Non-Wires Solutions Program Security Control Requirements

The United Illuminating Company/Eversource (the "Company") have established the following security control requirements to mitigate cybersecurity risks associated with the supply chain for grid-related cyber systems.

Definitions

The following definitions apply only to the terms and conditions in this Annex.

"CEII" means Critical Energy Infrastructure Information and/or Critical Electric Infrastructure Information.

"Company" means the organization that acquires or procures a product or service.

"Company Information" means for purposes of these terms and conditions, any and all information concerning Company and its business in any form, including, without limitation, the products and services provided under this Agreement that is disclosed to or otherwise learned by Contractor during the performance of this Agreement.

"Contractor" or "Developer" or "Vendor" or "Supplier" means the organization or individual that enters into an agreement with the Company for supplying a product or service.

"Contractor Proprietary Information" means any Contractor information that is considered highly confidential where disclosure outside of the Company may result in significant loss of Contractor's intellectual property, PII, etc. and may cause damage to the operational effectiveness or otherwise substantially disrupt significant business operations, with examples including but not limited to: source code, private encryption keys, or Company Information.

"Disclosed" means any circumstance when the security, integrity, or confidentiality of any Company Information has been compromised, including but not limited to incidents where Company Information has been damaged, lost, corrupted, destroyed, or accessed, acquired, modified, used, or disclosed by any unauthorized person, by any person in an unauthorized manner, or for any unauthorized purpose.

"PII" means Personally Identifiable Information.

"Security Incident" means any circumstance when (i) Contractor knows or reasonably believes that Company Information hosted or stored by the Contractor has been Disclosed; (ii) Contractor knows or reasonably believes that an act or omission has compromised or may reasonably compromise the cybersecurity of the products and services provided to Company by Contractor or the physical, technical, administrative, or organizational safeguards protecting Contractor's systems or Company's systems storing or hosting Company Information that may affect the Company Information or that could pose a cyber security risk to the Company; or (iii) Contractor receives any third-party complaint, notice, or communication which relates directly or indirectly to a Security Incident involving (A) Contractor's handling of Company Information or Contractor's compliance with the data safeguards in this Agreement or applicable laws; in connection with Company Information or (B) a verified impact to the

cybersecurity of the products and services provided to Company that could pose a cybersecurity risk to the Company.

"Responsible Entity" refers to the Contractor, Developer, Vendor, Supplier, or its subcontractors.

"Vulnerability" means a weakness in an information system, system security procedures, internal controls, firmware, software, or implementation that could result in a Security Incident including being exploited or triggered by a threat source.

Notification by the vendor of vendor-identified incidents related to the products or services provided to the Responsible Entity that pose cyber security risk to the Responsible Entity.

Contractor agrees to notify Company immediately at 855-548-7276 and asoc@avangrid.com (Avangrid) or CSIRT@eversource.com (Eversource) by email, after Contractor's knowledge or reasonable suspicion of an occurrence of a Security Incident.

The written notice shall include the date and time of the Security Incident's occurrence (or the approximate date and time of the occurrence if the actual date and time of the occurrence is not precisely known) and a summary of the facts and circumstances of the Security Incident, including a description, to the extent known, of a) why the Security Incident occurred (e.g., a description of the reason for the system failure), (b) the amount and nature of Company Information known or reasonably believed to have been Disclosed (if applicable), and (c) the measures being taken to address and remedy the Security Incident and to prevent the same or a similar event from occurring in the future. In the event Contractor is required by law enforcement to withhold such notification, Contractor is under no obligation to notify Company until such withholding is no longer required.

If such written notice is provided in the preceding paragraph, Contractor shall provide written updates to the initial written notice to Company addressing any new facts and circumstances learned after the initial written notice is provided and shall provide such updates within a reasonable time after learning of those new facts and circumstances.

Contractor shall reasonably cooperate with Company in Company's efforts to determine the risk posed by the Security Incident to Company Information and Company assets.

Coordination of responses to vendor-identified incidents related to the products or services provided to the Responsible Entity that pose cyber security risk to the Responsible Entity.

