

TENNESSEE VALLEY AUTHORITY - TECHNOLOGY TERMS - <\$700K

1. DEFINITIONS

"Affiliate" means a corporate entity (1) in which a party owns or controls, directly or indirectly, greater than 50% of the entity's controlling interests; or (2) that is the parent of, or is owned or controlled, directly or indirectly, by the same parent entity that owns or controls the party, provided that, the parent entity must own greater than 50% of the controlling interests of both the party and the other corporate entity to be considered an "Affiliate" of both.

"Applicable Laws" means those federal, state, or local laws, regulations, ordinances, judicial or administrative decisions or injunctions, or any other legal pronouncements having the force or effect of law, which are applicable to the performance of the Work, TVA, or the locations at which the Work will be performed.

"Contractor Employee" means any person performing Work through Contractor or a Subcontractor, and regardless of whether such person has an employment, staff augmentation, or independent contractor relationship with Contractor or a Subcontractor.

"Export Control Laws" means any Applicable Laws that govern the transfer of items or information to non-U.S. persons, entities, or destinations, including but not limited to: (i) the U.S. Department of Commerce's Export Administration Regulations ("EAR"), 15 C.F.R. Parts 730-774; (ii) the U.S. Department of Energy's export regulations, 10 C.F.R. Part 810; (iii) the U.S. Nuclear Regulatory Commission's export and import regulations, 10 C.F.R. Part 110; (iv) analogous export control laws of non-U.S. countries, to the extent applicable to either party or the Work; and (v) all applicable Permits issued thereunder.

"Force Majeure Event" means an act of God or other event outside the control of a party including, but not limited to: act of civil or military authority, war, terrorist attacks, riot, insurrection, inability of TVA to obtain any required permits or licenses, blockades or embargoes, strikes, sabotage, epidemics, fires, hurricanes, tornados, or floods.

"Governmental Authority(ies)" means any federal, state, provincial or local administrative or regulatory authority, including non-U.S. authorities, that has or have authority or jurisdiction under Applicable Laws over a Site, the Work, a party's or its suppliers' or subcontractors' real and personal property, or current and future employees or operations.

"Hazardous Materials" means toxic substances, hazardous substances or hazardous wastes, as such terms are defined by Applicable Laws.

"Permits" means all licenses, permits, approvals, and authorizations required by Applicable Laws, issued by Governmental Authorities, and necessary or required for performance of Work under this Contract.

"Proper Invoice" means a numbered and dated invoice, containing TVA's Contract and PO number(s) (if applicable) and the Work for which Contractor is invoicing TVA, together with any additional documentation that the Contract or PO requires.

"Site" means any property on or to which TVA has any property interest (including, without limitation, ownership or lease, license, or easement rights).

"Subcontractor(s)" means the Contractor's Affiliates, subsidiaries, subcontractors, suppliers, and agents, whether entities or persons, and the employee(s) of such entities or persons, in each case, which or who supply or perform Work on Contractor's behalf under this Contract.

"Work" means the total, or any portion, of all deliverables, actions, products, management, services, materials, documentation, electronic programs, reports, testing, transport, administration, software, tools, equipment, items and responsibilities to be furnished or performed by Contractor under this Contract, together with all other, or any portion of, the additional necessities that are not specifically recited in this Contract, but can be reasonably inferred as necessary to complete all obligations and fully satisfy the intent of this Contract.

2. WORK SCOPE/DELIVERABLES

Contractor will perform, provide or complete the Work detailed in the Work scope(s) attached to this Contract or to any purchase orders ("POs") issued by TVA that reference this Contract. Contractor's performance of Work constitutes its acceptance of the terms of this Contract and PO(s) issued under or referencing these Contract terms.

3. TERMINATION

a. TVA may terminate this Contract or any related PO, in whole or in part: (a) upon Contractor's default in performance of Work under this Contract or any such PO, and Contractor's failure to cure the default within such time period (if any) required by the Contracting Officer; or (b) for TVA's convenience. TVA will deliver to Contractor a written notice of termination ("Notice of Termination") specifying whether termination is for the default of Contractor or for the convenience of TVA, whether the termination is in whole or in part, and the date upon which such termination is effective. After receipt of a Notice of Termination, and except as otherwise directed by the Contracting Officer, Contractor shall follow the reasonable direction of the Contracting Officer with respect to such matters as transferring property, designs, and Work in progress; terminating subcontracts and orders; and completing performance.

b. Regardless of the reason for termination, TVA: (1) is not liable to Contractor for amounts in excess of the payments due for Work completed to TVA's satisfaction before the effective date of termination, and (2) will not accept nor pay Contractor's invoices if submitted later than 45 days after the effective date of the termination.

c. 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.

4. COMPENSATION

a. **Fixed Price.** If the relevant PO or attachment hereto specifies a firm, fixed, or "lump sum" price for the Work (a "Fixed Price"), TVA will pay Contractor such Fixed Price upon the satisfactory completion of the Work. The Fixed Price(s) include all costs that Contractor and Subcontractors incur in the

performance and completion of the Work. The Fixed Price(s) will not be changed except pursuant to a fully executed written amendment to this Contract.

b. **Time and Materials.** If the relevant PO or attachment hereto specifies that Work will be performed on a time and materials basis, based on rate(s) set forth therein, then TVA will pay Contractor in accordance with such rate(s) for time spent performing Work and for the provision of materials necessary to complete the Work.

c. Each PO will specify on what basis TVA will pay Contractor (Fixed Price or Time and Materials), and whether or to what extent TVA will reimburse Contractor for any travel, transportation, or subsistence expenses incurred in connection with this Contract. If authorized by PO(s), and subject to the conditions and limitations stated in this Section, TVA will reimburse Contractor's expenses actually incurred in connection with intermittent business travel, and to and from any assignment at a Site Work location, in accordance with the applicable U.S. General Services Administration (GSA) travel reimbursement rates, located at www.gsa.gov, subject to the following:

1. Actual cost (up to 100%) of the most current GSA "Max Lodging" rates. The traveler's location at midnight determines the applicable locality rate.
2. If overnight lodging is necessary, the current, applicable GSA Meals & Incidental Expenses (M&IE) rate for each full day of business travel, and 75% of the full M&IE day rate for the first and last days of travel.
3. Actual cost of coach class airline tickets, airport parking, reasonable and cost-effective costs of commercial transportation to and from the airport, airline baggage fees, and documented airfare penalty or cancellation charges incurred by Contractor if TVA alters the work schedule after Contractor already has purchased an airline ticket; however, TVA will not reimburse any additional fees (including, without limitation, personal accident insurance, seat upgrades, priority boarding, priority check-in, and in-flight wi-fi) in connection with air travel.
4. Actual rental cost for non-luxury, mid-size vehicles only, unless the number of travelers or the circumstances dictates a different class, and fuel for such vehicles (purchased from commercial fuel stations, and not at rental agency fueling locations), excluding any additional fees (including, without limitation, collision damage waivers, personal accident insurance, or rental agency fueling charges).

d. TVA will not compensate Contractor for its or Subcontractor(s) for any travel-related expenses incurred in connection with their employee(s)' daily commute(s) to or from a Site or other Work location.

e. TVA will not reimburse any Contractor or Contractor's Subcontractor travel expense that otherwise may qualify for payment or reimbursement under this Section, and may reject any Contractor invoice or portion thereof that seeks such payment or reimbursement, if any of the following occur or apply: (i) TVA has not authorized Contractor, in advance and in writing, to incur the expenses, (ii) Contractor or Subcontractor(s) incur the expenses during any employee's leave of absence from Work that exceeds one-half of that employee's daily scheduled working hours, (iii) the expenses are or are invoiced as a cost burden, administrative fee, or other markup or charge to any travel-related expenses, or (iv) TVA determines that the expenses are unreasonable.

f. TVA may, in its sole discretion audit all Contractor claims for reimbursement of travel expenses, and adjust claimed or issued reimbursements accordingly.

5. INVOICING AND PAYMENT

a. 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 it has completed the Work being invoiced to TVA's satisfaction.

b. 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.

c. All undisputed payments due to either party under this Contract will bear interest at the rate or rates identified in the Prompt Payment Act, 31 U.S.C. §3901-3907.

6. TAXES

As a corporate agency and instrumentality of the United States government, and pursuant to Section 13 of the TVA Act of 1933, TVA (federal EIN # 62-0474417) generally is exempt from state and local taxation. By entering into this Contract, Contractor certifies that no sales or use taxes imposed on any Work purchased by TVA, by a state, county, municipality, or any subdivision or district of the foregoing jurisdictions, are or will be included in the amounts invoiced to TVA. Contractor is responsible for payment of any other taxes imposed on it related to the Work, and for taking all measures to identify and claim any available tax exemptions or reductions.

7. AUDIT RIGHTS

Contractor shall keep accurate records and books of accounts in machine readable form supporting the amounts invoiced to TVA under this Contract. TVA, or its agents, shall have the right to audit without restrictions and at no additional cost to TVA, at any time during normal working hours, all amounts invoiced by Contractor to TVA and may examine Contractor's records specifically relating thereto. Contractor shall refund to TVA any amounts invoiced to and paid by TVA that are not in accordance with Contract terms or that are not supported by valid evidence. If TVA makes an overpayment to Contractor as a result of Contractor overbillings, Contractor is liable to TVA for interest on the amount of such overpayment, to be computed (1) for the period beginning on the date the overpayment was made to Contractor and ending on the date TVA receives a refund of such overpayment from Contractor, and (2) at the rate or rates identified in the Prompt Payment Act. Contractor shall preserve and make available its records, both manual and those which are in machine readable form, for a period of six (6) years from the date of final payment by TVA.

8. TVA REPRESENTATIVES

TVA's Contracting Officer (Contract Manager/ Procurement Agent) is TVA's duly authorized representative for all Contract purposes until otherwise stated. No change or amendment to this Contract is effective without the authorized signature of TVA's Contracting Officer and an authorized Contractor representative. Contractor shall furnish all correspondence regarding this Contract to TVA's Contracting Officer unless he or she directs otherwise. TVA's Contracting Officer may designate a CTS, who will act for TVA in regard to all technical matters under the Contract, but has no authority to modify the Contract or to issue direction contrary to the Contract. Contractor must direct technical communications (for example, technical documents, samples, drawings, or specifications) to the CTS.

9. INFORMATION TECHNOLOGY

A. Definitions

1. "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.
2. "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.
3. "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.
4. "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.
5. "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.
6. "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.

B. Viruses and Harmful Code

1. 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 cooperate with TVA, and shall make commercially reasonable efforts, including the use of an industry standard scanning tool, to prevent the introduction and proliferation of Harmful Code into TVA's network, software, hardware, and systems. Contractor shall indemnify and hold TVA harmless from all liabilities resulting from Contractor's and its subcontractor(s)' failure to comply with this Section.
2. Product Integrity Requirements. Contractor must provide or deliver to TVA Work Products that 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.
3. 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).
4. Contractor shall ensure that its Subcontractor(s) comply with this Section, and is liable for such Subcontractor(s)' failure to comply with this subsection.

C. Accessible Technology, Software, Web Sites and Services- Section 508

1. 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 <https://www.section508.gov/manage/laws-and-policies/>).
2. 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>.

3. 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.

D. TVA Furnished Information Technology Equipment

1. 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).
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.

E. Contractor Use of TVA Computer System Resource

1. 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.
2. Any Contractor employee or Subcontractor(s) that seek(s) access to a TVA Information System, or receives a TVA network ID:
 - i. first shall complete 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; and
 - ii. are subject to and must comply with TVA Personnel Security Policy requirements, and the requirements of the United States Citizenship and Immigration Services (USCIS) related to Covered Employees' eligibility to work in the United States.
3. Contractor must acquire, verify and maintain appropriate documentation (such as valid U.S. Social Security number(s) and USCIS Form I-9) on all Contractor employee or Subcontractor(s) who seek access to a TVA Information System.
4. Contractor shall immediately notify the CTS or designee 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.

