## **1. DELIVERABLES**

Contractor agrees to provide the goods, equipment, or items ("Materials") detailed in the work scope attached hereto (if any) and in any Purchase Order or Work Release ("PO(s)") that reference this Contract.

## 2. TERMINATION

- a. TVA may terminate this Contract or any PO issued hereunder, in whole or in part: (a) upon Contractor's default in performance of this Contract or any such PO, specifically including Contractor's failure to meet Contract or PO performance schedules, and Contractor's failure to cure the default within such time period (if any) required by TVA's notice of termination, specifying the default; or (b) for TVA's convenience, if such termination is in TVA's best interest.
- b. Regardless of the reason for termination, TVA: (1) is not liable to Contractor for amounts in excess of the payments due for Materials properly delivered before the effective date of termination, and (2) shall not be obligated to pay any Contractor invoice submitted later than 45 days after the effective date of the termination. Upon a termination for default, TVA has and may exercise any and all rights and remedies against Contractor available to TVA at law or in equity.

## 3. COMPENSATION, INVOICING, AND PAYMENT

- a. Compensation
  - 1. Fixed Price

If TVA accepts Contractor's proposed firm, fixed, or "lump sum" price for the Materials and related work (a "Fixed Price"), TVA will pay Contractor such Fixed Price upon the satisfactory completion and Acceptance by TVA of the Materials and work, The Fixed Price(s) include all costs that Contractor and its subcontractors, and their agents and employees, incur in connection with the manufacture and supply of the Materials, and the performance and completion of related work. The Fixed Price(s) will not be changed except pursuant to a fully executed written amendment to this Contract. "Acceptance" means receipt by TVA of work meeting the Contract requirements and acknowledgement by an authorized representative of TVA that such Contract requirements have been met.

2. Time and Materials

If Contractor supplies Materials on a time and materials basis, based on rate(s) agreed to on the relevant PO(s) or pursuant to a rate schedule attached hereto, then TVA will pay Contractor in accordance with such rate(s). Such payments will exclude all travel time and any related travel expenses, unless authorized in advance and in writing by the TVA Contract Technical Steward (CTS).

- b. Invoicing and Payment
  - 1. TVA will make payments to Contractor in accordance with the payment schedule set forth in the PO, after TVA's receipt of Proper Invoices, including supporting documentation: (i) through the Maximo Portal within TVA's Supplier Connections website, at www.tva.com/supplier (if TVA enables Contractor's access to such portal), or (ii) by electronic mail (PDF or TIF file) to accountspayable@tva.gov. Contractor shall not submit any invoices to TVA until the later of its completion of work to TVA's satisfaction, or TVA's Acceptance of the Materials or work. "Acceptance" means receipt by TVA of work meeting the Contract requirements and

acknowledgement by an authorized representative of TVA that such Contract requirements have been met. "Proper Invoice" means a numbered and dated invoice, containing TVA's PO number(s) (if applicable), and the work, Materials, or both for which Contractor is invoicing TVA, together with any additional documentation that the PO requires.

- 2. Contractor certifies that: (i) to the best of its knowledge and belief, all information contained in each Proper Invoice is true and correct, (ii) all costs, charges and expenditures submitted were made and incurred in accordance with the provisions of this Contract, and have been actually paid by Contractor, and (iii) payment for the amounts on such Proper Invoice has not been received from TVA or otherwise paid or reimbursed to the Contractor by any other party, in whole or in part.
- 3. All payments due to either party under this Contract are subject to the Prompt Payment Act, 31 U.S.C. §§ 3901-3907.

### 4. TAXES

By entering into this Contract, Contractor certifies that no state sales or use taxes are or will be included in the amounts invoiced to TVA.

## 5. SHIPMENT/DELIVERY

- Time is of the essence. Contractor shall ship all Materials in compliance with this Contract and a. with the instructions contained in PO(s) issued hereunder, or specific, written instructions issued by TVA. If Contractor routes shipments contrary to this Contract, PO(s), or such instructions, TVA is not liable or obligated to pay any amount in excess of the shipping costs that would have been incurred had Contractor complied with Contract or PO terms, or followed the specified instructions. For shipments made: (i) Free Carrier At (FCA, INCOTERMS 2010) or F.O.B. Origin (Freight Collect) (Contractor is responsible for loading onto TVA's carrier, and TVA takes title and risk of loss upon the carrier's departure from Contractor's loading dock), or (ii) F.O.B. Destination (Freight Collect) (Contractor is responsible for loading onto TVA's carrier, but retains title and risk of loss until delivery to TVA's Site destination), Contractor shall not charge or invoice to TVA any additional valuation or cargo insurance, and all invoices must be supported by and consistent with carriers' freight bills. In any of the foregoing cases, and unless TVA or its agent(s) directly cause shipment delays, if the actual delivery date is later than the delivery date stated on the relevant Work Release(s), then (1) Contractor will be liable for all additional charges (including costs of emergency or expedited loading, shipment, and unloading) related to such delayed delivery date, and (2) TVA may claim from or deduct and retain from any Contractor invoices, amount(s) equal to such prohibited or additional charges, plus a per-shipment administrative fee of \$250.
- b. Contractor must prepare the Materials provided under this Contract for shipment, accurately identify the Materials (with, at minimum, a bill of lading or packing list(s) that describe the Materials, their quantity, and the Contract or PO number), pack the Materials to protect them from damage in transit, and package the Materials for shipment to facilitate their unloading at the TVA destination. TVA may provide additional shipment or packaging instructions at time of shipment or issuance of the PO. Contractor is responsible and liable for any and all damage to Materials due to improper preparation for shipment, receiving, handling, or storage.

### 6. ENTIRE AGREEMENT

This Contract, PO(s) issued hereunder, and any attachments hereto, embody the entire agreement between TVA and Contractor, and supersede all other communications, either oral or written, with respect to the subject matter hereof. The parties shall not be bound by or be liable for any statement, representation, promise, inducement or understanding not set forth herein. No

amendments or modifications shall be valid unless incorporated into this Contract in writing. Specifically, any reference to a Contractor proposal or quote is solely for the purpose of incorporating the description and specifications of the Materials contained therein to the extent that such description and specifications do not conflict with the description and specifications on the face of this Contract or the relevant PO(s). By acknowledging receipt of this Contract or any PO(s) issued hereunder, or by shipping the Materials for which Contractor will invoice TVA pursuant to these terms and conditions, Contractor agrees to these terms and conditions.