<u>Development and Implementation of a Response Plan</u>: Contractor shall develop and implement a "Response Plan," which shall include policies and procedures to address Security Incidents. The Response Plan shall include appropriate provisions for mitigating the harmful effects of Security Incidents and addressing and remedying the occurrence(s) to prevent the recurrence of similar Security Incidents in the future. Contractor shall provide Company access to inspect Contractor's Response Plan, provided that Contractor shall have a right to redact any part of the Response Plan that contains Contractor Proprietary Information or information protected by legal privilege.

The development and implementation of the Response Plan shall follow industry standard practices, such as those that at a minimum are consistent with the contingency planning requirements of NIST Special Publication 800-61 Rev. 2, NIST Special Publication 800-53 Rev. 4, CP-1 through CP-13 and the incident response requirements of NIST Special Publication 800-53 Rev. 4, IR-1 through IR-10 as those standards may be amended.

Prevention of Recurrence: If the Security Incident arises from Contractor-provided software, hardware, or equipment, then, within [14] days of a Security Incident, Contractor shall develop and take necessary steps to execute a plan that reduces the likelihood of the same or a similar Security Incident from occurring in the future consistent with the requirements of its Response Plan and industry standards (e.g., NIST Special Publication 800-61 Rev. 2 and NIST Special Publication 800-184, as may be amended) and shall communicate to Company the implementation of such plan to reduce a similar Security Incident. If the Security Incident arises from a third-party supplier's software, equipment or services, then if Contractor is permitted to disclose such information, Contractor shall provide updates to Company of such third-party supplier's plan for the prevention of recurrence of such Security Incident. Except to the extent publicly available, any information provided hereunder by Contractor shall be treated as confidential and not disclosed to any third party without Contractor's prior written approval, unless required by applicable governmental entities.

Coordination of Incident Response with Company:

(a) Contractor will, at its sole cost and expense, assist and cooperate with Company with respect to any investigation of and response to a Security Incident and disclosures to affected parties in connection with a Security Incident or required under any applicable laws related to a Security Incident.

(b) In the event a Security Incident results in Company Information being Disclosed such that notification is required to be made to any person or entity, including without limitation any customer, shareholder, or current or former employee of Company under any applicable laws, including privacy and consumer protection laws, or pursuant to a request or directive from a governmental authority, such notification will be provided by Company, except as required by applicable law or approved by Company in writing. Company will have sole control over the timing and method of providing such notification.

Notification by vendors when remote or onsite access should no longer be granted to vendor representatives.

<u>Development and Implementation of Access Control Policy</u>: Contractor shall develop and implement policies and procedures to address the security of Contractor's remote and onsite access to Company Information, Company systems and networks, and Company property (an "Access Control Policy") that is consistent with the personnel management requirements of industry standard practices (e.g., NIST Special Publication 800-53 Rev. 4 AC-2, PE-2, PS-4, and PS-5 as may be amended) and also meets the following requirements:

Company Authority Over Access: In the course of furnishing products and services to Company under this Agreement, Contractor shall not access, and shall not permit its employees, agents, contractors, and other personnel or entities within its control ("Contractor Personnel") to access Company's property, systems, or networks or Company Information without Company's prior express written authorization. Such written authorization may subsequently be revoked by Company, at any time in its sole discretion. Further, any Contractor personnel access shall be consistent with, and in no case exceed the scope of, any such approval granted by Company. All Company-authorized connectivity or attempted connectivity to Company's systems or networks shall be in conformity with Company's security policies as may be amended from time to time with notice to the Contractor.

<u>Contractor Review of Access</u>: Contractor will review and verify Contractor personnel's continued need for access and level of access to Company Information and Company systems, networks and property on a quarterly basis and will retain evidence of the reviews for two year from the date of each review.

<u>Notification and Revocation</u>: Contractor will promptly notify Company, but no later than [2] hour(s) in) when

- (i) any Contractor personnel no longer requires such access in order to furnish the services or products provided by Contractor under this Agreement,
- (ii) any Contractor personnel is terminated or suspended or his or her employment is otherwise ended,
- (iii) Contractor reasonably believes any Contractor personnel poses a threat to the safe working environment at or to any Company property, including to employees, customers, buildings, assets, systems, networks, trade secrets, confidential data, and/or Company Information.
- (iv) there are any material adverse changes to any Contractor personnel's background history, including, without limitation, any information not previously known or reported in his or her background report or record,

- (v) any Contractor personnel loses his or her U.S. work authorization, or
- (vi) Contractor's provision of products and services to Company under this Agreement is either completed or terminated, so that Company can discontinue electronic and/or physical access for such Contractor personnel.