F. Information Technology Security Training

1. 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).
2. 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).
3. 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.
4. 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.

G. Personally Identifiable Information and Privacy Act

1. Contractor shall obtain, access, use, receive, back-up, maintain, transmit, store, and disclose personally identifiable information ("PII") at all times in compliance with applicable laws and regulations, including without limitation the federal Privacy Act of 1974, 5 U.S.C. §552a ("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 applicable HIPAA Business Associate Agreement.
2. If an event has or could have resulted in the unauthorized access to, loss, theft, or damage to PII (hereinafter, "security incident"), Contractor shall:
 - a. 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
 - b. cooperate with TVA in any investigation or legal proceedings relating to a security incident.
3. In the event of any security incident, TVA 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.
4. Within 90 days of the expiration or termination of a contract with TVA, Contractor shall destroy or return to TVA all PII received or obtained while performing work under the applicable contract.

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.

H. Externally Hosted Information Systems

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.

1. 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:
 - a) 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").
 - b) Limit Information System access to Authorized Users, and to the types of transactions and functions that Authorized Users are permitted to execute.
 - c) 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.
 - d) Limit physical access to Information Systems, related equipment, and the respective operating environments, to Authorized Users.
 - e) 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.
 - f) Sanitize or destroy Information System media containing Contract Information before disposal or release for reuse.
 - g) 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.
 - h) Implement subnetworks for publicly accessible system components that are physically or logically separated from the Information System(s)' internal networks.
 - i) 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).
 - j) Monitor, control, and protect organizational communications at the external boundaries and key internal boundaries of the Information Systems.
 - k) Identify, report, and correct Information System Vulnerabilities within 30 days of discovery of any Vulnerability.
 - l) 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.
 - m) 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).

- n) 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).
2. 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:
- a) 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.
 - b) 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.
 - c) 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 CYBERSECURITY@TVA.GOV, summarizing the incident and providing a designated CSP contact for the incident.
 - d) 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.
 - e) 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.
 - f) 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.
3. Any CSP providing Cloud Services not authorized by the Federal Risk and Authorization Management Program (FedRAMP) must:
- a) Provide documentation proving implementation of an appropriate control baseline, as determined by TVA, based on the Federal Information Processing Standard (FIPS) 199.
 - b) Provide, upon TVA's request, any additional information/documentation to allow TVA to determine that controls are in place and operating as expected.
 - c) 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.
 - d) Remediate 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.
4. 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.
5. 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.
6. 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.

I. Order of Precedence

In the event of a conflict or inconsistency between or among sections of this Contract, or attachments hereto that are incorporated into the Contract (by reference or otherwise), the conflict or inconsistency will be resolved by applying the following order of precedence to the elements of the Contract:

1. Contract terms and conditions; then
2. Contract Exhibits and Attachments (including specifications) hereto; then
3. Work Releases issued under this Contract; and then
4. Contractor-provided drawings or specifications, separate from the Contract's Exhibits or Attachments.
5. License, end-user, or subscription agreements, or any one or more of the foregoing, referenced or provided to TVA by Contractor

J. 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.

K. 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.

L. Cyber Security Incidents: Notices and Responses

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").

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.

M. 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.

10. FOREIGN MATERIAL

If this Contract or any associated PO value is at or above \$250,000, Contractor will provide Work compliant with the Trade Agreements Act of 1979, 19 U.S.C. §§ 2501-2581 (TAA), to the extent the TAA is applicable.

11. INDEMNITY

- a. Contractor, by agreeing to perform the Work, acknowledges awareness of the location, nature and hazards of such Work. As such, Contractor releases TVA, its agents and employees, and shall indemnify and defend them against all liabilities (including claims and actions for damages, and payment of all judgments that may be rendered in such claims or actions) for personal injuries, property damage, or loss of life or property resulting from or in any way connected with this Contract or the performance of Work. However, the foregoing indemnification shall not apply to injuries or damages to persons or property for which the proximate cause is the sole negligence of TVA, its agents or employees.
- b. Contractor shall indemnify, defend and save harmless TVA from all claims for material furnished or work done and shall promptly discharge the same and not suffer any mechanics or other liens to remain outstanding against any of the property used in connection with the Work. Furthermore, Contractor shall, on request, furnish satisfactory evidence that all persons who have done Work have been fully paid. Contractor shall pay TVA the cost, including overhead, of any services or materials provided by TVA to any Subcontractors that perform or support (in whole or in part) Contractor's obligations under this Contract. TVA reserves the right to withhold from any sums due Contractor sufficient sums to satisfy all such claims. If after written notice from TVA, Contractor fails to satisfy such claims, TVA may adjust and pay the same upon a fair and reasonable basis out of any withheld funds.
- c. Contractor shall comply with Applicable Laws that affect performance of Contractor's obligations under this Contract, and will indemnify and defend TVA and the United States and their officers, employees and agents, from all liability resulting from its or its employees', agents', or Subcontractor(s)' violation of such Applicable Laws. If this Contract is for nuclear-related Work and contains a **Nuclear Incidents** section, nothing in this Section will be construed as reducing Contractor's rights under the **Nuclear Incidents** section.

12. WARRANTIES

- a. Contractor unconditionally warrants to TVA that all Work will:
 1. Be performed or delivered in a safe, timely, efficient, professional, and workmanlike manner, by skilled, experienced, and trained persons who exercise competent professional knowledge and judgment.
 2. Be free from defects in design, material, and workmanship.
 3. Be 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 Work Release(s).
 4. Comply with this Contract's and Work Release(s)' requirements and specifications.
 5. Be new, unused, not surplus (never before sold for use), and not rebuilt, unless otherwise specified by TVA in a Work Release.
 6. Comply with Applicable Laws, prevailing industry practices, and all applicable standards and rules established, issued or adopted by

standards boards or industry associations relevant to the Work.

- B. Contractor warrants that the Work will render efficient and satisfactory service for twenty-four (24) months, beginning: (1) for services, on the date that Contractor completes all such services and any related, authorized Work; or (2) for materials, items, or equipment ("Materials") that Contractor delivers to TVA as part of the Work, on the date that such Materials are installed at the relevant TVA Site(s).
- c. If the Work fails to comply with the warranties stated in this Section, TVA may require that Contractor perform the corrective action, may return the Work for correction or replacement, or may take corrective action itself in accordance with subsection (d), below. If Contractor performs corrective action, it must, at its sole expense, repair, adjust, or replace the defective Work to the complete satisfaction of TVA. Contractor shall pay all costs of removal, transportation, reinstallation, repair, and all other costs incurred in connection with correcting such defects in the Work, or ensuring compliance with Applicable Laws, standards and rules. Contractor shall correct any defects only at times designated by TVA. Any portion of the Work that Contractor (or any of its subcontractor(s) or other suppliers(s) has repaired or replaced due to a failure to comply with the warranties in this Section will be warranted as provided in subsections a and b, above.
- d. If Contractor's corrective action fails to render the Work compliant with the warranties stated in this Section, 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, in accordance with the Termination Section, above.
- e. In addition to the remedies stated herein, TVA may repair or replace any defective Work at Contractor's expense when TVA determines that: (i) operational conditions require such action, (ii) Contractor fails to correct the defect within a reasonable time of receiving written notification of the defect from TVA, (iii) Contractor is unable to respond in an emergency situation, or (iv) necessary to prevent TVA from substantial financial loss. If and to the extent TVA makes repairs or replaces defective Work, TVA will issue Contractor a written accounting and invoice of all such Work to correct defects.
- f. If any portion of Contractor's Work is covered under a third party manufacturer's or Subcontractor's warranty, Contractor, upon TVA's written request, shall assign to TVA the right to enforce any such warranty, to the extent such warranty is assignable, and at no cost to TVA. Such third party warranties do not in any way limit or modify Contractor's warranties to TVA under this Contract.

13. DELAYS, REMEDIES, AND WAIVERS

- a. No failure or delay in either party's performance of its obligations under this Contract will result in a default under this Contract, to the extent that such failure or delay is caused by a Force Majeure Event, and: (1) the non-performing party is without fault in causing such default or delay; (2) such default or delay could not have been prevented by reasonable precautions; and (3) such default or delay could not have been reasonably circumvented by the non-performing party through the use of alternate sources, work-around plans or other means.
- b. TVA will not terminate this Contract or affected Work Release(s) for default if: (1) Contractor has notified TVA's Contracting Officer and CTS, in writing within three (3) workdays of the Force Majeure Event, that its delays or failure to meet applicable Work schedule(s) are caused by a Force Majeure Event, and the duration or expected duration of the delays or failure; and (2) TVA's Contracting Officer determines, in his or her sole judgment, that Contractor's delays or failures to meet applicable schedule(s) are due to a Force Majeure Event. TVA may deem Contractor's failure to provide the written notice required in this subsection as sufficient grounds to deny Contractor's claim for an equitable adjustment or other relief caused by the Force Majeure Event.
- c. If and to the extent that any delay is caused by a Force Majeure Event, the time for performance of each party (including the payment of Proper Invoices submitted by Contractor, if such event actually prevents payment) will be extended for a period of time reasonably necessary to offset the effect of such delay or failure, subject to this Section's specific requirements, and except as provided for elsewhere in this Contract.
- d. Contractor's delays due to delays of its Subcontractors will not be excusable unless (1) delay was also caused by a Force Majeure Event, and (2) Contractor demonstrates to TVA that it could not have obtained replacement or substitute Work in compliance with Contract or Work Release requirements or specifications from other third party suppliers.
- e. If TVA notifies Contractor in writing of its determination of causes of delays or failures, extension of time, or denial of a request for modified performance of Work or schedule, and Contractor fails to object to such TVA notice by written response within thirty (30) days of the date of TVA's notice, the provisions of such TVA notice will bind both parties as a change notice under the Changes Section of this Contract.
- f. TVA's allowance or requirement that Contractor complete Work after the completion time specified in this Contract or any affected Work Release does not constitute a waiver of any right or remedy that TVA has under this Contract, under law or in equity, or TVA's right to claim damages or injunctive relief against Contractor because of Contractor's delay. No TVA extension of Contractor's time for performance of Work will release Contractor's sureties (if any) from their obligations. No TVA waiver of any Contractor breach of this Contract will be construed to waive any other or subsequent breach. TVA's Contracting Officer's acceptance or consideration of any untimely notice or information by Contractor does not waive any time limits or schedule deadlines stated in this Contract or any Work Release issued hereunder.

14. CHANGES

- a. TVA's Contracting Officer may at any time, without notice to Contractor's sureties (if any), issue a written change notice, making changes in the Work within the general Work Scope of this Contract (a "Change Notice"), including, without limitation, the following changes:
1. Drawings, designs or specifications.
 2. Method or manner of performance of Work.
 3. TVA's furnished facilities, equipment, materials, services or Site.
 4. Acceleration or deceleration in the performance of Work.
- b. A Change Notice becomes an effective Contract obligation: (1) when both parties execute the Change Notice and associated documents (for

example, but without limitation, a revised specification, milestone payment schedule, or Work Release); (2) subject to subsection c., below, if Contractor does not notify TVA in writing of any claims against TVA within five (5) business days of the date stated on TVA's Change Notice; or (3) immediately, if the Contracting Officer states in the change notice that it is impractical to delay implementation of the change. The parties also may agree to amend this Contract or any Work Release(s) affected by the issued Change Notice, in lieu of or in addition to executing the Change Notice.

c. Pending resolution of any claims (under this Contract's **Disputes and Governing Law** Section, or otherwise), or execution of the Change Notice or any related amendment, Contractor shall proceed with the Work as modified by the Change Notice. TVA's Contracting Officer may, but is not obliged to, accept or consider any Contractor or its Subcontractor(s)' claims arising from a Change Notice after the five (5) business day time period established in subsection b., above. TVA will not accept or consider any such claim after it has made final payment to Contractor under this Contract.

d. Contractor must continue to perform all Work not modified by the Change Notice, as required in this Contract. If at any time Contractor believes that acts or omissions by TVA constitute a change to Work not covered by a Change Notice, Contractor must notify TVA in writing within ten (10) days from its discovery of such acts or omissions, in order for TVA to consider the request.

e. Any Contractor proposal or request in response to an issued Change Notice, or pursuant to subsection d., above, must be based on Contractor's actual and allowable costs, rates, or prices (as applicable), or at minimum, on a cost or pricing structure similar to the terms of payment under which Contractor is (at the time of the proposal or request) being paid for Work under this Contract.

f. TVA is not liable to Contractor or any Subcontractor for increased costs in connection with any Change Notice or related claims, whether in tort or in contract, except as specifically provided in this Section, or pursuant to an executed amendment to this Contract.