### 7. WARRANTIES-MATERIALS

- a. Contractor warrants that the Materials and related work provided to TVA:
  - 1. Are free from defects due to faulty workmanship or material;
  - 2. Are fit for the intended use(s) and purpose(s) including, but not limited to, those uses and purposes specified or referred to in this Contract or PO(s);
  - 3. Comply with this Contract, PO requirements and specifications, applicable laws, regulations, and standards issued by federal, state, and local government authorities and standards boards, and industry association standards;
  - 4. Are, unless otherwise specified by TVA in a PO, new, unused, not surplus (never before sold for use), and not rebuilt;
  - 5. Are free from defects in design (except to the extent TVA or a third party that is not a subcontractor to Contractor has provided or directed the design of the Materials); and
  - 6. Are not fraudulent or counterfeit.
- If Contractor is notified in writing that the Materials fail to comply with any of the warranties stated b. in subsection a, above, during the warranty period of one (1) year from the date of Acceptance, or TVA's first use in actual service, whichever is later, Contractor will, at TVA's option and Contractor's expense, refund to TVA the portion of the invoiced amount(s) paid for the defective Materials, or correct such nonconformity by repair or replacement, to TVA's reasonable satisfaction. Contractor shall pay transportation and labor costs incurred in connection with correcting such defects in the Materials. Contractor shall correct any defects only at times designated by TVA. Any portion of the Materials that have undergone warranty repair or replacement, or on which corrective action has been performed, will be warranted as provided in subsection a. above. If it is impractical for TVA to wait for Contractor to perform corrective action. TVA may have such corrective actions performed at Contractor's expense. If Contractor's corrective action fails to render the Materials compliant with the warranties stated in subsection a above, or Contractor fails to take the appropriate corrective action within a reasonable time after receiving notice of the relevant defect(s) or noncompliance, then TVA may terminate this Contract (in whole or in part) for default.
- c. If the Materials are covered under a manufacturer's or Subcontractor's warranty, Contractor, upon TVA's written request, shall assign to TVA the right to enforce any such warranty. Such third-party warranties do not in any way limit or modify Contractor's warranties to TVA under this Contract.
- d. Contractor's failure to correct a defect within a reasonable time of receiving written notification of the defect from TVA constitutes a default under subsection b, above.
- e. The foregoing warranties and remedies are in addition to any specific warranties, guarantees, or remedies contained in this Contract or available at law.

### 8. SPECIFIC REQUIREMENTS FOR FOREIGN OR NUCLEAR MATERIALS

- a. If this Contract or any associated PO value is at or above \$250,000, Contractor will provide Materials compliant with the Trade Agreements Act of 1979, 19 U.S.C. §§ 2501-2581 ("TAA"), to the extent the TAA is applicable. Contractor will provide Materials compliant with the Buy American Act, 41 U.S.C. §§ 8301-8305 ("BAA"), to the extent the BAA is applicable. TVA may reject any Materials that does not comply with the BAA or TAA.
- b. If under this Contract or any associated PO, TVA purchases Materials from Contractor that are or may be subject to any level of the Quality Assurance ("QA") requirements established by the U.S. Nuclear Regulatory Commission ("NRC") ("QA Materials"), then the following requirements apply to Contractor and the QA Materials, as stated:
  - TVA's QA organization must approve Contractor's listing on TVA's Acceptable Suppliers List ("ASL"), and approve Contractor's subcontractors, distributors, and agents ("Suppliers," for purposes of this Section 8.b), if Contractor does not manufacture, supply or distribute the QA Materials. TVA will not list Contractor or its Supplier(s) on the ASL unless the Supplier(s) manufacture, distribute, handle, transmit QA and technical requirements to Contractor or among Suppliers, store, or ship (or any one or more of the foregoing) QA Materials and maintain a QA program (e.g., ANSI N45.2, ASME, Commercial) that TVA's QA Organization has approved.
  - Suppliers must ensure that TVA quality and technical requirements are transmitted to Contractor and other Supplier(s) who contribute to, distribute or deliver the QA Materials, obtain required documentation from Contractor, provide the information to TVA, and maintain traceability to the Supplier(s)' production data (such as lot number, date of manufacture, and production number).
  - 3. Contractor and each Supplier must provide TVA with a written list, table or chart stating, at minimum, for each QA Material(s) or group of QA Materials, the QA Materials' item number, description, and the ASL Supplier's corporate name and full street address.
  - Contractor must direct any questions about a Supplier's ASL approval status to: Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801, Attn: Vendor Audit & Services - LP5M, (423) 751-7726 or (423) 751-2051.
  - 5. Contractor shall determine whether the QA Materials are subject to the requirements and civil penalty provisions of NRC's regulations, at 10 C.F.R. Part 21 (Reporting of Defects and Noncompliance), and shall inform TVA immediately in writing of each defect or noncompliance reportable under 10 C.F.R. Part 21. Contractor must send any such notice to the following TVA address, with a copy to the Contracting Officer: TVA Nuclear Power Performance Improvement, Attention: Program Manager, Operating Experience, 1101 Market Street, Mailstop: LP 4G, Chattanooga, Tennessee 37402-2801.

### 9. CONTRACT INTERPRETATION AND DISPUTES

This Contract is governed by and will be construed under Federal law. In the event Federal law does not provide a rule of decision for any particular dispute, the law of the State of Tennessee will apply; provided, however, in no event shall Tennessee's choice of law provisions apply. Pending resolution of any dispute, Contractor shall proceed with the work in accordance with the determinations, instructions, and clarifications of TVA's Contracting Officer. The parties will use their best efforts to resolve disputes informally at the lowest possible levels of decision making, and consensual alternative dispute resolution processes may be used. The parties agree that any lawsuit between them that asserts a claim or claims arising out of or related to this Contract (whether sounding in Contract, tort, or otherwise) shall be filed and litigated to conclusion only in the United States District Court for the Eastern District of Tennessee, and each party hereby consents to the jurisdiction and venue of that court for all such lawsuits. The parties further agree that in any such litigation, each will waive any right it may have to a trial by jury. This Section 9 is

not a "disputes" clause within the meaning of the Contract Disputes Act, 41 U.S.C. §§ 7101-7109, and this Contract is not subject to that Act.