Contractor will take all steps reasonably necessary to immediately revoke such Contractor personnel's electronic and physical access to Company Information as well as Company property, systems, or networks, including, but not limited to, removing and securing individual credentials and access badges, multifactor security tokens, and laptops, as applicable. Further, for such revoked Contractor personnel, Contractor will return to Company any Company-issued property including, but not limited to, Company photo ID badges, keys, parking passes, documents, or electronic equipment in the possession of such Contractor personnel. Contractor will notify Company at 855-548-7276 and asoc@avangrid.com (Avangrid) or CSIRT@eversource.com (Eversource) once access to Company Information as well as Company property, systems, and networks has been removed.

Disclosure by vendors of known vulnerabilities related to the products or services provided to the Responsible Entity.

Contractor shall develop and implement policies and procedures to address the disclosure by Contractor of known Vulnerabilities and defects related to the products and services provided to Company under this Agreement including the following:

- (a) Prior to the delivery of the procured product or service, Contractor shall provide or direct Company to an available source of summary documentation of publicly disclosed vulnerabilities and material defects in the procured product or services, the potential impact of such vulnerabilities and material defects, the status of Contractor's efforts to mitigate those publicly disclosed vulnerabilities and material defects, and Contractor's recommended corrective actions, compensating security controls, mitigations, and/or procedural workarounds.
- (b) Contractor shall provide or direct Company to an available source of summary documentation of vulnerabilities and material defects in the procured product or services within thirty (30) calendar days after such vulnerabilities and material defects become known to Contractor, consistent with ISO/IEC 30111 and 29147 for Coordinated Vulnerability Disclosure. The summary documentation shall include a description of each vulnerability and material defect and its potential impact, root cause, and recommended corrective actions, compensating security controls, mitigations, and/or procedural workarounds (e.g., monitoring).
- (c) Contractor shall disclose the existence of all known methods for bypassing computer authentication in the procured product or services, often referred to as backdoors, and provide written attestation that all such backdoors created by Contractor have been permanently remediated.
- (d) Contractor shall implement a vulnerability detection and remediation program consistent with industry standards (e.g., ISO-27417 Vulnerability Disclosure, NIST Cybersecurity Framework v1.1 Reference RS.AN-5, NIST Special Publication 800-53 Rev. 4 RA-5, SA-11, and SI-2, as may be amended.)

<u>Disclosure of Vulnerabilities by Company</u>: Whether or not publicly disclosed by Contractor and notwithstanding any other limitation in this Agreement and following reasonable written notice provided to and acknowledged by Contractor, Company may disclose any vulnerabilities, material defects, and/or other findings related to the products and services provided by Contractor to (a) the Electricity Information Sharing and Analysis Center ("E-ISAC"), the United States Cyber Emergency Response Team ("CERT"), or any equivalent U.S. governmental entity or program, (b) to any applicable U.S. governmental entity, upon mutual agreement of Company and Contractor, when necessary to preserve the reliability of the BES, or (c) any entity required by applicable law.

Verification of software integrity and authenticity of all software and patches provided by the vendor for use in the BES Cyber System.

Hardware, Firmware, Software, and Patch Integrity and Authenticity:

- (a) Contractor shall establish, document, and implement risk management practices for supply chain delivery of hardware, software (including patches), and firmware provided under this Agreement, in accordance with industry standards and until otherwise noted with end of sale, end of support, and/or end of life. Contractor shall provide documentation on its: chain-of-custody practices, inventory management program (including the location and protection of spare parts), information protection practices, integrity management program for components provided by sub-suppliers, instructions on how to request replacement parts, and commitments to ensure that for [24 months] spare parts shall be made available by Contractor.
- (b) Upon request by Company and if such information is not confidential or Contractor's Proprietary Information or otherwise protected by legal privilege, Contractor shall specify how digital delivery for procured products (*e.g.*, software and data) including patches will be validated and monitored to ensure the digital delivery remains as specified. When product features and delivery mechanisms allow, Contractor shall apply encryption technology to protect procured products throughout the delivery process.
- (c) If Contractor provides software or patches to Company, Contractor shall publish or provide a hash conforming to the Federal Information Processing Standard (FIPS) Security Requirements for Cryptographic Modules (FIPS 140-2) or similar standard information on the software and patches to enable Company to use the hash value as a checksum to independently verify the integrity of the software and patches.
- (d) Contractor shall identify or provide Company with a method to identify the country (or countries) of origin, of the procured Contractor product and its components (including country of manufacture (hardware) and country of build (software and firmware). Contractor will identify the countries where the development, manufacturing, maintenance, and service for the Contractor product are provided. Contractor will notify Company of changes in the list of countries where product maintenance or other services are provided in support of the procured Contractor product. This notification in writing shall occur at least 180 days prior to initiating a change in the list of countries.
- (e) Contractor shall provide a software bill of materials for procured (including licensed) products consisting of a list of components and associated metadata that make up a component.
- (f) Contractor shall use or arrange for the use of trusted channels to ship procured products, such as U.S. registered mail and/or tamper-evident packaging for physical deliveries,
- (g) Contractor shall demonstrate a capability for detecting unauthorized access throughout the delivery process.

(h) Contractor shall provide chain-of-custody documentation for procured products appropriate to scope of supply.

Patching Governance:

- (a) Prior to the delivery of any products and/or services to Company or any connection of electronic devices, assets, or equipment to Company's electronic equipment, Contractor shall provide documentation regarding the patch management and vulnerability management/mitigation programs and update Contractor's process (including for any third-party hardware, software, and firmware) for products, services, and any electronic device, asset, or equipment required by Contractor to be connected to the assets of Company during the provision of products and services under this Agreement. This documentation shall include information regarding:
 - (i) the resources and technical capabilities to sustain this program and process such as the method or recommendation for how the integrity of a patch is validated by Company; and
 - (ii) the approach and capability to remediate newly reported zero-day vulnerabilities for Contractor products.
- (b) Unless otherwise approved by the Company in writing, products and services supplied by Contractor shall not require the use of any out-of-date, unsupported, or end- of-life version of third-party components (*e.g.*, Java, Flash, Web browser, etc.).
- (c) Contractor shall verify and provide documentation that procured products (including third-party hardware, software, firmware, and services) have appropriate updates and patches installed prior to product or service supply to the Company.
- (d) In providing the products and services described in this Agreement, Contractor shall provide or arrange for the provision of appropriate software and firmware updates to remediate newly discovered vulnerabilities or weaknesses for Contractor products within [30] days. Updates to remediate critical vulnerabilities shall be provided within a shorter period than other updates, within [15] days. If updates cannot be made available by Contractor within these time periods, Contractor shall provide mitigations, methods of exploit detection, and/or workarounds within [10] days.
- (e) In providing third-party hardware, software (including open-source software), and firmware is provided by Contractor to Company, Contractor shall provide or arrange for the provision of appropriate hardware, software, and/or firmware updates to remediate newly discovered vulnerabilities or weaknesses, if such vulnerabilities or weaknesses are applicable to the Company's use of the third-party product in its system environment, within 30 days of availability from the original supplier and/or patching source. Updates to remediate critical vulnerabilities applicable to the Contractor's use of the third-party product in its system environment shall be provided within a shorter period than other updates, within [30] days of availability from the original supplier and/or patching source. If applicable third-party updates cannot be integrated, tested, and made available by Contractor within these time periods, Contractor shall provide or arrange for the provision

of recommended mitigations and/or workarounds within 30 days.