15. INTELLECTUAL PROPERTY RIGHTS

a. TVA will have full ownership rights, including copyright, in all documents, drawings, reports, computer software, deliverables, records, and other work products generated, prepared, or provided to TVA by Contractor under this Contract and in connection with the Work. Contractor retains ownership of technical data, engineering techniques and computer software not generated, prepared or provided under this Contract but utilized for Work, but grants TVA a non-exclusive, royalty-free license to use such data, techniques and software, as required to maintain the integrity of Work performed by Contractor, including any subsequent necessary modifications. Contractor will not use third party licensed computer software that is not commercially available for Work under this Contract unless appropriate rights for TVA's continued utilization can be obtained at reasonable cost.

b. Contractor hereby indemnifies and holds harmless TVA, and its representatives from all suits, claims, actions, losses, 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 Work 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 or 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 or Work Product; provided that, subject to TVA's written approval, Contractor at its expense may replace or modify said Work or Work Product so that it becomes non-infringing, and provided further, that any substituted or modified Work or Work Products must satisfy, and be subject to, this Contract's requirements. The aforementioned obligations shall not apply to Work or Work Products, 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.

16. TERMS INCORPORATED BY REFERENCE

To the extent applicable to this Contract or the Work, the regulatory provisions listed at TVA's Supplier Connections at <https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses> under "Referenced Clauses" are incorporated in their entirety into this Contract.

17. ASSIGNMENT & CHANGE OF CONTROL

a. Neither party will, without the prior, written consent of (respectively) TVA's Contracting Officer or a corporate officer of Contractor, which in either case shall not be unreasonably withheld, Assign or effect an Assignment regarding or with respect to this Contract, provided, however, that no such consent is required in connection with an Assignment: (i) by Contractor, to one or more financial organizations in connection with Contractor's financing needs, of its right to receive payment from TVA, or (ii) if Contractor has provided to TVA the notice and information required by subsection (c), below (addressing a Change in Control), prior to the Assignment, and the Assignment results from a corporate merger, reorganization or transfer to a U.S.-domiciled Affiliate.

b. A party that requests the other party's consent to an Assignment must notify the latter party in writing, prior to any proposed Assignment, and in such request or notification:

1. Describe the proposed Assignment and underlying transaction(s) in detail, including providing corporate organizational charts that clarify the party's ownership before and after the transaction; and
2. Provide assurance to the consenting party that, post-Assignment, the assignee or transferee person or entity will, at minimum: (i) protect the consenting party's Confidential Information, and (ii) be willing and capable to continue performance of Work, in all cases, in full compliance with Contract requirements and specifications.

c. Each party must notify the other party in advance and in writing of any Change in Control, and in such notification:

1. Describe the proposed Change in Control and underlying transaction(s) in detail, including providing corporate organizational charts that clarify the party's and its Affiliates' ownership before and after the Change in Control; and
2. Provide assurance to the other party that, post-Change in Control and during the remaining Contract term, the party and its Affiliates will, at minimum: (i) protect the other party's Confidential Information, (ii) not prevent or restrict the notifying party's continued performance of Work, and (iii)

as applicable, maintain or renew any bonding or other surety requirements, or guaranty(ies) provided by the notifying party's parent entity(ies) or other Affiliates, at the levels or amounts stated in the Contract.

d. Either party's failure to comply with all requirements of this Section voids any proposed Assignment and constitutes a default, consistent with this Contract's **Termination** Section.

18. 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 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.

19. NONDISCLOSURE

Contractor agrees not to disclose to third parties, without the prior written consent of TVA, any information that: (a) a prudent business person would consider sensitive, (b) is designated by TVA as sensitive, restricted, proprietary or confidential, or (c) is obtained from or through TVA, or developed or obtained by Contractor, in connection with the performance of Work under this Contract ("Confidential Information"). Access to such TVA Confidential Information must be approved in advance and in writing by TVA's Contracting Officer. The nondisclosure restrictions stated in this Section do not apply to information that is or was, at the time of disclosure: public knowledge, already known by Contractor; obtained by Contractor from a third party that did not receive the information from TVA; or independently developed by Contractor's employees without access to such information. If Contractor's legal counsel reasonably advises it that disclosure of Confidential Information is required by Applicable Laws, Contractor must notify TVA in writing sufficiently in advance of the effective date of such legal requirement so that TVA can prevent or limit the required disclosure. This Section and the nondisclosure restrictions herein apply to all Subcontractors under this Contract.

20. INDEPENDENT CONTRACTOR

Contractor shall perform the Work as an independent contractor. Contractor (a) does not have the power or authority to bind TVA or to assume or create any obligation or responsibility, express or implied, on TVA's part or in TVA's name, and (b) shall not represent to any person or entity that it has such power or authority.

21. NOTICES

- a. A notice by either party to the other party is not valid or binding unless the conditions stated in this Section are satisfied. Unless expressly stated in a separate Section of this Contract, oral notice by either party, or constructive notice by one party to the other, does not fulfill a party's notice obligations under this Contract.
- b. All notices by either party to the other must be in writing and Delivered: (1) by hand, (2) by a nationally or internationally recognized delivery service entity, with all fees prepaid, (3) by registered or certified mail, return receipt requested, and all fees prepaid, to the party's designated recipient and address stated in this Section, or (4) by means of electronic mail, if confirmed by an electronic read receipt or separate electronic mail acknowledgement, to: (i) for TVA, its Contracting Officer or designated Site representative, and (ii) for Contractor, its on-Site representative or signatory to this Contract.
- c. A notice valid under subsections (a) and (b), above, is deemed effective when it is Delivered to the party to which it is addressed. For purposes of this Section, "Delivered" or "Delivery" means: (i) if hand-delivered by a delivery service or otherwise, at the time and on the date that such delivery service's or other written or electronic records indicate that delivery was completed, or (ii) in the case of electronic mail delivery, at the time and on the date of such electronic mail's delivery receipt.
- d. In addition to complying with the notice provisions of this Section, Contractor shall direct all original administrative, financial or legal correspondence regarding this Contract to TVA's Contracting Officer (and, if applicable, any TVA procurement agent(s) or business service representatives who issue Work Releases under this Contract). If TVA designates a CTS or project manager, Contractor shall direct all original technical communications, documents, specifications, and information, and materials (or samples or analyses thereof, as applicable) to the designated CTS or project manager. Contractor shall provide additional copies of such technical communications and information (but not physical materials) to the Contracting Officer.
- e. The Contractor person(s) listed in subsection (b), above are Contractor's Representative(s) for purposes of all notices and communications Delivered to TVA under this Contract. If Contractor does limit the authority of any Contractor's Representative, it must provide to TVA's Contracting Officer the name and business contact information for the person authorized to act for Contractor regarding the stated limitation. Consistent with the other requirements of this Section, Contractor is bound and deemed actually notified by all written, Contract-related communications that is Delivered by TVA's Contracting Officer to a Contractor Representative.

22. ORGANIZATIONAL CONFLICTS OF INTEREST

A. An organizational conflict of interest (OCI) arises when factors create an actual or potential conflict of interest on a contract, or when the nature of the work to be performed on that contract creates an actual or potential conflict of interest on a future procurement action or contract. If Contractor is unable or potentially unable to render impartial advice or assistance to TVA, or the Contractor's objectivity in performing work under this Contract, or any TVA contract, is or might be otherwise impaired, or the Contractor has an unfair competitive advantage, TVA may impose restrictions

on Contractor to avoid, neutralize and/or mitigate the OCI or the appearance of an OCI.

B. Contractor warrants that, to the best of its knowledge and belief, there are no relevant facts that could give rise to an OCI. If during the term of this Contract Contractor becomes aware of relevant facts that could give rise to an OCI, it shall promptly notify the Contracting Officer of those facts. TVA reserves the right to take or direct Contractor to take such steps as TVA deems appropriate in its discretion to identify and evaluate, avoid, neutralize, or mitigate any OCI or the appearance of an OCI.

23. ENTIRE AGREEMENT

This Contract embodies the entire agreement between TVA and Contractor and supersedes all other communications, either oral or written. 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 will be valid unless incorporated into the Contract in writing.

ON-SITE WORK PROVISIONS

OS-1. PERMITS

Contractor, by entering into this Contract, certifies that it (or, as applicable, its Subcontractor(s)) has obtained, and will maintain at its expense, all Permits, and that such Permits are (as of the Effective Date and any relevant Work Release) in full force and effect. Such required Permits may include, but are not limited to, professional licenses, business licenses, corporate licenses and certifications, or export licenses or authorizations. Upon TVA's written request, Contractor shall furnish to TVA's CTS and Contracting Officer copies of all such Permits. If applicable, the parties shall exchange copies of all Permits issued under Export Control Laws and related to this Contract, including all provisos, conditions, and correspondence required to understand the scope and limitations of such Permits.

OS-2. SITE WORK

- a. Upon initial arrival at the Site, Contractor shall notify the CTS in writing, and report directly to the CTS or TVA's designated Site representative. Neither Contractor nor any Subcontractor will begin performing on-Site Work until TVA's CTS or Site representative has, by written notice to Contractor's Representative(s), authorized such Work in compliance with Site procedures.
- b. While any of its personnel or its Subcontractor(s) are present on-Site, Contractor shall:
 1. ensure that all on-Site Work performed by Contractor or its Subcontractor(s) comply with applicable Site Work control procedures; confine its operations to the Site areas assigned by TVA; and be solely responsible and liable for its use of any off-Site areas;
 2. promptly notify TVA of any Work impact due to collateral work by others, in compliance with this Contract's Notification of Work Impact Section; and
 3. coordinate its and its Subcontractor(s)' Work with the operations of TVA and TVA's third party contractors, to avoid confusion and delay.
 4. be solely responsible for its Subcontractor(s)' performance and completion of Work.
- c. In connection with on-Site Work, TVA may:
 1. require Contractor to schedule the order of performance of its Work in such a manner as will minimize interference with the work of any of the parties involved;
 2. require that Contractor maintain complete and accurate records of all personal property that Contractor or its Subcontractor(s) bring onto the Site, store or use in its or their performance of on-Site Work, or any of the foregoing, and submit such records to TVA's Site representative, upon request; and
 3. upon notice to Contractor, deny access to, or expel from, the Site any Contractor employee or Subcontractor, if TVA reasonably determines that such exclusion or expulsion is consistent with Site safety or security policies.
- d. Upon final departure from the Site or the return of an access card, Contractor shall coordinate processing out with the CTS or the designated TVA Site representative, in accordance with applicable Site Work control procedures (including, without limitation, completion of TVA Form 40157, "TVA Contractor Check-Out Form," by departing Contractor or Subcontractor personnel.
- e. Contractor and its Subcontractor(s) shall not possess, transport, give, sell, or use controlled substances, alcohol, explosives, firearms (that Contractor is not specifically required to use on-Site as part of its performance of on-Site Work), or incendiary devices at any Site. In addition to any other remedies TVA may have under Applicable Laws or this Contract, TVA may direct Contractor to remove from the Site, prohibit from any future on-Site Work, or both, any person that violates the restrictions stated in this Section.

