summary

The staff hours summary must identify the task/subtask, the staff assigned to the task/subtask, hours budgeted, hours expended for this reporting period, total cumulative hours expended and the task/subtask status.

IV. INFORMATION TECHNOLOGY SECURITY TRAINING

In accordance with the clause, NRC INFORMATION TECHNOLOGY SECURITY TRAINING, contractors shall ensure that their employees, consultants, and subcontractors with access to the agency's information technology (IT) equipment and/or IT services complete NRC's online initial and refresher IT security training requirements to ensure that their knowledge of IT threats, vulnerabilities, and associated countermeasures remains current. Both the initial and refresher IT security training courses generally last an hour or less and can be taken during the employee's regularly scheduled work day.

Where the contract/order includes the clause, **NRC INFORMATION TECHNOLOGY SECURITY TRAINING**, the MLSR must include the following information for all completed training:

- (1) Name of the individual completing the course:
- (2) Course title:
- (3) Course completion date:

The MLSR must also include the following information for those individuals who have not completed their required training:

- (1) Name of the individual who has not yet completed the training:
- (2) Title of the course(s) which must still be completed:
- (3) Anticipated course completion date(s):

V. LICENSE FEE RECOVERY COST STATUS

This section is required if any portion of the work described in the Statement of Work is fee recoverable.

Pursuant to the provisions on fees of Title 10 of the *Code of Federal Regulations* Parts 170 and 171, provide the total amount of fee recoverable costs incurred during the reporting period, the fiscal year to date costs, and the cumulative total costs to date for each task/project. The License Fee Recovery Cost Status (LFRCS) shall be recorded on a separate page as part of the MLSR, and shall be in the format provided in the MLSR template under the LFRCS Section.

Each report will contain a docket number, cost activity code (CAC) or other unique identifier. Facilities must be sorted by docket number/identifier. Unit numbers must be identified for each facility included in the LFRCS table. For work that involves more than one facility at the same site, each facility should be listed separately, and the costs should be split appropriately between the facilities. Common costs, as defined below, must be identified separately in the LFRCS.

Common costs are those costs that are not licensee unique and associated with the performance of an overall program that benefit all similar licensees covered under that program or that are required to satisfactorily carry out the program. Common costs include costs associated with the following: preparatory or start-up efforts to interpret and reach agreement on methodology, approach, acceptance criteria, regulatory position, or technical reporting requirements; efforts associated with the "lead plant" concept that might be involved during the first one or two plant reviews; meetings and discussions involving the above efforts to provide orientation, background knowledge or guidance during the course of a program; any technical effort applied to a docket or other unique identifier; and project management. Common costs must be reported monthly for each docket or unique identifier. Common costs must be computed based on the proportion of direct costs incurred against each docket or unique identifier for the reporting period.

Any/all non-fee recoverable costs must be accounted for in the cost breakdown table of the MLSR template with the corresponding non-fee recoverable CAC as directed by the COR.

VI. SPENDING PLAN UPDATE—Required for Cost Reimbursement, Labor-Hour and Time- and Materials Contracts/Orders (Complete as Applicable for Other Contract Types)

The initial Spending Plan must be included in the initial MLSR. Thereafter, the spending plan shall be updated on the MLSR Spending Plan Update Template in Excel (enclosed), and submitted with the MLSR. Spending plan updates shall encompass two fiscal years (current fiscal year and following fiscal year). Discussion shall include significant spending plan variances, the cause for the variance, and proposed solutions to bring the cost within planned amounts. Definitions of spending plan terms are provided below:

Planned – Spending plan agreed to by the parties at time of award.

Revised – Updated spending plan revised by the contractor. Spending plan shall be updated as necessary.

Actual – Total amount/costs expended by the contractor as reported in the MLSR.