## **10. INTELLECTUAL PROPERTY RIGHTS**

- a. TVA will own all documents, drawings, reports, computer software, and other deliverables (whether or not copyrighted by Contractor) generated, prepared, or provided to TVA by Contractor under this Contract (all such deliverables, together with any inventions embodied in Materials, are herein collectively referred to as "Work Products"). Upon request, Contractor shall assign to TVA all copyright ownership in Work Products. Contractor retains ownership of technical data, engineering techniques and computer software not generated, prepared or provided under this Contract but utilized in connection with the Materials, but grants TVA a nonexclusive, royalty-free license to use such data, techniques and software, as required to maintain the integrity of Materials, including any subsequent necessary modifications.
- Contractor hereby indemnifies and holds harmless TVA from all suits, claims, actions, losses, b. damages, and expenses, including attorney's fees, and at its expense shall defend any suit against TVA, in so far as it is based on the claim of infringement of any United States patent or of any copyright, for any Materials or Work Products furnished to TVA. TVA shall immediately notify Contractor in writing of any such suit or claim, and permit Contractor to defend same. If in any such suit or claim, said Work Products, or their utilization by TVA, Contractor, or any party on TVA's behalf, is held to constitute infringement, or is otherwise determined to violate any right secured by patent or copyright. Contractor at its expense shall procure for TVA the necessary licenses and right to continued utilization of said Work Product; provided that, subject to TVA's written approval, Contractor at its expense may replace or modify said Work Product so that it becomes non-infringing, and provided further, that any substituted or modified Materials or Work Products must satisfy, and be subject to, this Contract's requirements. The aforementioned obligations shall not apply to any Materials, the detailed design of which (excluding rating and/or performance specifications) has been furnished in writing by TVA. Contractor warrants that no information that it discloses to TVA under this Contract is subject to or violates an obligation of privilege or confidentiality to any third party.

## **11. NO WAIVER**

TVA's allowance or requirement that Contractor deliver Materials after the completion time specified in this Contract or any affected PO does not constitute a waiver of any right, remedy or damages TVA may have or seek due to Contractor's delay. TVA's waiver of any Contractor breach of this Contract shall not be deemed to waive any other or subsequent breach. No time limits in this Contract shall be waived by TVA's Contracting Officer's consideration of any untimely notice or information by Contractor.

# **12. INFORMATION TECHNOLOGY**

#### 1. Definitions

- a. "Cloud Computing" means the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-145 definition of this same term, as of September 2011.
- b. "Cyber Asset" means any programmable electronic device, including hardware, software, information, or any of the foregoing, which are components of such devices or enable such devices to function.

- c. "Harmful Code" means any computer instructions, circuitry or other technological means whose purpose is to disrupt, damage or interfere with TVA's use of TVA's Information System(s), including, without limitation, any automatic restraint, time-bomb, trap-door, virus, worm, Trojan horse, time lock, clock or any other harmful, malicious or hidden procedure, routine or mechanism, which will cause the Work or any other TVA software, hardware or system to cease to operate or to fail to conform to its specifications.
- d. "IT Work" means the total of all hardware, software, software licenses, networks, cloud services, telecom, servers, databases, electronic programs, and related actions, management, services, Records (electronic or physical) or responsibilities, that Contractor will develop, update, upgrade, grant, deliver, transmit, perform, or provide to TVA under this Contract.
- e. "Kaspersky Product" means any software code, or any information security product, solution, network, system, or service, that is or has been supplied (directly or indirectly) by AO Kaspersky Lab or any of its predecessor entities or its Affiliates (including, without limitation, Kaspersky Lab North America, Kaspersky Lab, Inc., and Kaspersky Government Security Solutions, Inc.), or any entity in which one or more of the foregoing has majority ownership or voting control.
- f. "Vulnerability(ies)" means any publicly disclosed material defect or compromise to the cybersecurity of Contractor's or its Subcontractor(s)' product or service provided, serviced, or delivered to TVA as part of the IT Work.

#### 2. Viruses and Harmful Code

- a. Contractor represents and warrants that the IT Work, and any media used to distribute the IT Work, contains no Harmful Code at the time of initial delivery or at the time of updates or upgrades. Contractor shall utilize an industry standard scanning tool to ensure that no Harmful Code is contained in the Work, and if such scanning tool indicates the presence of any suspected or known Harmful Code associated with the IT Work, Contractor shall, at its expense, remove and confirm to TVA in writing the removal of the Harmful Code.
- Product Integrity Requirements. Contractor must provide or deliver to TVA Work Products that b. comply with the requirements stated in subsection (a), above, and the following (as appropriate and specified on Work Release(s)): (1) for Work Products delivered physically, in sealed boxes, packaged to indicate that the seal has not been broken, disturbed, or modified, (2) for Work Products delivered electronically, but separately from the Work Products themselves, a list of all delivered files and (i) the sha-1, sha-2 hash values associated with those files such that TVA can verify the integrity of the files, or (ii) other recognized hash value systems or hashing algorithms, functionally equivalent to sha-1 or sha-2 values, and (3) in any of the foregoing cases, accompanied by a written confirmation that the Work Products have never been affected by input from, and are free from, any Kaspersky Products (as defined in this Contract) (x) the use of which is prohibited under Section 1634 of the Fiscal Year 2018 National Defense Authorization Act, as enacted or codified; or (y) named or referenced in the U.S. Department of Homeland Security's Binding Operational Directive (BOD) 17-01, dated September 2017 (as such BOD may be revised or updated). TVA receiving personnel will verify that either: (x) tamper evident seals of the packaging are intact, or (y) Contractor has provided (by email or otherwise in writing) the information required by subsection (2), above, or (as appropriate) a cryptographic key and access information for the electronic Work Products.
- c. Ensure that Information System(s) hosted externally to TVA, by Contractor, Contractor's Subcontractor(s), or by Cloud Service Provider(s) (as those terms are defined herein), as part of or incident to Contractor's Work, have never been exposed to or affected by input from, and are protected and free from, any Kaspersky Products (1) the use of which is prohibited under Section 1634 of the Fiscal Year 2018 National Defense Authorization Act, as enacted or codified; or (2) that are named or referenced in the U.S. Department of Homeland Security's Binding Operational Directive (BOD) 17-01, dated September 2017 (as such BOD may be revised or updated).