OS-3. USE OF TVA SITES: REAL PROPERTY (BUILDINGS AND LAND)

- a. TVA may provide or allow Contractor or its Subcontractor(s) non-exclusive rights to access or use, strictly on an "as-is" basis at the time of such access or use: (1) Site facilities such as offices, warehouses or other buildings and permanent structures ("Facilities"); (2) designated areas of land on the Site, (3) existing Site restroom facilities or portable toilets; or (4) designated Site parking areas for Contractor and Subcontractor(s)' vehicles, subject to specific Site permitting requirements, or any or all of the foregoing. Contractor must notify TVA's CTS in writing, at least ten (10) days before beginning on-Site Work, that such Site use or access is necessary to Contractor's performance and completion of the Work.
- b. If Contractor's on-Site Work requires placement of its or its Subcontractor(s)' mobile and modular buildings, such as Conex or mobile office trailers, or their exclusive use of Facilities, Contractor must: (1) notify TVA's CTS in writing, at least ninety (90) days before beginning on-Site use of such Facilities, and (2) coordinate such on-Site activities with TVA Site representatives, comply with all Applicable Laws (specifically including applicable local building codes). In any of the foregoing cases, TVA reserves the right to require Contractor to enter into a separate TVA Real Property license agreement or comparable use agreement governing Contractor's or Subcontractor(s)' use of and obligations with respect to such Facilities, mobile or modular buildings or trailers, or designated areas of land on the Site.
- c. Upon the earlier of Contractor's completion of on-Site Work, or termination of this Contract or any license or comparable use agreement pursuant to subsection b., above, Contractor shall promptly remove its personal property, fixtures, or equipment, repair any damage, ordinary wear and tear excepted, and leave its Site Work area(s) in a clean, neat, and workmanlike condition, satisfactory to the CTS. TVA may use or dispose of (at Contractor's expense) any such personal property, fixtures or equipment that Contractor does not remove within thirty (30) days of Contract expiration or termination.
- d. Contractor shall not make any connections to any Site building, equipment, systems, or structure without first obtaining written approval from TVA's CTS, a Site Safety representative and, in a TVA Facilities Management maintained building, upon written approval from the Manager,

Architecture and Engineering, or designee. All such modifications must meet all applicable building codes.

e. TVA may authorize Contractor's employees and Subcontractor(s) to use Site elevators, in coordination with TVA Site representatives, and in compliance with the Health and Safety Section of this Contract. TVA's CTS and Site Safety representative must pre-approve, in writing, any Contractor use of on-Site elevators to transport equipment, materials, vehicles, or supplies.

f. Unless and only to the extent that Contractor's scope of Work, attached to this Contract, specifically states otherwise, TVA retains and expressly reserves title to water, soil, rock, gravel, sand, minerals, timber, and any other materials developed or obtained in any on-Site excavation or other operations of Contractor or any Subcontractor. TVA may, in such scope of Work, or upon the written consent of both TVA's CO and CTS, permit Contractor to use or dispose of such materials in compliance with this Contract and Applicable Laws.

OS-4. PERSONNEL QUALIFICATIONS AND SITE SECURITY

a. Contractor is responsible for determining that its and its Subcontractors' personnel are qualified to perform on-Site Work within this Contract's or Work Release(s)' scope(s) of Work. Prior to Contractor's performance of on-Site Work and upon TVA's written request to Contractor, Contractor shall submit to TVA's CTS a written statement that describes Contractor's personnel or its Subcontractor(s)' specific qualifications for and prior, relevant experience in performing the on-Site Work assigned to them. TVA's CTS will review Contractor's statement and may concur or object to the proposed on-Site Work assignment(s) of such personnel.

b. Contractor shall not assign to Work any person who fails to meet the qualifications, prior experience, Site safety or security prerequisites (if applicable), or performance requirements established by TVA. In accordance with Executive Order 11755 (as amended by Executive Orders 12608 and 12943), Contractor shall not assign Work to any person undergoing a sentence of imprisonment except to the extent permitted by 48 C.F.R § 52.222-3. Regardless of whether Contractor personnel or its Subcontractor(s) have met such requirements and begin performance of on-Site Work, TVA may, in its discretion and by written notice to Contractor, direct Contractor to reassign or remove from a Site any person if: (1) such action is consistent with Site or TVA corporate health, safety, environmental, personnel, or security policies, or Applicable Laws, or (2) such person has performed or is performing on-Site Work for which such person lacks qualifications or prior experience requirements established by TVA for such Work. TVA also may, by written notice to Contractor, reject and require Contractor to re-perform, at its sole cost, any Work performed by such persons whom TVA reasonably determines are or were unqualified to perform such Work, or otherwise failed to comply with the requirements stated in or established pursuant to this Section.

c. Contractor shall comply with TVA's Site security system requirements, and ensure that all Contractor Employees comply with such requirements. TVA may subject each Contractor Employee at a Site to a medical examination and security investigation. Any such employees who cannot work within any applicable medical restriction imposed, or who do not meet TVA's security requirements, or whose access to the Site is denied or revoked, shall not be permitted to perform Work. Contractor will bear the costs and expenses, or reimburse or credit to TVA any costs or expenses that TVA incurs, resulting from the failure of Contractor Employees to: (1) satisfy the specified security clearance requirements, (2) pass their medical examinations, or (3) otherwise meet specific requirements of this Contract or any related PO. Additional information on the security system is available from TVA's Supplier Connections (<https://www.tva.com/Information/Supplier-Connections/Existing-TVA-Supplier>), or from the Contracting Officer.

OS-5. DRUG TESTING (Non-Nuclear)

a. Pre-access testing is required when Contractor Employees are expected to perform on-Site Work for more than 20 consecutive work days or 90 cumulative work days in any 180 calendar day period. If Contractor Employees are not expected to perform work for more than 20 consecutive work days or 90 cumulative work days, but actually do perform work for such period of time, then drug testing must be conducted within 14 calendar days from when the employee exceeded such 20 work day or 90 cumulative work day period.

b. Contractor Employees working on-Site less than the above-specified amounts of time, but who will be performing in safety sensitive positions or safety-sensitive functions must be tested prior to TVA Site access. Safety-sensitive positions are those positions in which an individual has the potential to cause immediate serious physical injury or harm to persons or property. Safety-sensitive functions include but are not limited to: carrying fire arms; working with explosives; working on or around energized equipment; working on or around powered equipment; working at unprotected elevations; working in or around water; performing safety inspections; piloting, co-piloting, or maintaining aircraft; performing plant maintenance, modifications, or operations; and performing construction work. Notwithstanding the foregoing, TVA may determine, in its discretion, which positions and functions are safety-sensitive.

c. Each calendar year during the Contract term, Contractor and any Subcontractors shall perform random testing of at least 25 percent of those employees who have performed on-Site Work for at least six months, are performing safety-sensitive positions or safety-sensitive functions, or both (as applicable). Contractor Employees performing on-Site Work are subject to TVA conducting reasonable suspicion testing at TVA's discretion.

d. Except as provided below for emergencies, Contractor Employees subject to the above testing requirements may only begin performing on-Site Work if one of the following conditions is satisfied:

a. A negative result has been reported for the employee for a drug test administered within 30 calendar days prior to or on the initial work date, and the testing program has been determined to be in compliance with TVA testing requirements.

b. The employee has been subject to a random drug testing program within the past 30 days and the drug testing program has been determined to be in compliance with TVA testing requirements.

In case of emergency the CTS or Contracting Officer may approve drug testing to be performed after an employee's initial work date.

e. Contractor is responsible for its own drug screening program, which must meet the following drug testing standards:

1. Collections and specimen transport for all drug screens must be conducted by certified collectors and follow proper chain-of-custody documentation, pursuant to the requirements in the Mandatory Guidelines for Federal Workplace Drug Testing and/or DOT regulations.
2. Point-of-collection testing (POCT) urine drug screens must be conducted with FDA-approved testing devices.
3. Non-negative results on initial screens (either POCT devices or laboratory immunoassays) must be confirmed by Gas Chromatography/Mass Spectrometry (GC/MS) testing at a Substance Abuse and Mental Health Service Administration (SAMHSA) certified laboratory.
4. Non-negatives confirmed by GC/MS must be reviewed by an AAMRO- or MROCC-certified Medical Review Officer (MRO).
5. Laboratory-based urine drug testing must be conducted by laboratories certified by SAMHSA to perform urine drug testing.
6. All drug screens must undergo specimen validity testing that includes, at a minimum, pH, creatinine and/or specific gravity, and one or more oxidant adulterants. POCT, as well as any laboratory-based urine drug testing, must meet these specimen validity testing requirements.
7. All drug screens must, at a minimum, test for the following substances identified in the Mandatory Guidelines for Federal Workplace Drug Testing at or below the listed cutoff levels. For POCT, the screening device is not required to detect 6-AM or PCP.

Drug	Screening Limit (ng/ml)	Confirmation Limit (ng/ml)
Amphetamines^{1,2}	500	250
Amphetamine	500	250
Methamphetamine	500	250
MDMA ³	150	100
Cocaine	50	15
Marijuana (THC)		
Opiates/Opioids⁴	2000	2000
Morphine/Codeine	300	100
Hydrocodone/hydromorphone	100	100
Oxycodone/oxymorphone	10	10
6-Acetylmorphine ⁵	25	25
PCP ⁵		

¹ Amphetamines screening must detect both amphetamine and methamphetamine.

² Methamphetamine is the target analyte for amphetamine/methamphetamine testing.

³ Methylenedioxymethamphetamine (MDMA) including Methylenedioxyamphetamine (MDA)\

⁴ For opiate/opioid analytes (i.e., morphine, codeine, hydrocodone, hydromorphone) the immunoassay test must be calibrated with one analyte from the group identified as the target analyte. The cross-reactivity of the immunoassay to the other analyte(s) within the group must be 80 percent or greater; if not, separate immunoassays must be used for the analytes within the group. Oxycodone/oxymorphone must be separate immunoassay target analytes on a POCT device.

⁵ POCT devices are not required to include 6-AM or PCP; however, any non-negative on a POCT opiates/opioids screen must undergo confirmation testing for morphine, codeine, hydrocodone, hydromorphone, and 6-AM using the confirmation cut-off levels above.

Pre-access alcohol testing is not required, but in the event that breath alcohol testing is performed in connection with this Contract, it must be conducted in accordance with 49 C.F.R. part 40, which outlines specific requirements for testing devices, collection protocols, confirmation testing, and documentation requirements.

Contractor shall maintain, at a minimum, the following data during the term of this Contract and for at least three years thereafter:

1. Number of employees tested for drugs and/or alcohol
2. Number of drug tests deemed positive by the MRO
3. Number of individuals refused to be tested
4. Number of individuals tampering or attempting to tamper with a specimen
5. Specific drugs that were positive
6. Evidence of individual testing documenting compliance with the drug testing requirements contained herein

Such data shall be provided to TVA upon request.

These standards do not exempt Contractor from complying with applicable Department of Transportation or any other federal or state drug or alcohol testing programs covering Contractor Employees.

Any Contractor Employee who tests positive under a drug screening program established by the Contractor shall be immediately removed from the Site, and is prohibited from working at any Site for a period of three years for a first positive drug test result, and permanently for a second positive drug test result. A refusal to be tested, adulteration, substitution, tampering, attempting to tamper with, failure to cooperate in a timely manner, or otherwise attempting to subvert the testing process will result in an employee being permanently barred from access to TVA sites. An individual providing a urine specimen that is negative and diluted may be required to provide another specimen under direct observation. A positive test result that is diluted will be considered a confirmed positive test.

Contractor must inform Contractor Employees of these requirements and to specify the consequences associated with substituting, adulterating, and/or otherwise tampering, or attempting to tamper with a specimen and/or positive test results. Contractor is also responsible for informing TVA Security of Contractor Employees who have violated the drug testing requirements, immediately upon testing confirmation, and utilizing TVA's Web Contractor Security System (WCSS).