Variance – Percentage difference between planned, or revised if applicable, and actual

MONTHLY LETTER STATUS REPORT-TEMPLATE

Reporting Period Start Date		Reporting Period End Date	
NRC Contract Number		Order Number (if applicable)	
Contract/Order Title			
Period of Performance Start Date:		Period of Performance End Date:	
Contracting Officer's Representative (COR)	COR Telephone	COR E-mail	
Contractor Name			
Contractor Complete Address (Street, City, State, and Zip Code)			
Contract Project Manager(s)/Contractor Lead Reviewer	Telephone	E-mail	

Provide the information requested in each of the following sections if applicable. (Please insert N/A beside items that are not applicable)

FINANCIAL STATUS

A. Overall Funding:

1.	Total Ceiling Amount	\$
2.	Total Amount of Funds Obligated to Date	\$
3.	Total Amount Invoiced - This Period	\$
4.	Total Amount Invoiced - Cumulative Amount to Date	\$
5.	Total Amount of Funds Expended to Date (Based on Obligated Funds)	\$
6.	Percentage of Funds Expended to Date (Based on Obligated Funds)	_%
7.	Balance of Obligated Funds Remaining (Based on Invoiced Amounts)	\$
8.	Total Amount/Costs Incurred (Invoiced amounts & amounts not yet invoiced—e.g. pending; outstanding to subcontractor)	\$
9.	Balance of Obligated Funds Remaining after Deducting Total Incurred Amounts/Costs	\$
10.	Balance of Funds Required for Completion	\$

B. Contractor Acquired Property:

Item*	Description	Manufacturer	Model Number	Serial Number	Acquisition Cost (\$)	Receipt Date	Property Identification Number

*Asterisk represents sensitive item

C. NRC-Funded Software:

Name*	Function	Development Cost (\$)	Computer Language Used	Operating System	Location of System	Date Software Completed	Date of Scheduled Replacement/ Useful Life

*Asterisk represents sensitive software

TECHNICAL STATUS

A. Deliverables/Milestones Schedule:

(Any variance in schedule shall be identified and discussed in detail. Discussion shall include the cause for the variance, together with any proposed solution to bring the dates within the original planned dates.)

Task/Subtask	Description	Planned Completion Date	Revised Completion Date (if applicable)	Actual Completion Date

B. Progress during Reporting Period: _____

C. Travel for this Period:

Staff	Purpose of Travel	NRC Authorization Required/ Obtained*	Start Date	End Date	Destination/Activity

*Include name of NRC authorizing official and date authorization was obtained.

D. Anticipated and Encountered Problem Areas: _____

E. Plans for the Next Reporting Period: _____

F. Staff Hours Summary:

Task/Subtask/Phase	Staff Assigned	Hours Budgeted	Hours Expended This Reporting Period	Total Cumulative Hours Expended	Notes

TRAINING

(Complete if contract/order includes the clause, NRC INFORMATION TECHNOLOGY SECURITY TRAINING)

Completed Training:

Name of Individual Completing the Course During This Period	Course Title	Course Completion Date

Training To Be Completed:

Name of Individual Who has NOT, To Date, Completed the Required Training	Course Title	Anticipated Course Completion Date

LICENSE FEE RECOVERY COST STATUS

Reporting Period Start Date	Reporting Period End Date
Contract Number	Order Number
Project Title	

Licensee	Task Order No.	Facility Name/Unit Number	Docket Number	CAC Number	Period Costs	Fiscal Year Costs to Date	Cumulative Costs to Date

Important Note - Individual administrative costs (e.g. costs associated with overall project management/coordination, administrative setup/monitoring of the task order/agreement, preparation of the MLSR, etc.) must be included in the current period costs (i.e. these costs should not be noted as separate costs/items). Administrative costs must be proportionately allocated to each line item listed in the summary table above. Any/all non-fee-recoverable costs must be accounted for in the above table with the appropriate non-billable Cost Activity Code (CAC) as provided by the COR. The total Period Costs in the above table shall equal the total amount charged to NRC for this period.

SPENDING PLAN - Fiscal Year (FY) _____

Required for Cost Reimbursement, Labor-Hour and Time-and-Materials Contracts/Orders (Complete as applicable for other contract types)

FY _____	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	TOTAL
Planned (\$)													
Revised (\$)													
Actual (\$)													
Variance (%)													

FY _____	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	TOTAL
Planned (\$)													
Revised (\$)													
Actual (\$)													
Variance (%)													



Spending Plan.xlsx

**INVOICE FORMAT FOR LH AND TM**

Version Control Date: January 26, 2015

ATTACHMENT 4**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (AUG 2017)**

General: During performance and through final payment of this contract, the contractor is responsible for the accuracy and completeness of data within the System for Award Management (SAM) database and the Invoice Processing Platform (IPP) system and for any liability resulting from the Government's reliance on inaccurate or incomplete SAM and/or IPP data.