- d. Contractor shall ensure that its Subcontractor(s) comply with this Section, and is liable for such Subcontractor(s)' failure to comply with this subsection.
- 3. Accessible Technology, Software, Web Sites and Services- Section 508
  - a. TVA fully supports the principles and goals outlined in section 508 of the Rehabilitation Act, 29 U.S.C. 794d, which seeks to improve the internal and external accessibility of electronic and information technology for persons with disabilities. When accessible technology is available in the market and meets TVA's Work requirements or specifications, then, unless otherwise approved by the Contracting Officer, all electronic and information technology Deliverables or related services, as applicable, must comply with Section 508 of the Rehabilitation Act, and the Access Board Standards (see http://www.section508.gov/section-508-standards-guide).
  - b. Contractor shall provide TVA with responses to the relevant portions of the Voluntary Product Accessibility Template (VPAT), located at http://www.itic.org/public-policy/accessibility, which will assist TVA in determining Contractor's compliance with Section 508 of the Rehabilitation Act. Contractor must complete the Functional Performance Criteria and all other applicable sections describing the commodity (for example, software, web information/applications, or telecommunications products). Instructions for the VPAT are available at http://www.itic.org/public-policy/accessibility.
  - c. In addition, as Contractor implements technology improvements to its Deliverables or other Work, it will emphasize the accessibility of such Products to persons with disabilities. TVA may evaluate Contractor's progress in this area as a factor in determining the overall duration of this Contract, as well as the nature and quantity of Work purchased or authorized.
- 4. Source Code Escrow
  - a. Concurrent with or within two weeks of the Effective Date, Contractor, at its expense, shall establish a source code escrow and name TVA as a Primary Beneficiary of the then-current source code and documentation (including programmers' documentation) as well as the executable code for the software that TVA purchases, or which is licensed to TVA, under or pursuant to this Contract (the "Escrowed Materials") with ("Escrow Agent"), pursuant to a fully executed Escrow Agreement approved by TVA.
  - b. Contractor shall, over the term of this Contract, also deliver to Escrow Agent, at the time Contractor releases any upgrades to the Escrowed Materials, or, at its option, deliver sealed Escrowed Materials to TVA. In such case, TVA shall keep the Escrowed Materials in a vault, a safe, or a closed or locked cabinet normally used for safekeeping purposes by TVA.
  - c. TVA may access the Escrowed Materials upon the happening of any of the following events:
    - 1. Contractor is liquidated, dissolved, or its assets but not its obligations are acquired by a third party
    - 2. Contractor ceases providing maintenance or hosting services as required under this Contract, ceases to provide services through a third party, or ceases doing business, voluntarily or involuntarily, for a period of at least ten days;
    - 3. Contractor furnishes written notice to TVA that it is withdrawing support for the software covered by this Contract;
    - Contractor becomes insolvent or is the subject of a bankruptcy suit under Chapter 7, or is the subject of a bankruptcy suit under Chapter 11 and elects to reject this Contract within 30 days, or does not elect to either accept or reject this Contract within 30 days of initiation of bankruptcy;

- 5. Contractor is in default under this Contract, and has not remedied the default within thirty days after its receipt of written notice provided by TVA; or
- 6. Contractor or Escrow Agent terminate or fail to renew or extend the Escrow Agreement throughout the term of this Contract.
- d. Upon the occurrence of any of the foregoing, TVA shall be allowed to access the Escrowed Materials. TVA's access to these materials includes the rights to use, copy, display, perform, and prepare derivative works thereof only for the purposes of obtaining or providing support or maintenance of the software or developing modifications or enhancements thereto, but this provision shall not be construed to grant TVA any right to commercialize the software or use it for other than TVA business purposes.
- e. TVA will own all title to and intellectual property rights in any such modifications, enhancements or derivative works.
- f. Any software that is part of the Escrowed Materials and also connected with (or designed to be connected with) an externally hosted Contractor Information System must comply with the applicable security controls requirements stated in the Contract Section Externally Hosted Information Systems.
- g. This Section does not operate and shall not be construed as limiting or replacing any other Contractor obligations or liabilities under this Contract.
- 5. TVA Furnished Information Technology Equipment
  - a. TVA may elect to furnish TVA-owned information technology equipment ("TVA IT Equipment," as defined herein) for Contractor's use if TVA determines that such use is the most cost-effective way to support the Contractor's performance of Work. For purposes of this Section, TVA IT Equipment means: (a) any equipment or interconnected system or subsystems of equipment that are used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching interchange, transmission, or reception of data or information; and (b) computers; ancillary equipment, data communication lines and other communication hardware, software, firmware; or similar equipment identified on Work Release(s).
  - b. TVA will deliver to Contractor any TVA IT Equipment at the time and location specified in Work Releases(s), or as otherwise authorized in writing by TVA's Contracting Officer.
  - c. All TVA IT Equipment, and any services, maintenance or support provided by TVA or third-party contractors relating to such TVA IT Equipment, are provided to Contractor "AS IS" or on a courtesy basis (as applicable), disclaiming any warranties by TVA or on TVA's behalf.
  - d. TVA owns and will retain title to all TVA IT Equipment provided to Contractor, including any such equipment that Contractor purchases as agent for TVA, or otherwise on TVA's behalf (if and as authorized by specific Work Release(s).Contractor shall not use TVA IT Equipment except in direct support of its Work under this Contract. Contractor assumes the risk and responsibility for loss or damage (other than as incident to reasonable usage for purposes of the Work) to any TVA IT Equipment after its initial delivery to Contractor, and until its return to TVA.
  - e. Contractor shall maintain written property control records for all TVA IT Equipment in accordance with sound business practices and will make such Records available for TVA inspection, upon TVA's request.
  - f. Upon completion of Work or termination of this Contract for any reason, Contractor shall follow the instructions of the Contracting Officer regarding the return and disposition of all TVA IT Equipment, and shall return all related Records to TVA's CTS.