The cost of preparing and administering (including recordkeeping) a drug screening program and the cost of Contractor Employees' time to have test performed, laboratory expenses, and expenses of test review results by an MRO shall be the Contractor's responsibility. TVA shall have the right to audit all documentation and records describing and supporting Contractor's drug screening program.

OS-6. HEALTH AND SAFETY

a. Purpose. TVA believes that Safety and Health is its most important value and all injuries and most illnesses, both on and off the job, are preventable. TVA is a zero injury culture company and expects its contractors and their sub-contractors to be committed to a zero injury work culture environment. In other words, occupational accidents or other incidents in which human health or safety is jeopardized are never acceptable.

b. Standards. Contractor will be proactive in taking necessary measures to avoid accidents or incidents which human health or safety is jeopardized. While performing Work at a Site, Contractor will not permit Contractor Employees, or its representatives or agents, to work in surroundings or under working conditions which are unnecessarily dangerous to human safety or health. In order to provide the necessary controls for protection of employees and prevention of damage to property and for avoidance of work interruption in the performance of this Contract, Contractor shall comply with:

1. Section 107 of the Contract Work Hours and Safety Standards Act (CWHSSA) (except to the extent Contractor's Work includes provision of "commercial items," as defined at 41 U.S.C. 403(12)); and
2. The Occupational Safety and Health Act of 1970 (OSHA), its implementing regulations, and applicable state-lead occupational safety and health laws and program regulations; and
3. The TVA Safety Manual (available at TVA's Supplier Connections, <https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses>, or from the Contracting Officer).
4. Prior to the commencement of on-Site Work, and depending on the nature and location of the Work, TVA's CTS may notify Contractor that certain additional TVA Site-specific safety and health requirements apply to Contractor's performance of Work. In the event of conflict between any Applicable Laws and TVA policies pertaining to human health, safety, or occupational standards or requirements, the more stringent requirements, i.e., the more protective of occupational health and safety, will apply.

Contractor and any Subcontractor(s) shall initiate and maintain such programs as may be necessary to comply with the foregoing requirements; provide for frequent and regular inspection of the job sites, materials, and equipment; identify and prohibit work in an unsafe or unhealthful work place, including the use of unsafe machinery, tools, materials, or equipment; and permit only those employees qualified by training or experience to operate equipment and machinery.

c. Compliance. In addition to the specific requirements stated in subsection B., above, Contractor shall comply, and is responsible for ensuring Subcontractors' compliance, with the provisions of this Section, Applicable Laws governing health and safety, and TVA policies contained or referenced herein.

d. Safety and Health Plan & Evaluation. Contractor, after evaluating potential hazards to human health and safety associated with the work to be performed under the contract, shall submit a Site-specific safety and health plan in writing to the CTS at least 30 days prior to the start of work under this Contract. At minimum, Contractor's Safety and Health Plan must address the steps Contractor will take to promote health and safety in the work environment. If Contractor's, or any Subcontractor(s)', scope(s) of Work includes construction work at a new or existing TVA owned or controlled site directly related to: (i) the construction of new generating capacity or transmission construction, or (ii) offices, other buildings, or facilities, and the aggregate value of the Work is greater than \$25,000 but less than: for TVA Fossil, Nuclear, or Hydro business units, \$250,000, or for all other TVA business units, \$350,000, then Contractor's Safety and Health Plan also must incorporate OSHA Outreach training, or its TVA-approved equivalent, for (at least) Contractor's Safety Representative (see subsection g., below) or Contractor's or the relevant Subcontractor(s)' designated on-Site supervisor(s). Such training may occur online, or, at TVA's option, through TVA-sponsored or TVA-designated training classes. Contractor will submit records showing completion of such training to TVA's CTS as addenda to the Safety and Health Plan. Contractor also may fulfill the requirements of this subsection by providing written evidence to the CTS that its Safety and Health Plan mandates certified or equivalent OSHA Outreach training for its on-Site safety and supervisory personnel.

e. Records.

1. Contractor and any Subcontractor will maintain an accurate record of all accidents and occupational diseases in accordance with OSHA regulations (29 C.F.R. Part 1904), and analogous regulations of state or local agencies. In addition, Contractor shall maintain records of the costs for repairing or replacing property, materials, supplies, and equipment damaged in accidents occurring while performing work under this Contract.

2. If the Contract value exceeds \$100,000 and involves Hazardous Work, as defined herein, Contractor must maintain (at its sole cost, during the Contract term) an active membership and subscription with ISNetworld (www.ISNetworld.com), and records of any information requested by or furnished by Contractor to ISNetworld in connection with ISNetworld's evaluation of the Contractor. If Contractor is subject to the requirements of this subsection E.2, and Contractor's ISNetworld rating falls below "B" during the Contract term, Contractor shall restore its rating to a "B", within thirty (30) days of its receipt of notice from ISNetworld of the rating below "B." TVA may issue a stop order or terminate this Contract for default, if Contractor fails to comply with this subsection E.2.
3. For purposes of this Health and Safety Section, "Hazardous Work" means any of the following, whether performed or expected to be performed under this Contract by Contractor or Subcontractor(s):
- a. Handling, management, transportation, or disposal of hazardous materials or hazardous waste (as defined by Applicable Laws);
 - b. Handling, management, transportation or disposal of radioactive material, radioactive waste, or work within a TVA nuclear plant's Radiologically Controlled Area;
 - c. Work involving disturbance or remediation of lead, asbestos-containing materials, potentially asbestos-containing materials, PCBs, or silica;
 - d. Work requiring fall protection;
 - e. Confined space work;
 - f. Cutting, welding, grinding or similar "hot work";
 - g. Erection or use of scaffolding;
 - h. Crane use or rigging requiring a "high hazard lift plan";
 - i. Fire protection or fire emergency planning;
 - j. Excavation or trenching;
 - k. Use of explosives or blasting operations;
 - l. Electrical work with Lockout/Tagout or Clearance requirements, or Arc Flash; or
 - m. Electrical transmission system work on or around lines rated at 13 kV or greater.
- f. Contractor Safety Representative. Unless otherwise authorized in writing by the CTS, Contractor shall retain a representative on-Site at all times while Work is in progress, who is responsible for Contractor's safety and health program and who is authorized to correct hazardous conditions. Contractor's representative shall respond promptly to the CTS in order to reduce or eliminate conditions which in the opinion of the CTS constitute a threat to or appear to threaten life, health or property at the on-Site Work location.
- g. Temporary Access and Public Safeguards. Contractor shall build and maintain such temporary bridges, roads, and other means of passage as are necessary and not otherwise provided by TVA; shall provide for convenient access to the various parts of the work and to adjacent private property which may be affected by the work; and shall provide such temporary fences or guards as may be necessary to keep livestock on adjoining property from entering the lands occupied by the work. Contractor shall also provide such barricades, warning signs and lights, watchmen, etc., as are necessary to protect the public and the work. Should conditions arise on the work, which require that immediate and unusual provisions be made to protect the public from danger or loss of damage due directly or indirectly to the prosecution of the work, Contractor shall make the necessary provisions. Contractor shall be responsible for the sufficiency and safety of all such temporary works and provisions and shall be responsible for all damage resulting from their insufficiency. Contractor shall not disturb, close, or obstruct any existing highways or other communications systems unless the CTS has provided Contractor with specific, prior written authorization to do so.
- h. Cleaning Up. Contractor shall, at all times, keep the work area, including storage areas used by it, reasonably free from hazardous and unsanitary accumulations of waste materials or rubbish, and prior to completion of the Work, shall remove any rubbish from the premises and all tools, scaffolding equipment, and material not the property of TVA. Upon completion of the Work, Contractor shall leave the work and premises in a clean, neat, and workmanlike condition satisfactory to the CTS.
- i. Breach of Safety and Health Provisions. Contractor is solely responsible for its and any Subcontractor(s)' compliance with this Section. The CTS has the right (but not the duty) to inspect Contractor's operations as he or she deems appropriate to assure that Contractor and any Subcontractor(s) comply with the requirements of health and safety laws, regulations, TVA policies, and this Section. TVA's CTS promptly will notify Contractor upon becoming aware of any noncompliance with the foregoing requirements. Upon receipt of such notice, Contractor shall immediately take such action as may be required to determine the existence of and to correct such noncompliance. If Contractor fails or refuses to correct an unhealthful or unsafe condition, the CTS shall have the authority to issue an order stopping all or part of the Work until satisfactory corrective action has been taken. No part of the time lost as the result of any stop order shall be the subject of a claim for extension of time or for excess costs or damages by Contractor. Any stop order issued by the CTS shall apply to Work performed by Contractor or any Subcontractor. The CTS has the authority to, and may, at his or her discretion, require removal of any person from a TVA work location (regardless of the status of such person as an employee of Contractor or any Subcontractor) if, in the opinion of the CTS, the presence of such person endangers the safety or health of others.
- j. Investigation of Accidents. TVA shall have the option to examine the site of any accident immediately following its occurrence to determine (1) the cause or causes of such accident; (2) the degree of personal injuries; (3) the damage to TVA-owned property; (4) the effect of such accident upon completion of the work provided for under the Contract; and (5) other pertinent information. In order to accomplish this, TVA shall have the authority to question any persons having knowledge relative to or present when such accident occurred, including any Contractor Employee(s).
- k. Respiratory Protective Equipment. Any Contractor Employee who performs Work at a plant or jobsite owned or controlled by TVA must wear respiratory protective equipment when required by the TVA project or plant procedures for safety or health considerations and, therefore, shall be required to be clean shaven in the area between the sealing surface of the device and the face. Any person requiring the use of corrective eyewear shall also be required to have special respirator glasses (not provided or reimbursed by TVA unless specifically noted elsewhere in contract) when reporting to work in order to be mask-fitted promptly. Any Contractor Employee refusing to comply with this requirement shall be denied access to plant facilities. No part of the time lost as the result of any denied access to plant facilities shall be the subject of a claim for extension of time or for

excess costs or damages by Contractor or any Subcontractor.

OS-7 INSURANCE.

a. Contractor shall secure and maintain in effect, at all times during the performance of Work, insurance coverages with limits not less than those set forth below, with insurers and under forms of policies satisfactory to TVA. No later than ten days after the Effective Date, or prior to Contractor's or any Subcontractor's commencement of on-Site Work (whichever date is earlier), Contractor shall deliver, by electronic mail to the Contracting Officer and to the Supply Chain COI Portal Email Inbox, SCCOIPortal@tva.gov, a complete and accurate certificate of insurance showing: (1) the TVA Contract number, and (2) that Contractor has secured the insurance policies and coverage limits required in this Section. In the event of disputes, claims, or litigation related to this Contract that impacts or involves the Contractor insurance policies required by this Section, Contractor shall provide TVA's designated representatives with access to and opportunities to review the relevant Contractor insurance policies, at times and places to which the parties reasonably and mutually agree.

b. Contractor's insurer(s) must be: (1) authorized to do business in the state(s) in which Contractor or its Subcontractor(s) will perform on-Site Work, and (2) rated "A-" or better by AM Best, and hold an AM Best financial size category class rating of VII or higher.