The contractor shall prepare invoices/vouchers for payment of deliverables identified in the contract, in the manner described herein. FAILURE TO SUBMIT INVOICES/VOUCHERS IN ACCORDANCE WITH THESE INSTRUCTIONS MAY RESULT IN REJECTION OF THE INVOICE/VOUCHER AS IMPROPER.

Electronic Invoice/Voucher Submissions: Invoices/vouchers shall be submitted electronically to the U.S. Nuclear Regulatory Commission (NRC) through the Invoice Processing Platform (IPP) at www.ipp.gov.

Purchase of Capital Property: (*\$50,000 or more with life of one year or longer*)

Contractors must report to the Contracting Officer, electronically, any capital property acquired with contract funds having an initial cost of \$50,000 or more, in accordance with procedures set forth in NRC [Management Directive \(MD\) 11.1](#), NRC Acquisition of Supplies and Services.

Agency Payment Office: Payment will be made by the office designated in the contract in Block 12 of the Standard Form 26, or Block 25 of the Standard Form 33, whichever is applicable.

Frequency: The contractor shall submit claims for reimbursement once each month, unless otherwise authorized by the Contracting Officer.

Supporting Documentation: Any supporting documentation required to substantiate the amount billed shall be included as an attachment to the invoice created in IPP. If the necessary supporting documentation is not included, the invoice will be rejected.

Task Order Contracts: The contractor must submit a separate invoice/voucher for each individual task order with detailed cost information included as Supporting Documentation. This includes all applicable cost elements and other items discussed in paragraphs (a) through (j) of the attached instructions.

Billing of Costs after Expiration of Contract: If costs are incurred during the contract period and claimed after the contract has expired, you must cite the period during which these costs

were incurred. To be considered a proper expiration invoice/voucher, the contractor shall clearly mark it "EXPIRATION INVOICE" or "EXPIRATION VOUCHER".

Final invoices/vouchers shall be marked "FINAL INVOICE" or "FINAL VOUCHER".

Currency: Invoices/Vouchers must be expressed in U.S. Dollars.

Supersession: These instructions supersede previous Billing Instructions for Time-and-Materials/Labor-Hour Type Contracts (JAN 2015).

Does my company need to register in IPP?

If your company is currently registered in IPP and doing business with other Federal Agencies in IPP, you will not be required to re-register.

If your company is not currently registered in IPP, please note the following:

- You will be receiving an invitation to register for IPP from IPP Customer Support, STLS.IPPHELPDESK@stls.frb.org.
- IPP Customer Support will send you two emails: the first email will contain the initial administrative IPP User ID and the second email, sent within 24 hours of receipt of the first email, will contain a temporary password.
- Please add the Customer Support email address (STLS.IPPHELPDESK@stls.frb.org) to your address book so you do not disregard these emails or mistake them for spam.
- During registration, one initial administrative user account will be created for your company and this user will be responsible for setting up all other user accounts including other administrators.
- Registration is complete when the initial administrative user logs into the IPP web site with the User ID and password provided by Treasury and accepts the rules of behavior.

What type of is training provided?

Vendor training materials, including a first time login tutorial, user guides, a [quick reference guide](#), and [frequently asked questions](#) are available on Treasury's IPP [website](#). **Individuals within your company responsible for submitting invoices should review these materials before work begins on the contract.**

How do I receive assistance with IPP?

Treasury's IPP Customer Support team provides vendor assistance related to the IPP application, and is also available to assist IPP users and to answer any questions related to accessing IPP or completing the registration process. IPP application support is also available via phone at (866) 973-3131, Monday through Friday from 8:00 am to 6:00 pm ET, and via email at IPPCustomerSupport@fiscal.treasury.gov.

Specific questions regarding your contract or task order should be directed to the appropriate NRC Contracting Officer.