#### 6. Contractor Use of TVA Computer System Resource

- a. Contractor's use of a TVA Information System, authorized or unauthorized, constitutes Contractor's consent to TVA's monitoring of Contractor's or any Subcontractor(s)' use of the relevant TVA Information System. TVA may provide access to its Information System and all related equipment, networks, and network devices (including internet access) only to authorized users for authorized purposes, as described in TVA's governing internal procedure(s), including, without limitation, TVA-SPP 12.001, Acceptable Use of Information Resources. Contractor is responsible for ensuring that its employees, its Subcontractor(s), and their agents comply with such internal procedures.
- b. Any Contractor employee or Subcontractor(s) that seek(s) access to a TVA Information System, or receives a TVA network ID, first shall complete, subject to TVA's written approval, TVA Form 40156 "TVA Contractor and TVA Nuclear Badged Employee Check-In Form Hire and/or Unescorted Nuclear Access Request." Any employee who receives a TVA network ID, or access to a TVA Information System, must complete TVA Form 40157, "TVA Contractor Check-Out Form" upon the completion of his or her Work, or the termination of this Contract or the relevant subcontract(s), for any reason.
- c. Contractor shall immediately notify the Contracting Officer in writing whenever it disables electronic access by or for any of its employees or Subcontractor(s) to a Contractor's Information System, due to any action that temporarily or permanently severs the employment or subcontracting relationship (including, without limitation, termination, resignation, or suspension) within 24 hours of the action. Upon receipt of such notice from Contractor, TVA will immediately disable the relevant employee(s)' electronic access to TVA Information Systems.
- 7. eMarketplace Catalog Content
  - a. TVA has developed an internet-based marketplace called eMarketplace Connection, which is operated through a remotely hosted software service, so that Contract information can be accessed through electronic catalogs. TVA will provide Contractor's employees and Subcontractor(s) with access to this marketplace, if and to the extent necessary to facilitate Work authorized by Work Release(s).
  - b. If this Contract is made available through the eMarketplace Connection, Contractor will assist TVA in building and maintaining catalog information, by preparing and updating a simple EXCEL spreadsheet.
  - c. If the parties implement the eMarketplace Connection for this Contract, Contractor will choose one of the following annual fee options, based on the applicable method of order transmission:

First Year	Subsequent Years
\$5,200	\$2,600
\$4,800	\$2,400
\$2,800	\$1,400
\$800	\$400
	\$5,200 \$4,800 \$2,800

#### 8. Information Technology Security Training

a. All Contractor employees and Subcontractor(s) who use TVA's Information Systems ("Contractor Users") must complete appropriate security training that satisfies the training requirement established in accordance with the Federal Information Security Modernization Act (FISMA), and Critical Infrastructure Protection (CIP) standards defined by the North American Electric Reliability Corporation (NERC).

- b. In order to have and maintain access to TVA Information Systems, all Contractor Users will receive an assigned TVA network ID and must complete required Security Awareness training within 14 days of their receipt of such network ID. After completion of the initial training, Contractor Users must complete Security Awareness training on an annual basis (before their training anniversary date).
- c. Contractor Users who receive a TVA network ID will receive: (1) an e-mail with instructions for completing the Security Awareness training requirement and an associated deadline for completion, and (2) an Employee ID and a personal identification number ("PIN") to access the online training. Contractor Users will then access the Security Awareness training with the ID and PIN, through TVA's Learning Management System. When each Contractor User completes the training module, he or she must complete a test with a passing score, as determined by TVA, to receive credit for the training.
- d. Any Contractor User's use of a TVA's Information System constitutes Contractor's agreement to comply with such system's terms of use. TVA may deny or revoke a Contractor User's access to any TVA Information System if: (1) such Contractor User fails to successfully and timely complete any Security Awareness training, (2) TVA's information or TVA Information Systems are misused or abused, or (3) TVA's terms of service are violated. TVA will not pay or reimburse Contractor, and Contractor shall not claim against TVA (under the Changes Section of this Contract, or otherwise), for any delays, costs, or other expenses incurred by Contractor or Subcontractor(s), relating to TVA's revocation or denial of system access to a Contractor User.
- 9. Personally Identifiable Information and Privacy Act
  - a. If Contractor or its Subcontractor(s) obtain or have access to PII in connection with Work performed or delivered under this Contract, or if Work Product delivered to TVA contains modules or features that collect or the functionality of which could be updated to collect PII, then, in addition to complying with the other PII-related provisions of this Section, Contractor shall:
    - 1. obtain, access, or use PII only as necessary to perform Work in compliance with the terms of this Contract and for no other purpose;
    - maintain the confidentiality of the PII as Confidential Information under the Nondisclosure Section of this Contract, and not disclose PII to any third party without the prior written consent of TVA, except as specifically required by Applicable Laws;
    - 3. obtain, access, use, receive, back-up, maintain, transmit, store, and disclose PII at all times in compliance with the terms of this Contract and Applicable Laws; and
    - 4. establish and maintain security controls and procedures acceptable to TVA for the collecting, processing, transmitting, and storing of PII on any Contractor Information System. TVA or the TVA Office of Inspector General (OIG) may inspect and review Contractor's security controls and procedures during normal business hours and upon providing reasonable advance, written notice to Contractor.
  - b. If an event has or could have resulted in the unauthorized access to, loss, theft, or damage to PII (hereinafter, "security incident"), Contractor shall:
    - immediately notify TVA in writing, and: (i) (at minimum) identify in such notice to the extent known, the information involved in the security incident, the timing and place of the security incident, the cause of the incident, and the steps being taken to mitigate any harm or damage caused by the security incident; and (ii) after such notice, as required by TVA, provide timely and regular updates regarding the security incident, and cooperate with TVA-designated personnel to mitigate any risks to Information Systems, or of further unauthorized disclosure of PII, posed by the security incident; and