STANDARD Coverage(s)	Minimum Policy Limits
1. Workers Compensation	
Part 1. Workers' Compensation	Statutory requirements
Part 2. Employer's Liability	\$1 million, bodily injury by accident each accident \$1 million, bodily injury by disease \$1 million, bodily injury by disease each employee
2. Commercial General Liability	
Combined Single Limits	\$1 million each occurrence
3. Automobile Liability (owned, hired, and non-owned)	
Combined Single Limits	\$1 million each accident
SPECIALTY Coverage(s)	Minimum Policy Limits
4. Professional Liability	\$1 million each claim

c. Deductibles or retention amounts under the policies described herein will not exceed 5% of the per occurrence coverage limits, without the express written consent of the Contracting Officer. Contractor shall pay all premiums, deductibles, and self-insured retention amounts, as required by its insurers. Contractor may satisfy the minimum policy limits required in this Section by either securing primary insurance coverage in the amounts specified, or through separate Excess Liability or Umbrella Liability insurance policies (or both), provided that, the total insurance coverage limits of the policy(ies) meet this Contract's requirements.

d. The insurance policies required by this Contract must include the provisions described in subsections 1 through 4 below, except that any Workers' Compensation insurance and any Professional Liability insurance will not include the provisions described by items 1 and 2. Subject to the foregoing, each Contractor insurance policy must:

1. Add TVA, the United States, their directors, officers, agents, employees, and volunteers as additional insureds.
2. Contain a severability of interest clause, which protects each insured as if a separate policy provides coverage to each insured.
3. Waive the insurer's rights of subrogation in favor of TVA, the United States, their directors, officers, agents, employees, and volunteers, except where prohibited by Applicable Laws.
4. State that it is primary and noncontributory, meaning that the insurance is primary and not excess to nor contributing with any insurance or self-insurance maintained by TVA.

e. Contractor's Commercial General Liability policy must provide coverage for liability arising out of premises and operations, products and completed operations coverage, and contractual liability coverage. Contractor shall maintain products and completed operations coverage for at least three years following completion of Work.

f. Any Contractor insurance policy required by this Section that provides coverage on a "claims-made" basis, must be effective no later than the Effective Date, and Contractor shall maintain such coverage for a period of three years following the termination of this Contract.

g. This Section's terms and requirements regarding Contractor's insurance policies and coverage do not in any manner limit or qualify Contractor's separate and additional liabilities and obligations under this Contract.

h. Contractor shall provide at least 30 days' prior written notice by electronic mail to the Contracting Officer of cancellations, expirations without renewal, or terminations of the insurance policies required by this Section.

i. Contractor is responsible for ensuring that all Subcontractor(s) that perform on-Site Work maintain insurance (1) coverages and limits consistent with the Subcontractor's scope of such Work, and (2) that includes the policy terms and conditions required by this Section. Contractor is solely liable for any claims related to Subcontractor(s)' performance of Work, whether or not the claim(s) exceed the limits of Subcontractor(s)' insurance policy(ies).

- j. Failure by Contractor or its Subcontractors to obtain and maintain required insurance policy limits and coverages, or for Contractor to deliver, by electronic mail, current certificates of insurance to the Contracting Officer and Supply Chain COI Portal Email Inbox annually during the Contract term, constitute default(s), for which TVA may exercise one or more of the remedies stated in the **Termination for Default** section of this Contract. TVA's failure to review Contractor's or Subcontractor(s)' certificates of insurance does not waive any of TVA's rights under this Section.
- k. TVA may accept Contractor's written certification that it or its Subcontractors self-insure in accordance with applicable workers' compensation laws for all duties, liabilities, and obligations it has or may have under such Applicable Laws; provided, however, that Contractor must provide to TVA satisfactory written evidence showing that its or its Subcontractors' self-insurance plan(s) have been authorized by the appropriate Governmental Authority.
- l. If Contractor or any of its Subcontractor(s):
1. Perform Work on or near navigable bodies of water, then Contractor shall carry insurance covering employee injuries as required by Applicable Laws.
 2. Own or operate watercraft in connection with the Work, then Contractor shall carry at least \$5 million (per occurrence) of insurance covering liability arising out of the operation of the watercraft.
 3. Own or operate, in connection with the Work, aircraft (fixed wing or helicopter) then Contractor shall carry at least \$10 million per occurrence (combined single limit) of aircraft liability insurance, which covers bodily injury (including passengers) and property damage liability.
 4. Own or operate, in connection with the Work, unmanned aerial vehicles (UAVs or drones) and their control systems (together, "UASs"), Contractor must provide TVA with evidence (in the form of a certificate of insurance and a copy of the relevant policy) by electronic mail prior to the performance of any Work that it maintains at least \$10 million per occurrence of aviation liability insurance covering Contractor's UAS operations.
 5. Perform on-Site Work that includes storing, handling, transportation, management, or disposal of Hazardous Materials, or performance of Work that could create, encounter, or exacerbate a pollution condition, then Contractor shall carry Contractors Pollution Liability (CPL) insurance with limits of at least \$5 million per occurrence.
 6. Perform Work that involves access, usage, processing, storage, transmission, or disposal of RPII or information that TVA has designated as TVA "Restricted" or "Sensitive" (for purposes of this subsection "Insured Information"), then Contractor must carry at least \$5 million per claim of network security and/or cyber liability insurance (or equivalent insurance). Contractor shall maintain such insurance policies and coverages for as long as Insured Information is stored on its backup Information Systems, or for a period of three years following the termination of this Contract, whichever period is longer.
 7. Perform Work on U.S. military bases, then Contractor shall procure insurance policy(ies) meeting the requirements set forth under Applicable Laws.
 8. Perform Work on or within close proximity to railroad-owned property, then Contractor shall procure railroad protective liability insurance in accordance with the railroad's requirements.

OS-8 BONDING REQUIREMENTS.

- a. If and to the extent Contractor's Work includes performance of on-Site Construction Work, then Contractor shall provide to TVA executed Performance and Payment Bonds in the amount of 100% of the Contract value (or aggregate value of the POs that authorize on-Site Construction Work) with a surety on the U.S. Treasury's list of acceptable sureties and with a minimum A.M. Best rating of A or better. "Construction Work" means Contractor's or Subcontractor(s)' on-Site Work that consists of construction or structural alteration or repair of or on TVA real property or permanent structures, and which (i) is subject to the performance or payment bonding requirements of the Miller Act (40 U.S.C. §§ 3131-3133), or (ii) requires Contractor to comply with one or more of the labor agreements listed in the Labor Provisions Section of this Contract.
- b. Contractor's firm and fixed prices, or fixed rates, must include the bond premiums for which it is responsible under this Section. TVA may require that Contractor complete TVA's standard Performance and Payment Bond forms, and the Surety Bond Cost Data form, as attachment(s) to this Contract or specific PO(s). If the parties execute an amendment that increases the Contract Monetary Limit, TVA may require that Contractor obtain additional bond coverage, either by increasing the penal sum of the existing bonds or by obtaining additional bonds, subject to the same standards stated in subsection a., above. If TVA decides to waive or reduce the bond requirement(s), and Contractor's costs to obtain or maintain the appropriate bonds are reduced accordingly, TVA will deduct the amount(s) of such reductions from (as applicable) allowable costs, fixed price(s), or rate(s) reimbursable or payable to Contractor.
- c. If during the Contract term, any surety providing bonding becomes unacceptable to TVA, Contractor shall promptly furnish additional security in an amount and from a surety acceptable to TVA.

NUCLEAR SITE-SPECIFIC PROVISIONS

N1. EMPLOYEE PROTECTED ACTIVITIES FOR NUCLEAR CONTRACTORS

THIS PROVISION IS REQUIRED PURSUANT TO TVA-NRC CONFIRMATORY ORDER EA-17-022 and RCA 1271309. IT MAY NOT BE MODIFIED WITHOUT WRITTEN OGC, MRC, (MANAGEMENT REVIEW COMMITTEE), and LICENSING CONCURRENCE, AND IN ACCORDANCE WITH NPG-SPP 03.12.

- a. In connection with the performance of on-Site Work at or in support of a TVA nuclear Site, Contractor shall comply, and is responsible for Contractor's Subcontractor(s)' compliance, with the following Applicable Laws (as amended) and the most current versions of the referenced policies:
1. 10 C.F.R. § 50.7 "Employee Protection" regulations of the Nuclear Regulatory Commission ("NRC") and Section 211 of the Energy Reorganization Act of 1974 (the "ERA"), which prohibit "discrimination" against employees for engaging in certain "protected activities," as these terms are defined by the U.S. Secretary of Labor and the NRC.
 2. "TVA's PRINCIPLES, Commitment to Nuclear Safety," and TVA's Standard Program and Process (SPP)-11.8.4, "Expressing Concerns and Differing Views," which are available from the Contracting Officer and are available at TVA's Supplier Connections website, at <https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses>.
 3. TVA's Nuclear Power Group (NPG)-SPP-01.7, "Nuclear Safety Culture," which applies to any person performing Work at a TVA nuclear Site, and is available from TVA's Contracting Officer and at TVA's Supplier Connections website, at <https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses>. NPG-SPP-01.7 describes and provides administrative guidance to support a healthy Nuclear Safety Culture (NSC) and a Safety Conscious Work Environment (SCWE).
 4. NPG-SPP-01.7.4, "Adverse Employment Action and the Executive Review Board," which is available from TVA's Contracting Officer and at TVA's Supplier Connections website, at <https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses> (under Employee Protected Activities, NPG-SPP-01.7.4). NPG-SPP-01.7.4 is designed to help ensure that certain significant proposed personnel actions are adequately reviewed by Contractor and TVA in order to comply with NRC employee protection (10 C.F.R. § 50.7) requirements, TVA-SPP-11.8.4, "Expressing Concerns and Differing Views," and this Section. In addition, application of NPG-SPP-01.7.4 will assist in determining whether the proposed action could negatively impact a SCWE and allow for actions to mitigate any potential chilling effect resulting from those significant proposed personnel actions.
- b. With respect to any current or former employee of Contractor or Subcontractor(s) (for purposes of this Section, "Covered Employee(s)") complaint or allegation relating to discrimination for engaging in protected activities (as defined herein), complaints under 10 C.F.R. § 50.7 or ERA § 211, or potential or actual adverse employment action that Contractor intends to or does take against such Covered Employee(s), related to the foregoing, Contractor shall:
1. notify TVA's CO, CTS, and one of the TVA Employee Concerns Staff Site Representative or TVA Employee Concerns Manager, in writing: (i) prior to (if possible), but in all cases, promptly after, it takes an adverse employment action against any Covered Employee, to enable TVA's Executive Review Board (ERB) to function in compliance with NPG-SPP-01.7.4); and (ii) within two working days after the earlier of Contractor or Contractor's Subcontractor's receipt of (x) a Covered Employee's allegation of discrimination because of engagement in protected activities, related to Work, or (y) notice of a Covered Employee's filing of a 10 C.F.R. § 50.7 or ERA § 211 complaint, provide TVA with Contractor's records of its actions, and a copy of any Covered Employee's allegations or complaint;
 2. notify TVA's Employee Concerns Manager of any internal employee concerns program(s) that Contractor maintains, and provide TVA's Employee Concerns Manager an opportunity to review such program(s);
 3. comply with, and handle and manage any complaints of discrimination for engaging in protected activities (as defined herein) or complaints under 10 C.F.R. § 50.7 or ERA § 211 in compliance with, the then-current revisions of the following policies and procedures, which are available from TVA's Contracting Officer and at TVA's Supplier Connections website, under the Employee Protected Activities heading, at <https://www.tva.com/Information/Supplier-Connections/Documents--Referenced-Clauses>: (1) TVA-SPP-11.8.4 (Expressing Concerns and Differing Views); (2) NPG-SPP-01.7.4 (Adverse Employment Action and the Executive Review Board); and (3) Procedure for Handling Complaints of Discrimination for Engaging Protected Activities against TVA Nuclear Contractor(s) and Their Subcontractors;
 4. aggressively pursue, or ensure that Contractor's Subcontractors aggressively pursue, any Covered Employee's allegation of discrimination for engaging in protected activity with respect to Work, and fully investigate such allegations,
 5. unless Contractor's interests vary significantly from TVA's, cooperate fully with TVA (represented by TVA's Office of General Counsel) or the TVA OIG (either of which may, at its option, conduct its own investigation of any allegation or complaint under this Section), provide TVA any investigative reports that it prepares as a result of any such allegation or complaint, and provide to TVA a full written description of any management action taken in response to any such allegation or complaint;
 6. ensure that no agreement affecting the compensation, terms, conditions, and privileges of employment, including, but not limited to, any agreement to settle a complaint filed by a Covered Employee pursuant to 10 C.F.R. § 50.7 or § 211 of the ERA contains any provision which would prohibit, restrict, or otherwise discourage a Covered Employee from participating in any protected activity as described in 10 C.F.R. § 50.7, including, but not limited to, providing information to NRC on potential violations of NRC's regulations or other matters within NRC's regulatory responsibilities; and
 7. include this Section, Employee Protected Activities for Nuclear Contractors, along with the flow-down requirement of this sentence and specifically including subsections b(1) and b(2) above as applicable, in all subcontracts of any tier entered into pursuant to this Contract, unless TVA consents in writing to exclude a particular subcontract or class of subcontracts.
- c. Contractor shall, at its sole expense, retain the services of legal counsel experienced in the handling of Covered Employee(s)' allegations or

complaints against it or Contractor's Subcontractor(s), based on 10 C.F.R. § 50.7 or ERA § 211 (or either or both), to ensure consistent handling of such matters. Subject to Contract Section 4 (Price and Payments), TVA may reimburse Contractor for certain legal expenses if it ultimately prevails in its defense of such allegations or complaints.

d. If Contractor or Contractor's Subcontractor(s) fail to comply with any substantive or notification requirement stated or referenced in this Section: (1) such failure constitutes a default under this Contract, and (2) if and to the extent such failure results in NRC's or any other Governmental Authority's imposition of monetary or equitable penalties or sanctions on or against TVA (including, without limitation, a confirmatory order or additional nuclear Site inspection requirements), Contractor releases and will indemnify and defend TVA and its employees from and against such liabilities. Contractor's liabilities arising under this subsection will not be deemed special or consequential damages under this Contract.

e. Nothing in this Section in any way limits the TVA OIG's authority under the Inspector General Act, as amended, including the authority to subpoena documents.