Viruses Firmware and Malware:

- (a) Contractor will use reasonable efforts to investigate whether computer viruses or malware are present in any software or patches before providing such software or patches to Company. To the extent Contractor is supplying third-party software or patches, Contractor will use reasonable effort to ensure the third-party investigates whether computer viruses or malware are present in any software or patches providing them to Company or installing them on Company's information networks, computer systems, and information systems.
- (b) Contractor warrants that it has no knowledge of any computer viruses or malware coded or introduced into any software or patches, and Contractor will not insert any code which would have the effect of disabling or otherwise shutting down all or a portion of such software or damaging information or functionality. To the extent Contractor is supplying third-party software or patches, Contractor will use reasonable efforts to ensure the third-party will not insert any code which would have the effect of disabling or otherwise shutting down all or a portion of such software or damaging information or functionality.
- (c) When install files, scripts, firmware, or other Contractor-delivered software solutions (including third-party install files, scripts, firmware, or other software) are flagged as malicious, infected, or suspicious by an anti-virus vendor, Contractor must provide or arrange for the provision of technical justification as to why the "false positive" hit has taken place to ensure their code's supply chain has not been compromised.
- (d) If a virus or other malware is found to have been coded or otherwise introduced as a direct result of Contractor's breach of its obligations under this Agreement, Contractor shall upon written request by Company and at its own cost:
 - (i) Take all commercially reasonable action to eliminate the virus or other malware throughout Company's information networks, computer systems, and information systems; and
 - (ii) If the virus or other malware causes a loss of operational efficiency or any loss of data (A) where Contractor is obligated under this Agreement to back up such data, take all commercially reasonable steps necessary and provide all assistance required by Company and its affiliates, or (B) where Contractor is not obligated under this Agreement to back up such data, use commercially reasonable efforts, in each case to mitigate the loss of or damage to such data and to restore the efficiency of such data.

End of Life Operating Systems:

- (a) Unless otherwise mutually agreed, Contractor-delivered solutions will not be required to reside on end-of-sale, end-of-support, and end-of-life operating systems, or any operating system that is known to be reaching such status six (6) months from the date of installation.
- (b) As mutually agreed, Contractor solutions will support the latest versions of operating systems on which Contractor-provided software functions within twenty-four (24) months from official public release of that operating system version.

Cryptographic Requirements:

- (a) Contractor shall document how the cryptographic system supporting the Contractor's products and/or services procured under this Agreement protects the confidentiality, data integrity, authentication, and non-repudiation of devices and data flows in the underlying system. This documentation shall include, but not be limited to, the following:
 - (i) The cryptographic methods (hash functions, symmetric key algorithms, or asymmetric key algorithms) and primitives (*e.g.*, Secure Hash Algorithm [SHA]- 256, Advanced Encryption Standard [AES]-128, RSA, and Digital Signature Algorithm [DSA]-2048) that are implemented in the system, and how these methods are to be implemented.
 - (ii) The preoperational and operational phases of key establishment, deployment, ongoing validation, and revocation.
- (b) Contractor will use only "approved" cryptographic methods as defined in the FIPS 140-2 Standard when enabling encryption on its products.
- (c) As mutually agreed, Contractor shall provide or arrange for the provision of an automated remote key-establishment (update) method that protects the confidentiality and integrity of the cryptographic keys.
- (d) Contractor shall ensure that:
 - (i) As mutually agreed, the system implementation includes the capability for configurable cryptoperiods (the life span of cryptographic key usage) in accordance with the Suggested Cryptoperiods for Key Types found in Table 1 of NIST 800-57 Part 1, as may be amended.
 - (ii) As mutually agreed, the key update method supports remote re-keying of all devices within [6 months] as part of normal system operations.
 - (iii) Emergency re-keying of all devices can be performed remotely or on-site within 30 days.
- (e) Contractor shall provide or arrange for the provision of a method for updating cryptographic primitives or algorithms.
- (f) Contractor shall apply Microsoft Information Digital Rights Management to protect the appropriate files related to the agreement.

Coordination of controls for (i) vendor-initiated interactive remote access, and (ii) system-to-system remote access with a vendor(s).

Contractor shall coordinate with Company on all remote access to Company's systems and networks, regardless of interactivity, and shall comply with any controls for interactive remote access and system-to-system remote access sessions requested by Company.