- 2. cooperate with TVA and the TVA OIG in any investigation or legal proceedings initiated by Governmental Authorities relating to a security incident.
- c. In the event of any security incident, TVA or the TVA OIG may, at its option, perform an independent risk analysis of the security incident to determine the level of risk and potential harm associated with the security incident. Contractor agrees to fully cooperate with and assist in this risk analysis.
- d. PII is subject to the provisions of the federal Privacy Act of 1974, 5 U.S.C. §552a ("Privacy Act"), and subsection H, below. Except as required or permitted by Applicable Laws, including the Freedom of Information Act, neither party will disclose any information subject to the Privacy Act, which it obtained from the other party, without such party's prior written consent. Each party must protect PII and shall not disclose such information without written authorization from the individual to whom the information pertains, or except in compliance with the Privacy Act. If Contractor requests PII from any individual, Contractor shall provide a Privacy Act statement with such request or directly to such individual, which includes a notice of the expected routine uses of such information. PII may also meet the definition of Protected Health Information ("PHI") and be subject to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and the privacy and security rules promulgated thereunder. In the event Contractor receives PHI from TVA or creates PHI on behalf of TVA, Contractor shall comply with the HIPAA Business Associate Agreement.
- e. Within 90 days of the expiration or termination of this Contract (for any reason), Contractor shall destroy or return to TVA's CTS all PII received or obtained while performing Work under this Contract. The application of this Section will survive the expiration or termination of this Contract.
- f. In the event of a loss or compromise of PII held by Contractor, its agents, or its Subcontractor(s), under this Contract, Contractor and TVA will collaborate and agree on the method and content of any written notification that is required to be sent to person(s) whose PII was lost or compromised. As part of such written notice, Contractor must offer to provide the following services to such person(s), at its sole cost, and without cost or liability to TVA: (1) 12 months of credit monitoring, and (2) for serious or large incidents as defined by TVA, call center help desk services for the person(s) whose PII was lost or compromised.
- g. Contractor shall provide reasonable assistance to TVA when TVA must complete a Privacy Impact Assessment (PIA) document due to the design, development or operation of any system of Records on individuals. Upon review of the PIA, the TVA Privacy Program will determine whether additional measures are required. Contractor shall provide adequate support to complete the PIA in a timely manner, and shall ensure that: (a) project management plans and schedules include the, PIA, and Privacy Act System of Records Notice (SORN) (to the extent required) as milestones, and (b) each PIA is updated and renewed every three years after the date of its initial preparation, or upon termination of this Contract, whichever occurs first.
- h. Privacy Act Compliance.
  - If and to the extent that the Work under this Contract involves or requires Contractor to: (i) design, develop, or perform any activity associated with operation of, a System of Individual Records on (as defined below), or (ii) collect, use or disseminate such Individual Records, in any of the foregoing cases, in order to accomplish a TVA function, Contractor and Subcontractor(s) shall comply with the Privacy Act and its implementing regulations.
  - 2. As used in this Section: (i) "**Individual Record(s)**" means any item, collection, or grouping of information about an individual that is maintained by TVA or a Governmental Authority, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph, and (ii) "**System of Individual Records**" means any group of Individual Records

subject to the Privacy Act, which is under the control of TVA or any Governmental Authority, from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

- 10. Externally Hosted Information Systems
  - a. This Section applies to any Information Systems hosted externally to TVA, by Contractor, its Subcontractor(s), or by Cloud Service Provider(s) (as those terms are defined herein), as part of or incident to Contractor's Work.
  - b. Basic Safeguarding of Covered Contractor Information Systems. Contractor and its Subcontractor(s) must comply with specific safeguarding requirements stated in Applicable Laws and by Governmental Authorities, which apply to its or their Information Systems. In addition to the foregoing, Contractor shall apply the following minimum security controls to all externally hosted Information Systems:
    - 1. Establish and identify users, processes acting on behalf of users, or devices (including other Information Systems), who and which are authorized by TVA, or authorized by Contractor and approved by TVA, to access the Information System(s) ("Authorized Users").
    - 2. Limit Information System access to Authorized Users, and to the types of transactions and functions that Authorized Users are permitted to execute.
    - Authenticate (or verify) the identities of all Authorized Users as a prerequisite to allowing access to Information Systems, and limit Authorized Users' connections to and use of external information systems through the Information Systems.
    - 4. Limit physical access to Information Systems, related equipment, and the respective operating environments, to Authorized Users.
    - 5. Escort visitors and monitor visitor activity, maintain audit logs of physical access, and control and manage devices that can be used to gain physical access to Information Systems.
    - 6. Sanitize or destroy Information System media containing Contract Information before disposal or release for reuse.
    - 7. If the Information System is publicly accessible, in whole or in part, control information posted on or processed by the publicly accessible portion(s) of the Information System.
    - 8. Implement subnetworks for publicly accessible system components that are physically or logically separated from the Information System(s)' internal networks.
    - Perform periodic scans of the Information System and real-time scans of files from external sources as files are downloaded to, opened in, or executed by or through the Information System(s).
    - 10. Monitor, control, and protect organizational communications at the external boundaries and key internal boundaries of the Information Systems.
    - 11. Identify, report, and correct Information System Vulnerabilities within 30 days of discovery of any Vulnerability.
    - 12. Protect the Information System(s) from Harmful Code at appropriate locations within such systems, and update Harmful Code protection mechanisms when new releases are available.
    - 13. Ensure the integrity and authenticity of the Information System(s), and all associated security patches, through physical or logical mechanisms, or both mechanisms, as appropriate to the nature of the Information System(s).