**INVOICE/VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL
(SAMPLE FORMAT – INVOICE ATTACHMENT)**

- a. Billing period. Insert the beginning and ending dates (day, month, year) of the period during which costs were incurred and for which reimbursement is requested.
- b. Labor Hours Expended. Provide a general summary description of the services performed and associated labor hours utilized during the invoice period. Specify the Contract Line Item Number (CLIN) or SubCLIN, as applicable, and information pertaining to the contract's labor categories/positions, and corresponding authorized hours.
- c. Property. For contractor acquired property, list each item with an initial acquisition cost of \$50,000 or more and provide: (1) an item description, (2) manufacturer, (3) model number, (4) serial number, (5) acquisition cost, (6) date of purchase, and (7) a copy of the purchasing document.
- d. Shipping. Insert weight and zone of shipment, if shipped by parcel post.
- e. Charges for freight or express shipments. Attach prepaid bill if shipped by freight or express.
- f. Instructions. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.
- g. Direct Costs. Insert the amount billed for the following cost elements, adjustments, suspensions, and total amounts, for both the current billing period and for the cumulative period (from contract inception to end date of this billing period).
 - 1. Direct (Burdened) Labor. This consists of salaries and wages paid (or accrued) for direct performance of the contract itemized, including a burden (or load) for indirect costs (i.e., fringe, overhead, General and Administrative, as applicable), and profit component, as follows:

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Burdened Hourly Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
-----------------------	---------------------	-----------------------------	--------------	--------------------------------

- 2. Contractor-acquired property (\$50,000 or more). List each item costing \$50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) an item description, (b) manufacturer, (c) model number, (d) serial number, (e) acquisition cost, (f) date of purchase, and (g) a copy of the purchasing document.
- 3. Contractor-acquired property (under \$50,000), Materials, and Supplies. These are equipment other than that described in (2) above, plus consumable materials and supplies. List by category. List items valued at \$1,000 or more separately. Provide the item number for each piece of equipment valued at \$1,000 or more.

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- 4. Materials Handling Fee. Indirect costs allocated to direct materials in accordance the contractor's usual accounting procedures.
- 5. Consultant Fee. The supporting information must include the name, hourly or daily rate of the consultant, and reference the NRC approval (if not specifically approved in the original contract).
- 6. Travel. Total costs associated with each trip must be shown in the following format:

<u>Start Date</u>		<u>Destination</u>		<u>Costs</u>
From	To	From	To	\$

(Must include separate detailed costs for airfare, per diem, and other transportation expenses. All costs must be adequately supported by copies of receipts or other documentation.)

- 7. Subcontracts. Include separate detailed breakdown of all costs paid to approved subcontractors during the billing period.
- h. Total Amount Billed. Insert columns for total amounts for the current and cumulative periods.
- i. Adjustments. Insert columns for any adjustments, including outstanding suspensions for unsupported or unauthorized hours or costs, for the current and cumulative periods.
- j. Grand Totals.

3. Sample Invoice/Voucher Information (to be included as an attachment)

Sample Invoice/Voucher Information (Supporting Documentation must be attached)

This invoice/voucher represents reimbursable costs for the billing period from _____ through _____.

		<u>Amount Billed</u>	
		<u>Current Period</u>	<u>Cumulative</u>
(a)	<u>Direct Costs</u>		
(1)	Direct burdened labor	\$ _____	\$ _____
(2)	Government property (\$50,000 or more)	\$ _____	\$ _____
(3)	Government property, Materials, and Supplies (under \$50,000 per item)	\$ _____	\$ _____
(4)	Materials Handling Fee	\$ _____	\$ _____
(5)	Consultants Fee	\$ _____	\$ _____
(6)	Travel	\$ _____	\$ _____
(7)	Subcontracts	\$ _____	\$ _____
	Total Direct Costs:	\$ _____	\$ _____
(b)	Total Amount Billed	\$ _____	\$ _____
(c)	Adjustments (+/-)	\$ _____	\$ _____
(d)	Grand Total	\$ _____	\$ _____

(The invoice/voucher format provided above must include information similar to that included below in the following to ensure accuracy and completeness.)

SAMPLE SUPPORTING INFORMATION

The budget information provided below is for format purposes only and is illustrative.

Cost Elements:

1) Direct Burdened Labor - \$4,800

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Burdened Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
Senior Engineer I	100	\$28.00	\$2,800	975
Engineer	50	\$20.00	\$1,000	465
Computer Analyst	100	\$10.00	<u>\$1,000</u>	<u>320</u>
			\$4,800	1,760 hrs.

Burdened labor rates must come directly from the contract.