<u>Controls for Remote Access</u>: Contractors that directly, or through any of their affiliates, subcontractors, or service providers, connect to Company's systems or networks agree to the additional following protective measures:

- (a) Contractor will not access and will not permit any other person or entity to access, Company's systems or networks without Company's written authorization and any such actual or attempted access will be consistent with any such written authorization.
- (b) Contractor shall implement processes designed to protect credentials as they travel throughout the network and shall ensure that network devices have encryption enabled for network authentication to prevent possible exposure of credentials.
- (c) Contractor shall ensure Contractor Personnel do not use any virtual private network or other device to simultaneously connect machines on any Company system or network to any machines on any Contractor or third-party systems, without
 - (i) using only a remote access method consistent with Company's remote access control policies,
 - (ii) providing Company with the full name of each individual who uses any such remote access method and the phone number and email address at which the individual may be reached while using the remote access method, and
 - (iii) ensuring that any computer used by Contractor personnel to remotely access any Company system or network will not simultaneously access the Internet or any other third-party system or network while logged on to Company systems or networks.
- (d) Contractor shall ensure Contractor Personnel accessing Company networks are uniquely identified and that accounts are not shared between Contractor personnel.

Supporting Provisions

Contractor Cybersecurity Policy:

Contractor will demonstrate to Company the Contractor's cybersecurity policy which shall be consistent with industry standard practices (e.g., NIST Special Publication 800-53 (Rev. 4) as may be amended). Contractor will implement and comply with its established cybersecurity policy.

Any changes to Contractor's cybersecurity policy as applied to products and services provided to Company under this Agreement and Company Information shall not decrease the protections afforded to Company or Company Information and any material changes shall be communicated to the Company in writing by Contractor prior to implementation.

Return or Destruction of Company Information:

Upon the later of (i) completion of the delivery of the products and services to be provided under this Agreement, (ii) the termination of any applicable warranty period under the Agreement or (iii) the termination of this Agreement, Contractor will return to Company all hardware and removable media provided by Company containing Company Information. Company Information in such returned hardware and removable media shall not be removed or altered in any way. The hardware should be physically sealed and returned via a bonded courier or as otherwise reasonably directed by Company. If the hardware or removable media containing Company Information is owned by Contractor or a third-party, a notarized statement detailing the destruction method used and the data sets involved, the date of destruction, and the entity who performed the destruction will be sent to a designated Company security representative within thirty (30) calendar days after the later of (i) completion of the delivery of the products and services to be provided under this Agreement, (ii) the termination of any applicable warranty period under the Agreement or (iii) the termination of this Agreement. Contractor's destruction or erasure of Company Information pursuant to this Section shall be in compliance with industry standard practices (e.g., Department of Defense 5220-22-M Standard, as may be amended).

Audit Rights:

Upon request, Contractor shall provide to Company the opportunity to review a copy of the Contractor's policies, procedures, evidence and independent audit report summaries, , that are part of a cyber security framework (e.g., ISO-27001, SOC2). Company or its third-party designee may, but is not obligated to, perform audits or other tests of Contractor's IT or systems environment and procedural controls to determine Contractor's compliance with the system, network, data, and information security requirements of this Agreement. Company audits of the Contractor system shall be done with at least 30 days advance notice. These audits and tests may include coordinated security tests as mutually agreed to not unduly affect Contractor operations, interviews of relevant personnel, review of documentation, and technical inspection of systems and networks as they relate to the receipt, maintenance, use,

retention, and authorized destruction of Company Information. Contractor shall provide all information reasonably requested by Company in connection with any such audits and shall provide reasonable access and assistance to Company upon request. Contractor will comply, within reasonable timeframes at its own cost and expense, with all reasonable recommendations that result from such inspections, tests, and audits. Company reserves the right to view, upon request, any original security reports that Contractor has undertaken or commissioned to assess Contractor's own network security. Any regulators of Company or its affiliates shall have the same rights of audit as described herein upon request.

Regulatory Examinations:

Contractor agrees that any regulator or other governmental entity with jurisdiction over Company and its affiliates may examine Contractor's activities relating to the performance of its obligations under this Agreement to the extent such authority is granted to such entities under the applicable law. Contractor shall promptly cooperate with and provide all information reasonably requested by the regulator or other governmental entity in connection with any such examination and provide reasonable assistance and access to equipment, records, networks, and systems reasonably requested by the regulator or other governmental entity. Contractor agrees to comply with reasonable recommendations that result from such regulatory examinations within reasonable timeframes.