- 14. Ensure that the Information System(s) have never been exposed to or affected by input from, and are protected and free from, any Kaspersky Products (1) the use of which is prohibited under Section 1634 of the Fiscal Year 2018 National Defense Authorization Act, as enacted or codified; or (2) that are named or referenced in the U.S. Department of Homeland Security's Binding Operational Directive (BOD) 17-01, dated September 2017 (as such BOD may be revised or updated).
- c. Cloud Services. If and to the extent that Contractor's Work includes the provision of Cloud Computing services to TVA, by it, its Subcontractor(s), or its or their agent(s) (individually and collectively referred to in this Section as a Cloud Service Provider, or "CSP"), the CSP will comply with the following in connection with its performance of Cloud Computing services ("Cloud Services") as part of this Contract's Work:
  - 1. Upon no less than 48 hours' prior written notice to Contractor, and at a mutually agreeable time, TVA may perform an onsite information security assessment of CSP's relevant Information Systems associated with the Cloud Services.
  - 2. The CSP will make Contract Information held or stored by the CSP, or its agent(s) available for retrieval for no less than 90 days after the termination of this Contract (for any reason), and promptly after the later of termination or TVA's retrieval of its information, the CSP, unless otherwise agreed upon by the parties in writing or required by Applicable Law, will destroy any Contract Information in its possession or control. The CSP must certify in writing that the Contract Information has been so destroyed, unless TVA elects to waive (in writing) such certification requirement.
  - 3. The CSP will notify TVA accordingly in the following Cloud Services situations: (a) at its earliest possible opportunity of any suspected security incident or the attempted access of Contract Information, and (b) no later than one hour of any confirmed security incident or the unauthorized access or attempted access of Contract Information. The one-hour time frame begins once a security incident has been confirmed, and does not include the time it takes to confirm that a security incident has occurred. The CSP must effect such notice by telephone to the Contracting Officer, and to the TVA ITCO at (423) 751-4357, and then immediately thereafter by providing a written communication to TVA at <u>CYBERSECURITY@TVA.GOV</u>, summarizing the incident and providing a designated CSP contact for the incident.
  - 4. Document Information System connections, as requested by TVA, with an Interconnection Security Agreement (ISA), Memorandum of Understanding (MOU), or both. The CSP shall transmit data externally only through connections that use secure communications (e.g., TLS, HTTPS/SSL, SSH, IPSec). Only ciphers that are generally recognized as safe may be used. Deprecated ciphers are prohibited.
  - 5. The CSP shall provide relevant security logs that can be integrated into TVA's security suite utilizing RFC-compliant, TLS-protected syslog or service vendor-provided API connectors.
  - 6. Unless otherwise authorized by TVA in writing, the CSP will store, process, and communicate all TVA information in connection with Externally Hosted Information Systems only within the continental United States, and will only allow United States Persons, as defined by 22 CFR part 120.15, or other individuals legally authorized under Applicable Laws, specifically including Export Control Laws, to access Contract Information. The CSP will use reasonable efforts to limit the interruption of Externally Hosted Information Systems and operation and maintenance times. The CSP will notify TVA in writing, at least 48 hours in advance, of any planned maintenance that could interrupt Externally Hosted Information Systems.
- d. Any CSP providing Cloud Services not authorized by the Federal Risk and Authorization Management Program (FedRAMP) must:

- 1. Provide documentation proving implementation of an appropriate control baseline, as determined by TVA, based on the Federal Information Processing Standard (FIPS) 199.
- 2. Provide, upon TVA's request, any additional information/documentation to allow TVA to determine that controls are in place and operating as expected.
- 3. Provide independent testing of those controls and document/maintain a plan that describes specific measures to be taken to correct deficiencies found during independent testing.
- 4. Remediation or mitigate all identified Common Vulnerabilities and Exposures (CVE) from the date vulnerabilities are formally identified, where applicable: (i) Critical vulnerabilities within 15 calendar days, and (ii) High vulnerabilities within 30 calendar days.
- e. Contractor shall not connect any TVA IT Equipment (as defined in the Contract Section TVA Furnished Information Technology Equipment) to an externally hosted Information System without the prior, written approval of TVA's CTS. If TVA's CTS provides such approval, Contractor must, at its sole cost, ensure that any TVA IT Equipment that is connected with or integrated into a Contractor Information System complies with the applicable requirements of this Section.
- f. Any reference in this Section to a NIST Special Publication (SP), Applicable Laws, or TVA or other federal standards, programs, memoranda or guidance, is to the latest issued or most recently amended version of such documents or requirements.
- g. Subcontracts. Contractor shall include the substance of this Section, including this subsection (h), in subcontracts under this Contract, in which Subcontractor(s) may process, store or transmit Contract Information through an externally hosted Information System.

#### 11. Cyber Security- Nuclear

This Section applies if and to the extent that Contractor, its Subcontractor(s), or its or their agent(s) furnish TVA with hardware, software, firmware, or digital devices that will or may connect with or impact TVA's Information Systems. Contractor will comply with the following in connection with its performance of such Work:

- a. Contractor may utilize any combination of technical and administrative controls to secure or protect its own Information Systems, in order to control modifications to hardware, firmware, and software, and to ensure that digital devices are protected against improper modifications prior to, during, and after installation of such Information Systems (for example, but without limitation, Contractor must configure digital devices to only enable functions and services needed for operation in support of the Work, and Contractor must certify that its Information Systems that may connect with or impact TVA's Information Systems are free from any and all Kaspersky Products). However, Contractor must comply with the requirements of TVA DS-E18.1.25.8, Cyber Hardening for Digital Devices, 1/13/14, associated with the design and development of such controls, and provide TVA the opportunity to verify the adequacy of such controls.
- b. Consistent with the Contract Section, Viruses and Harmful Code, Contractor shall provide documentation (for example, user guides, specifications, installation guides, maintenance guides) that: (i) address the applicability and methods on conformance to security requirements outlined in TVA DS-E18.1.25.8, Cyber Hardening for Digital Devices, 1/13/14, and (ii) ensure that the Information System(s) have never been exposed to or affected by input from, and are protected and free from, any Kaspersky Products (1) the use of which is prohibited under Section 1634 of the Fiscal Year 2018 National Defense Authorization Act, as enacted or codified; or (2) that are named or referenced in the U.S. Department of Homeland Security's Binding Operational Directive (BOD) 17-01, dated September 2017 (as such BOD may be revised or updated).