2) Government-furnished and contractor-acquired property (\$50,000 or more) - \$60,000

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Prototype Spectrometer - item number 1000-01 = \$60,000

3) Government-furnished and contractor-acquired property (under \$50,000), Materials, and Supplies - \$2,000

10 Radon tubes @ \$110.00	= \$1,100
6 Pairs Electrostatic gloves @ \$150.00	= \$ 900
	<u>\$2,000</u>

4) Materials Handling Fee - \$40

(2% of \$2,000 in item #3)

5) Consultants' Fee - \$100

Dr. Carney - 1 hour fully-burdened @ \$100 = \$100

6) Travel - \$2,640

(i) Airfare: (2 Roundtrip trips for 1 person @ \$300 per r/t ticket)

<u>Start Date</u>	<u>End Date</u>	<u>Days</u>	<u>From</u>	<u>To</u>	<u>Cost</u>
4/1/2011	4/7/2011	7	Philadelphia, PA	Wash, D.C.	\$300
7/1/2011	7/8/2011	8	Philadelphia, PA	Wash, D.C.	\$300

(ii) Per Diem: \$136/day x 15 days = \$2,040

7) Subcontracting - \$30,000

Company A	= \$10,000
Company B	= <u>\$20,000</u>
	<u>\$30,000</u>

(EX: Subcontracts for Companies A & B were consented to by the Contracting Officer by letter dated 6/15/2011.)

Total Amount Billed	\$99,580
Adjustments (+/-)	<u> 0</u>
Grand Total	<u>\$99,580</u>

4. Definitions

Material handling costs. When included as part of material costs, material handling costs shall include only costs clearly excluded from the labor-hour rate. Material handling costs may include all appropriate indirect costs allocated to direct materials in accordance with the contractor's usual accounting procedures.

ATTACHMENT 5**SNAP User's Group Membership
Software License Agreement**

This "License Agreement" is entered into between **United States Nuclear Regulatory Commission (Licensee), 11545 Rockville Pike, Bethesda, MD 20852** and Applied Programming Technology, Inc. (APT), located at 240 Market St., Suite 208, Bloomsburg, PA, 17815-1951.

1. DEFINITIONS

"Licensed Software" means any machine readable materials (including, but not limited to, executable files, libraries, source files, header files, and data files), user manuals, programming guides and other documentation provided to you by Applied Programming Technology, Inc. (APT) under this Agreement. This includes the following plug-ins to the Symbolic Nuclear Analysis Package (SNAP) and utility applications:

- RELAP5 Plug-in with 3D support.
- EXTDATA Plug-in and data extraction tool.
- SNAP-MATLAB Interface Library
- AptPlot Analysis Code Support Plug-in.
- PIBTOOL Code Generator.
- GOTHIC Post-processing Plug-in.
- RETRAN-3D Post-processing Plug-in.
- BlackBox Plug-in.
- Subversion Plug-in.
- PYPOST Python based Post-Processing Tools.
- Additional software that may be made available by APT to SNAP User's Group (SUG) members.

2. LICENSE TO USE.

APT grants the Licensee a non-exclusive and non-transferable license for the internal use only of the licensed software and documentation and any error corrections provided by APT (collectively "Licensed Software").

3. LICENSE RESTRICTIONS

Licensee agrees not to use this software for commercial training classes without prior written approval from Applied Programming Technology, Inc.

Licensee may duplicate Licensed Software for internal use only. Licensee agrees to reproduce any copyright and other proprietary right notices on any such copies. Except as otherwise provided by law, Licensee may not modify or create derivative works of the Licensed Software, or reverse engineer, disassemble or decompile binary portions of the Licensed Software, or otherwise attempt to derive the source code from such portions.

4. NO SUPPORT

APT is under no obligation to support Licensed Software or to provide Licensee with updates or error corrections (collectively "Software Updates"). If APT, at its sole option, supplies Software Updates to Licensee, the Software Updates will be considered part of Licensed Software, and subject to the terms of this Agreement.

5. TERMINATION OF AGREEMENT

This Agreement will commence on the date on which Licensee receives Licensed Software (the "Effective Date"). Licensee may terminate this Agreement at any time by destroying all copies of Software. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right. This Agreement will terminate immediately without notice from APT if you fail to comply with any provision of this Agreement. Upon termination or expiration of this Agreement, you shall immediately cease use of and destroy Licensed Software and any copies thereof. Rights and obligations under this Agreement which by their nature should survive, will remain in effect after termination or expiration hereof.