N2. NUCLEAR INCIDENTS

a. For purposes of this Contract, "nuclear incident" and "public liability claims" have the meanings given those terms in the Atomic Energy Act (42 U.S.C. §§ 2014(q), 2014(w)). For purposes of this Section only, the term "Subcontractors" includes any of Contractor's suppliers of material, equipment, or services for the Work, regardless of tier.

b. Prior to, or at the time of shipment of the first nuclear fuel to the TVA nuclear Site, TVA will maintain nuclear liability insurance, to cover public liability claims, in accordance with section 170 of the Atomic Energy Act (42 U.S.C. § 2210) and applicable NRC regulations. If this nuclear liability protection system is repealed or changed, TVA will seek comparable insurance coverage, to the extent available on commercially reasonable terms, and maintain such insurance in effect during the period of operation of the TVA nuclear Site, so as not to materially impair the protection afforded to Contractor and Subcontractors under the existing system.

c. In the event of losses or liability resulting from nuclear incidents at the TVA nuclear Site:

1. TVA waives any claim it might have against Contractor or Subcontractors because of damage to, loss of, or loss of use of any property at the TVA nuclear Site; and
2. TVA will indemnify Contractor and Subcontractors and save them harmless from any claims, losses or liability arising as a result of damage to, loss of or loss of use of any property at the TVA nuclear Site.
3. The waiver stated in subsection C.1, above, does not apply to any TVA rights or remedies available against Contractor for breach of any Contractor warranty obligations under this Contract, to the extent such breach is unrelated to a nuclear incident at the TVA nuclear Site.

d. The waiver and indemnification provisions stated in this Section apply to the full extent permitted by Applicable Laws, and regardless of fault.

N3. NANTEL

a. The National Academy of Nuclear Training electronic Learning (NANTEL) has established standardized, generic training that applies to personnel who perform on-Site Work at TVA's nuclear Sites. Contractor shall, at its expense, ensure that its and Subcontractor(s)' personnel complete NANTEL's generic training courses prior to seeking access to a TVA nuclear Site to perform Work. TVA may review the Contractor's training program, content, documents, and facilities to allow TVA to determine whether or to what extent the program meets NANTEL training and qualification requirements applicable to the scope(s) of on-Site Work.

b. Contractor shall not charge or invoice TVA (directly or indirectly), and TVA will not reimburse Contractor, for any time, expenses or costs incurred or charged by Contractor's or Subcontractors' personnel, associated with: (1) completion of the NANTEL training courses listed below, (2) training on-Site provided by TVA personnel on the listed topics, for which training content and evaluation tools exist on NANTEL; (3) TVA's review and evaluation of Contractor's training program, or (4) failure of or failure to complete the listed NANTEL modules or courses.

Generic Plant Access

Generic Radiation Worker Training

Generic Fitness For Duty Behavior Observation Program

Generic Foreign Material Exclusion

Generic Confined Space Entrant/Attendant

Generic Fall Protection

Generic Cyber Security Awareness

Electrical Safety for Non-Qualified Workers

Generic Scaffold Safety

Electrical Safety for Qualified Workers

Generic Material Handling

Generic Hot Work Firewatch

Asbestos Awareness

Generic Lead Awareness

Human Performance

c. In addition, each TVA nuclear Site has Site-specific training (web-based or on-Site classroom) that complements and augments NANTEL generic training. Contractor must ensure that its and Subcontractor(s)' personnel complete such Site-specific training, in accordance with applicable TVA Site procedures, including but not limited to TVA Training Procedure TPD-GET, General Employee Training, as amended from time to time.

d. TVA retains the sole right to develop and evaluate training and qualification requirements for Contractor's and Subcontractors' personnel who

access or perform Work on a TVA nuclear Site.

N4. HUMAN PERFORMANCE/DYNAMIC LEARNING CENTER-NUCLEAR

- a. Contractor's and Contractor's Subcontractors' personnel performing Work inside the power block, or other areas as determined by the CTS, on TVA nuclear Sites shall successfully complete a prescribed training course in the TVA nuclear Site's Dynamic Learning Center (or its equivalent as described in this Section).
- b. Contractor shall ensure that its and Contractor's Subcontractors' personnel who performing Work at a TVA nuclear Site receive Human Performance training, including training in the Human Error Reduction tools (as set forth in TVA NPG SPP 22.202 (Human Performance Tools)), at the earliest practical time prior to seeking access to the Work Site(s). Such personnel may fulfill these training requirements off-Site by successfully completing the prescribed training courses in the online NANTel system.
- c. If Contractor has implemented a program substantially equivalent to that set forth in TVA NPG SPP 22.200 (Human Performance Program), it must submit the program to the CTS for approval by TVA. If TVA's CTS approves Contractor's program, in writing, completion of that program by Contractor's and Contractor's Subcontractors' personnel, as applicable, will satisfy the training requirements stated in this Section.

N5. FITNESS FOR DUTY - NUCLEAR

- a. TVA's NPG-SPP-14.1, as amended, applies to all Contractor and Subcontractors' personnel performing T Work at a TVA nuclear Site, including all such personnel with unescorted access to TVA nuclear Sites, and those personnel required to report in person to any TVA emergency response center under TVA's emergency plans and procedures (collectively, "Covered Personnel"). Contractor must comply with the TVA's fitness-for-duty (FFD) requirements, as applicable, set forth by the latest revision of NPG-SPP-14.1, and any subsequent revision(s) thereto, with respect to any Covered Personnel. Covered Personnel who have been denied access to or removed from work at any nuclear plant as a result of any violation(s) of any FFD program are prohibited from performing on-Site Work. Upon Contractor's written request to TVA's CTS, TVA Corporate Nuclear Security may approve an exception to this requirement.
- b. All Covered Personnel must report to the TVA nuclear Site's Check-In Coordinator at the Work location, and complete appropriate FFD program training from TVA. Such Covered Personnel must complete such FFD training at least once every twelve (12) months. During the Contract term, Contractor, monthly or upon TVA's CTS's written request, will supply the CTS with names of those Covered Personnel who have been promoted to manager or supervisor positions (this includes temporary assignments). In addition, Contractor shall: (1) notify TVA Corporate Nuclear Security, in writing, within 24 hours of becoming aware of any violation of TVA's FFD requirements by any Covered Personnel, and (2) allow authorized representatives of the NRC to inspect, copy, or take away copies of any Contractor or Subcontractors' records, documents, or reports related to implementation of TVA's or Contractor's FFD program.
- c. Contractor shall comply with all applicable NRC requirements related to FFD programs, including but not limited to those in 10 C.F.R. Part 26. Contractor shall include the requirements of this Section in any subcontract(s) for on-Site Work under this Contract, regardless of tier. Contractor's and Subcontractors' personnel that are not Covered Personnel, and who are not subject to drug testing pursuant to FFD requirements, are subject to the applicable requirements of the **Drug Testing (Non-Nuclear)** Section of this Contract.

N6. NUCLEAR SITE ACCESS

- a. This Section applies to all Covered Personnel (as defined in the Fitness for Duty Section, above); Contractor is responsible for ensuring its and Subcontractors' compliance with the applicable requirements of this Section.
- b. Work Eligibility Requirements. Contractor shall comply with requirements of the United States Citizenship and Immigration Services (USCIS) related to eligibility of Covered Personnel to work in the United States, including, without limitation, acquiring, verifying and maintaining appropriate documentation (such as USCIS Form I-9) on such Covered Personnel. All Covered Personnel must have a valid Social Security number, which must be provided to TVA's designated Site representatives upon request.
- c. Contractor must check all Covered Personnel through TVA's Web-based Contractor Security System (WCSS) before any such personnel perform on-Site Work. For instructions on accessing WCSS, see TVA's Supplier Connections website, at <https://www.tva.com/Information/Supplier-Connections/Existing-TVA-Supplier> under "Web Contractor Security System (WCSS)" or contact the TVA Contracting Officer. TVA may collect fingerprints from any Covered Personnel, at any time prior to or during their performance of on-Site Work.
- d. TVA may provide a Site-specific ID, photo ID card, or an access control card, or any or all of the foregoing, for Covered Personnel. All ID and access cards are and remain TVA's property, and each must be returned to TVA by Contractor immediately when the Covered Personnel no longer require access. Contractor shall reimburse TVA in the amount of \$30 per photo ID and \$35 per access card for each unreturned ID or card, as applicable, and TVA may enter restrictions into the WCSS for any Covered Personnel whose cards are not returned.
- e. Fitness for Duty Requirements: Nuclear Sites. Covered Personnel who require unescorted access to TVA nuclear Sites in order to perform Work must fulfill the Fitness for Duty In-Processing Requirements (described in this subsection) at TVA's Central In-Processing Center, located at 29199 US Hwy 72, Hollywood, Alabama. Contractor shall include the requirements of this subsection (e) in any subcontract(s) related to the performance of Work at TVA nuclear Site(s) under this Contract. Subject to the conditions stated in this subsection (e), TVA will bear the costs of and perform services relating to certain In-Processing Requirements (e.g., background investigation, psychological screening, fingerprinting, drug/alcohol testing, and successful completion of Plant Access and Fitness for Duty training) for Covered Personnel.
- f. Contractor shall not invoice (directly or indirectly) or claim against TVA (under any Section of this Contract) for any time, adjustment (equitable or monetary), cost or expense relating to Contractor's or Subcontractors' failure to comply with the requirements of this Section, or specific In-Processing Requirements, applicable to any Covered Personnel.
- g. With respect to Covered Personnel who are, as of the Effective Date or prior to seeking access to a TVA nuclear Site, authorized to access a TVA

nuclear Site, or have completed Fitness for Duty In-Processing Requirements under Contractor's or Subcontractors' Fitness for Duty program(s): (1) TVA may pre-approve qualification of such Covered Personnel at an individual TVA Site, rather than at TVA's In-Processing Center (any such approval or rejection must be in writing from TVA's CTS, within thirty (30) days of Contractor's written request); and (2) Contractor shall utilize its Fitness for Duty program to complete the requirements for background investigations and psychological screening for Covered Personnel in compliance with 10 C.F.R. 73.56; Nuclear Regulatory Commission (NRC) Order for Compensatory Measures Related to Access Authorization, EA-02-261, dated January 7, 2003 (and any subsequent revisions); and the latest revision of Nuclear Energy Institute (NEI) 03-01, Nuclear Plant Access Authorization Program. Contractor must, at its sole cost and expense: (i) perform these training and qualification activities in a timely manner to support the applicable Work schedule requirements of this Contract or Work Release(s) issued under it and (ii) maintain all records associated with the granting of unescorted Site access, and not destroy any such record without the prior written approval of TVA's Corporate Nuclear Security group.

h. TVA will accept task qualifications awarded to Covered Personnel by Contractor, if Contractor (at its sole cost and expense) achieves and maintains compliance with the Electric Power Research Institute ("EPRI") Administrative Protocol for Portable Practicals (EPRI AP3). Contractor shall not invoice (directly or indirectly) or otherwise claim or charge TVA for time, expenses or costs for Covered Personnel associated with any training or qualification activities performed on-Site for any tasks for which approved EPRI standardized task evaluations (STEs) exist. Completion of the EPRI STEs does not guarantee Covered Personnel access to, or the right to perform Work at, a TVA nuclear Site, however, Covered Personnel who have completed TVA-approved EPRI STEs can use these STEs to meet task qualifications applicable to the on-Site Work.

i. Additional Requirements for Access to Nuclear Site Protected Area. TVA will: (a) require access control and compliance with Fitness for Duty requirements for all Covered Personnel who perform Work within the TVA Nuclear Power Plant Protected Area, or require long-term unescorted access to a nuclear Site, and (b) normally provide escorted access for such Covered Personnel's short-term access requirements.