- c. Deliverables Affecting Critical Digital Assets. A "Critical Digital Asset" means a digital computer, communication system, or network that is a component of a critical Information System (this includes assets that perform Safety-Sensitive or Emergency Planning ("SSEP") functions, or provide support to, protect, or provide a pathway to critical systems), or a support system asset whose failure or compromise as the result of a cyber attack would result in an adverse impact to an SSEP Function. If Work Products delivered to TVA by Contractor are designed to, or functionally may, affect or modify TVA-designated Critical Digital Assets, Contractor must comply with all provisions and substantive requirements stated and referenced in this Section, and:
  - Provide a Failure Modes and Effects Analysis (FMEA) testing report, performed by Contractor at a component level (meaning, for purposes of this requirement, at the circuit board level), and including: (a) reliability metrics data (that is mean time for failure (MTFF)) for each component, and (b) a common cause evaluation such as software, power supplies, or cooling.
  - 2. Provide an EMI/RFI Test Report, consistent with EPRI TR-102323.
  - 3. Provide user documentation that describes the function and operation of software included in or necessary to operate the Work Products, which must be sufficiently detailed to allow the development of interface device drivers for communicating with Site data systems, and include: (a) an Information System overview, (b) description of the purpose and instructions for use of each software function, (c) system/function operation requirements including any limitations and assumptions, (d) description of the user interface with the software including input data requirements, interpretation of data outputs, and required responses to Information System error messages, casualty events, or prompts, (e) samples of outputs, forms, reports, or displays, (f) information for obtaining user and maintenance support, (g) description of all data communication ports (Inputs and Outputs) detailing all handshaking and format requirements, (h) description of all self diagnostics and their associated actions, and (i) error or self diagnostic codes.
  - 4. For all digital devices, provide to TVA the manufacturer's name and a list of all installed software and patches on the digital device, and the revision, version, or upgrade levels for software and hardware provided to TVA.
- 12. Knowledge Transfer (1213)
  - a. Contractor recognizes that its Work is critical to TVA function(s), and must be continued without interruption upon termination or expiration of this Contract (for any reason). Accordingly, Contractor shall furnish phase-in training to TVA or third-party contractor personnel, and cooperate with TVA to ensure an orderly and efficient transition of such Work, consistent with this Section.
  - b. Contractor shall, upon the Contracting Officer's written notice, (1) furnish phase-in, phase-out services for up to 90 days after this Contract expires or terminates, and (2) negotiate in good faith a plan with TVA or its designated third-party contractor, to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of Work described in the plan, and is subject to the Contracting Officer's approval. Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the Work is maintained or performed at the required level of proficiency.
  - 13. Indemnity IT Work

Contractor shall not knowingly or negligently introduce any Harmful Code into any TVA Information System and shall indemnify TVA and hold TVA harmless from all liabilities resulting from the presence of Harmful Code in or with the Work, or contained on media, delivered by Contractor or its Subcontractor(s) to TVA. Contractor will immediately notify TVA in writing of any suspected or known Harmful Code associated with the Work, and will, at its expense, ensure the removal of the Harmful Code. Further, Contractor is responsible for replacing any hardware, software, or data medium destroyed by failure to comply with requirements of the Viruses and Harmful Code Section of this Contract.

14. Vulnerabilities

Prior to the performance of any IT Work under this Contract, Contractor shall provide summary documentation of any Vulnerability, the potential impact of such Vulnerabilities, and the status of Contractor's efforts to mitigate those publicly disclosed Vulnerabilities. Contractor, at its expense, shall implement any corrective actions, compensating security controls, mitigations, or procedural workarounds, or any of the foregoing, which it recommends as necessary to address the identified Vulnerabilities.

- 15. Cyber Security Incidents: Notices and Responses
  - a. In addition to any notice required under this Contract, Contractor agrees to notify TVA immediately at (423) 751-4357 and then immediately thereafter by providing a written communication to TVA at CYBERSECURITY@TVA.GOV, whenever Contractor knows or reasonably believes that an act or omission by any source has compromised or may adversely affect or breach: (i) the cybersecurity of any IT Work, or (ii) the physical, technical, administrative, or organizational safeguards protecting Contractor's Information Systems (any of the foregoing, a "Compromise").
  - b. Within seven days of notifying TVA of the Compromise, Contractor shall recommend actions that TVA should take on TVA Cyber Assets to reduce the risk of a recurrence of the same or a similar Compromise, including, as appropriate, the provision of action plans and mitigating controls. Unless TVA or its agents negligently caused the Compromise, Contractor is responsible for developing and implementing those action plans and mitigating controls, at its expense. Regardless of the cause(s) of the Compromise, Contractor shall coordinate with TVA in implementing the action plans and mitigating controls. In addition, Contractor will provide TVA guidance and recommendations for long-term remediation of any cyber security risks posed to TVA Cyber Assets, and any information necessary to assist TVA in any of its recovery efforts in response to a Compromise.

#### 16. Remote Access

If the IT Work involves establishment or maintenance of remote access to a TVA Cyber Asset (either interactive or to and from an external Cyber Asset), Contractor shall (i) comply with TVA Cyber Asset requirements and preconditions, and (ii) coordinate with TVA to establish controls around, any such remote access to TVA Cyber Assets.

### **13. TERMS INCORPORATED BY REFERENCE**

This Contract incorporates by reference the following regulatory provisions, which, to the extent applicable to this Contract or the Materials, apply as if they were set forth in their entirety in this Section, and are available from TVA's Supplier Connections at <a href="https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses">https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses</a> under "Referenced Clauses":

- a. If the Contract value exceeds \$10,000: Affirmative Action and Equal Opportunity; Asbestos Containing Materials.
- b. If the Contract value exceeds \$25,000: Walsh-Healey Act; Affirmative Action for Disabled Veterans.
- c. If the Contract value exceeds \$100,000: Anti-Kickback Procedures; Drug-Free Workplace (\$0 for contracts with individuals); Small Business Policy; Combating Race and Sex Stereotyping.