6. CONFIDENTIAL INFORMATION

For purposes of this Agreement, "Confidential Information" means: (i) business and technical information and any source code or binary code which APT discloses to Licensee related to Licensed Software; and (ii) the terms, conditions, and existence of this Agreement. Licensee may not disclose Confidential Information or use it except for the purposes specified in this Agreement. Licensee will protect the confidentiality of Confidential Information to the same degree of care, but no less than reasonable care, as Licensee uses to protect its own Confidential Information. Licensee's obligations regarding Confidential Information will expire no less than five (5) years from the date of receipt of the Confidential Information, except for APT source code which will be protected in perpetuity. Licensee agrees that Licensed Software contains trade secrets of APT. Notwithstanding any provisions contained in this Agreement concerning nondisclosure and non-use of the Confidential Information, the nondisclosure obligations will not apply to any portion of Confidential Information that a Licensee can demonstrate in writing is: (i) now, or hereafter through no act or failure to act on the part of Licensee becomes, generally known to the general public; (ii) known to Licensee at the time of receiving the Confidential Information without an obligation of confidentiality; (iii) hereafter rightfully furnished to Licensee by a third party without restriction on disclosure; or (iv) independently developed by Licensee without any use of the Confidential Information.

7. DISCLAIMER OF WARRANTY.

Licensed software is provided "as is". All express or implied conditions, representations, and warranties, including any implied warranty of merchantability, satisfactory quality, fitness for a particular purpose, or non-infringement, are disclaimed, except to the extent that such disclaimers are held to be legally invalid.

8. LIMITATION OF LIABILITY

Licensee acknowledges that the Licensed Software is experimental. Licensee acknowledges that the Licensed Software may have defects or deficiencies which cannot or will not be corrected by APT.

Licensee shall have the sole responsibility to protect adequately and backup Licensee's data and/or equipment used in connection with the Licensed Software. Licensee shall not claim against APT for lost data, re-run time, inaccurate output, work delays or lost profits resulting from Licensee's use of the Licensed Software.

Neither party will be liable for any indirect, punitive, special, incidental or consequential damage in connection with or arising out of this Agreement (including loss of business, revenue, profits, use, data or other economic advantage), however it arises, whether for breach or in tort, even if that party has been previously advised of the possibility of such damage.

9. U.S. GOVERNMENT RIGHTS

If this Software is being acquired by or on behalf of the U.S. Government or by a U.S. Government prime contractor or subcontractor (at any tier), then the Government's rights in the Software and accompanying documentation shall be only as set forth in this license; this is in accordance with 48C.F.R. 227.7201 through 227.7202-4 (for Department of Defense (DoD) acquisitions) and with 48C.F.R. 2.101 and 12.212 (for non-DoD acquisitions).

10. GENERAL TERMS

This agreement shall be governed by, and interpreted in accordance with, applicable Federal law and regulations. To the extent the applicable Federal law does not apply and existing state law could become applicable to this Agreement, the laws of the Commonwealth of Pennsylvania shall apply. Both parties agree that any claims or disputes shall be governed by the Contract Disputes Act of 1978, 41 U.S.C §601 et seq.. The U.N. Convention for the International Sale of Goods and the choice of law rules of any jurisdiction will not apply.

Licensed Software and technical data delivered under this Agreement are subject to U.S. export control laws and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such laws and regulations and acknowledges that it has the responsibility to obtain such licenses to export, re-export or import as may be required after delivery to Licensee.

Neither party may assign or otherwise transfer any of its rights or obligations under this Agreement, without the prior written consent of the other party, except that APT may assign this Agreement to an affiliated company.

If any provision of this Agreement is inconsistent with, or cannot be fully enforced under, the law, such provision will be construed as limited to the extent necessary to be consistent with and fully enforceable under the law. This Agreement may only be modified in writing signed by an authorized officer of APT.

It is acknowledged and understood that the Licensee is a federal agency of the United States government. Accordingly, and notwithstanding any other terms or conditions contained in this agreement, the Agreement is subject to federal law, remedies, procedures, disputes and payment provisions contained under the Federal Acquisition Regulation (FAR). Agreement terms that are inconsistent with or contrary to federal law and the FAR are deemed inapplicable and superseded. This agreement is subject to availability of appropriated funds.

11. REPORTING DEFECTS

Errors or defects discovered by the licensee will be reported to APT as soon as practicable. APT and Licensee have executed this License Agreement as evidenced by their respectively authorized representatives signing on the respective date(s) set forth below:

**United States Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852**

31310018C0004

Company

Signature

(Date)

Printed Name

Title (Position)

Applied Programming Technology, Inc
240 Market St, Suite 208
Bloomsburg, PA 17815

Company

Signature

(Date)

KENNETH R JONES

Printed Name

PRESIDENT

Title (Position)