N7. PROCEDURE USE AND ADHERENCE

THIS PROVISION IS REQUIRED PURSUANT TO TVA-NRC CONFIRMATORY ORDER EA-12-021 (Section V-C), and RCA CA 1271309. IT MAY NOT BE MODIFIED WITHOUT WRITTEN OGC, MRC, (MANAGEMENT REVIEW COMMITTEE), and LICENSING CONCURRENCE, AND IN ACCORDANCE WITH NPG-SPP 03.12.).

The following TVA nuclear power program procedure establishes minimum requirements for the use, preparation, revision, and approval of technical procedures that involve Work at TVA's nuclear plant Sites. TVA's Nuclear Power Group (NPG) applies NPG-SPP-01.2, "Administration of Site Technical Procedures," and its Attachments, to activities conducted at Browns Ferry Nuclear Plant, Sequoyah Nuclear Plant, and Watts Bar Nuclear Plant. Contractors and Contractor's Subcontractors whose Work involves or impacts the technical procedures referenced therein are required to comply with the latest revision of NPG-SPP-01.2, specifically including, without limitation, Section 3.2.1 of NPG-SPP-01.2, which describes responsibilities for procedure adherence and the consequences of failing to follow procedures, including the penalties associated with knowingly providing false, inaccurate, misleading, or incomplete statements or information under NRC regulations and other Applicable Laws.

N8. RADIATION EXPOSURE

a. TVA shall provide radiological control personnel to review and discuss radiological conditions and safe work practices with Contractor prior to any Radiological Controlled Area (RCA) Work activities that Contractor is scheduled to perform at a TVA nuclear Site. Contractor shall ensure that its employees follow all TVA radiological control instructions while working at TVA Sites.

b. Contractor, in performing Work in RCAs, shall ensure that each Contractor Employee immediately prior to entry onto a TVA nuclear Site, is at least 18 years of age at their last birthday, and have: (1) occupational radiation exposures less than 50% of the NRC annual whole body (TEDE) dose limit of 5 Rems from all occupational sources, not to exceed a lifetime whole body dose of 1N Rem, where N is the individual's age at his/her last birthday, (2) the sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue less than 50% of the NRC annual dose limit of 50 Rems; and (3) an eye dose equivalent less than 50% of the NRC annual limit of 15 Rems, and a shallow-dose equivalent to the skin and to the maximum exposed extremity less than 50% of the NRC annual limit of 50 Rems.

c. For each Contractor Employee who performs Work in RCAs, Contractor must, prior to or upon each employee's assignment to a Site, provide TVA with documents that demonstrate (for each such employee) the past occupational radiation exposure history for the current calendar year, a written and signed statement of their cumulative occupational radiation dose, and validation of their date of birth through a government issued document, such as a driver's license. TVA will use this information to complete Form NRC-4. The current year records must include each location where the employee was monitored for occupational radiation exposure. TVA may deny access to the Site to any employee for whom Contractor fails to provide records in compliance with this subsection C.

d. Contractor acknowledges and agrees that each Contractor Employee who performs Work hereunder may receive the annual dose limits as prescribed by 10 C.F.R. § 20.1201(a). Upon written request by Contractor, TVA may, in its sole discretion, and upon both parties' execution of an amendment to this Contract grant an exception from the individual requirements of subsections B and C, above, or agree to a lower annual dose limit for specified employee(s).

e. TVA will decontaminate materials and tools used by Contractor or Subcontractor(s), TVA equipment, or both, without cost to Contractor, under the following limited circumstances, and to the extent necessary to permit Contractor to perform the Work: (i) in the event of a nuclear incident (as defined in the **Nuclear Incidents** section of this Contract), or (ii) as specified in this Contract's scope of Work, or in an amendment to this Contract. TVA and Contractor also may agree to ship Contractor's or Subcontractor(s)' materials or tools, which TVA cannot or elects not to decontaminate within a TVA Site's RCA, to Contractor's or a third party's facility that is licensed under Applicable Laws to decontaminate or store such radiologically contaminated materials or tools. Unless otherwise agreed in writing by both parties, Contractor will pay the costs of such shipment to a non-TVA facility.

f. Contractor must include the provisions of this Section in any subcontract entered into for the performance of Work hereunder.

g. Contractor shall, at its own expense, assume the defense of and save TVA harmless from all radiation injury claims filed by Contractor's or Subcontractor(s)' employees with respect to Work performed at facilities owned or operated by Contractor or Subcontractor(s).

N9. NUCLEAR FATIGUE RULE

Contractor shall track and report to TVA the number of hours worked by individual Contractor Employees, including shift schedules and shift cycles of such individuals, who are subject to the work hour requirements established in 10 C.F.R. § 26.205, and provide TVA with copies of all such records. Contractor must track such Work hours with computer software acceptable to TVA, and notify TVA as soon as it becomes apparent that any such individual is at risk of noncompliance with the NRC's Fatigue Rule, as set forth in 10 C.F.R. Part 26, Subpart I. Contractor must report to TVA at least daily during Site outage periods and weekly during non-outage periods. Contractor shall (1) furnish TVA with its recommendations regarding any fatigue assessment to be performed with respect to a Contractor Employee; and (2) submit all requests for waiver approvals to TVA in sufficient time to allow TVA to make a waiver approval determination. Contractor must comply with this section's requirements in order to enable TVA to make final determinations regarding fatigue assessments, waiver approvals, and accurately assess the risks of non-compliance.

N10. QUALITY ASSURANCE-NUCLEAR

If and to the extent that Contractor's Work is designated by TVA as nuclear quality assurance (QA) Level 1 ("QA-1") or higher, the provisions of this Section will apply and govern such Work.

a. Contractor's and (if applicable) its Subcontractors' personnel must be listed on TVA's Approved Supplier List (ASL) for QA purposes, and be certified to Contractor's or TVA's QA certification program. TVA will evaluate and may accept Contractor's QA program, if it complies with Applicable Laws and those portions of ANSI N45.2 that are relevant to the Work.

b. Prior to performance of Work, Contractor must:

(1) Submit a description of its QA program to TVA's Program Manager at TVA Nuclear Power Performance Improvement, Attention: Program Manager, Operating Experience, 1101 Market Street, Mailstop: BR 3C-C, Chattanooga, Tennessee 37402-2801 for acceptance. Contractor shall not begin Work until it obtains TVA's formal acceptance of Contractor's QA program.

(2) Ensure that Contractor's QA program includes provisions for performance-based audits (by Contractor's QA organization) of technical quality of off-Site Work. In addition, upon reasonable prior notice to Contractor, TVA may access Contractor's Work to perform QA audits, inspections, and surveillance.

(3) Submit a copy of any implementing interface procedures for review and acceptance to the CTS.

c. During the term of this Contract, Contractor shall:

(1) Submit (for review and acceptance) all major proposed changes of its QA program to the TVA address listed above.

(2) Maintain its QA program current and in compliance with: (i) applicable TVA QA requirements (TVA will notify Contractor in writing of any changes to its QA program that impact the Work, during the Contract term); (ii) the applicable requirements of International Quality System Standard ISO 9001; and (iii) the applicable requirements of the U.S. Nuclear Regulatory Commission (NRC) regulations, 10 C.F.R. Part 50, Appendix B and NQA-1 (including, for software only, subpart 2.7 of NQA-1).

(3) Make available QA records for TVA review and approval and transfer to TVA for retention.

(4) Identify all nonconformance to the QA requirements stated in this Contract or any PO issued hereunder. Nonconformance shall be documented, including suggested corrective action, and referred to TVA for resolution before continuing any Work which may cause further nonconformance.

d. Contractor's Work is subject to, and the applicable QA program must address, the requirements of 10 C.F.R. Part 21 (Reporting of Defects and Noncompliance), to the extent that the Work is subject to these NRC requirements and civil penalty provisions. In addition, Contractor shall inform TVA immediately of each defect or noncompliance reportable under 10 C.F.R. Part 21, by written notice to the following address, with a copy to the Contracting Officer: TVA Nuclear Power Performance Improvement, Attention: Program Manager, Operating Experience, 1101 Market Street, BR 3C-C, Chattanooga, Tennessee 37402-2801.

N11. 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 Contract Section 9.B (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:

1. 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.

N12. NUCLEAR SITE EMERGENCY PREPAREDNESS

Contractor shall ensure that Contractor Employees working at or near a TVA nuclear Site are aware of Site emergency information, including, without limitation, accountability and evacuation procedures that they must follow during a Radiological Emergency. At a minimum, Contractor must provide each Contractor Employee with a copy of the following information:

EMERGENCY PREPAREDNESS INFORMATION TO BE FURNISHED TO ALL CONTRACTOR EMPLOYEES WORKING ON OR NEAR A TVA NUCLEAR PLANT SITE

The following information is related to TVA Emergency Preparedness within the area owned and operated by the Tennessee Valley Authority (TVA) for nuclear sites. In the unlikely event of an accident, all onsite personnel will be notified by one of the following means:

1. *Sirens would be sounded for three minutes. (See site specific information below for routine siren test schedule.)*
2. *TVA personnel may enter the area and provide instructions.*

If Contractor personnel are alerted by either of the above, Contractor personnel should:

3. *If TVA personnel are present, follow their instructions.*
4. *If no TVA personnel are present, and the sirens are not sounding during the test schedule below, Contractor personnel should immediately exit TVA property.*
5. *As soon as possible, listen to one of the radio stations noted below for any additional information which may be provided by State Authorities.*

If there is a potential that Contractor personnel may have been exposed to radioactive material, he or she would be instructed to go to a designated location for monitoring or decontamination.

For further information on these emergency plans, please contact TVA Emergency Preparedness at the numbers listed below.

Site Specific Information:

Browns Ferry Nuclear Plant

- a) Sirens are normally tested at 9:15 AM on the 2nd Monday of each month.
- b) WVNN (AM 770) WZYP (FM 104) WKAC (AM 1080)
- c) Emergency Preparedness - (256) 729-2038

Sequoyah Nuclear Plant

- a) Sirens are normally tested at noon on the 1st Wednesday of each month.
- b) WSKZ (FM 106.5)
- c) Emergency Preparedness - (423) 843-7088

Watts Bar Nuclear Plant

- a) Sirens are normally tested at noon on the 1st Wednesday of each month.
- b) WSKZ (FM 106.5) WIVK (FM 107.7) WIVK (AM 990)
- c) Emergency Preparedness - (423) 365-8004