AGREEMENT

For

NERC Facility Rating Priority III

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This DESIGN, SUPPLY AND INSTALLATION AGREEMENT (this "Agreement") is made this 22nd day of November, 2019 by and between **Avangrid Service Company** ("Owner" or "Company") and [redacted] ("Contractor" or "Supplier") [redacted] and covers the Contractor's performance of Work for the Owner, as provided hereunder, including all supplemental addenda hereto and all general and special provisions pertaining to the Work or materials therefore.

AVANGRID, an Affiliate of Owner, has full power to act as an agent for Owner, and for the purposes of this Agreement will act as Owner's representative. For good and valuable consideration, the Parties agree as follows:

ARTICLE 1 – ORDER OF PRECEDENCE AND DEFINITIONS

1.1 This Agreement, its appendices and related purchase order(s) are complementary documents, and what is required by any one document shall be as binding as if required by all such documents. In the event of any inconsistency between the provisions of two or more documents, the order of supremacy (in descending order) shall be as follows:

- The purchase order;
- The Appendix A (Specifications and Schedule); and
- This Agreement and the remaining appendices in the order listed.

In the event of a conflict between a Drawing and another type of Specification, the Specification shall prevail.

1.2 "Affiliate" means with respect to a person or entity, any individual, corporation, partnership, firm, joint venture, association, Joint Stock Company, trust or other unincorporated organization, directly or indirectly controlling, controlled by, or under common control with, such person or entity. The term "control" shall mean the possession, directly or indirectly, of the power to direct the management or policies of a person or an entity. A voting interest of ten percent (10%) or more shall create a rebuttal presumption of control.

1.3 "Agreement Sum" means the total amount payable by the Owner to the Contractor for the performance of the Work under this Agreement.

1.4 "Agreement Time" means the period of time allotted in this Agreement to achieve Final Completion. The Agreement Time shall end at the Final Completion Date mentioned in Appendix C (Contract Datasheet).

"Drawings" means the drawings specified in Appendix A (Specifications and Schedule), including, but not limited to, final drawings prepared by Contractor which are approved by Owner for use during construction and show the design, location and dimensions of the Work and include, if applicable, plans, elevations, sections, diagrams and other details

as may be necessary or desirable to facilitate the effective, efficient and timely construction and commissioning of the Work.

1.5 "Energized" means operational, on-line and connected to the transmission system.

1.6 "Final Completion" means Substantial Completion has occurred, the Contractor has satisfactorily completed all of the items on the "punch-list", the In-Service Date has been achieved, Owner has signed Appendix M (Certificate of Final Completion) and final payment is now due and owing.

1.7 "In-Service Date" means the date that Substantial Completion is achieved. Provided however, if the In-Service Date has not been achieved within sixty (60) days of Contractor's Notice of Substantial Completion for reasons not attributable to Contractor, the In-Service Date shall be deemed to have been achieved upon expiration of that period.

1.8 "Project" means Owner's (NERC Facility Rating Priority III).

1.9 "Schedule" means the schedule included in Appendix A (Specifications and Schedule).

1.10 "Site" means the lands and improvements where the Project is located and the Work is to be installed, which lands and improvements are described in the Specifications.

1.11 "Site Access Date" means the site access date specified in Appendix C (Contract Datasheet) or in any notice to Contractor of a revision of the Site Access Date.

1.12 "Specifications" means scope of work document(s), technical specifications, Drawings and performance requirements, as listed in Appendix A (Specifications and Schedule) or as incorporated (by reference or otherwise) into this Agreement.

1.13 "Subcontractor" means the Contractor's subcontractors, and such subcontractors' subcontractors to include subcontractors of all tiers.

1.14 "Substantial Completion" means delivery by the Contractor of factory test results and completion of site inspection, testing and commissioning and certification that the Work is functionally complete.

1.15 "Substantial Completion Date" means the date set forth in Appendix C (Contract Datasheet), which is the date by which Substantial Completion must be achieved.

1.16 "Warranty Period" has the meaning set forth in Appendix C (Contract Datasheet).

1.17 "Work" or "Services" or "Scope of Work" means all design and installation services, labor, tools, equipment and material:

a) to be provided by Contractor; and
b) under the financial and legal responsibility of Contractor.

ARTICLE 2 - OWNER

The Owner is the person or organization identified as such in this Agreement. The term Owner means the Owner or an authorized representative of the Owner.

2.1 Services Required of the Owner. Unless otherwise specified, the Owner will establish base lines necessary for the location of the principal component parts of the Work together with a suitable number of benchmarks relating to the Work.

The Owner shall secure and pay for easements for permanent structures or permanent changes in existing facilities.

2.2 Owner's Right to Correct Deficiencies. Subject to the Contractor's warranty obligations set forth in Section 4.10, upon failure to perform the Work in accordance with this Agreement and after seven days' written notice to the Contractor during which period Contractor has failed to correct the failure, provided that if such failure is not capable of correction within such seven day period, Contractor has failed to submit a plan of correction reasonably acceptable to Owner within such period and diligently thereafter performed such plan to correction, the Owner may, without prejudice to any other remedy it may have, correct such deficiencies in Work intended to become a permanent part of the Project. In such case, an appropriate change order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

If, within the Warranty Period any of the Work is found to be defective or not in accordance with this Agreement, the Contractor shall correct it promptly according to its obligations under Section 4.10 after receipt of a written notice from the Owner to do so. The Owner shall give such notice promptly after discovery of the condition.

All such defective or non-conforming Work shall be removed from the Site if necessary and the Work shall be corrected to comply with this Agreement without cost to the Owner. The Contractor shall bear the cost of making good all work of separate contractors destroyed or damaged by such removal or correction.

If the Contractor does not remove such defective or nonconforming Work within a reasonable time fixed by written notice from the Owner, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon ten additional days written notice sell such materials or equipment at auction or at private sale and shall account for the net proceeds thereof, after deducting all the

costs that should have been borne by the Contractor including compensation for additional architectural and/or engineering services. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate change order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

2.3 Owner's Termination Rights. The Owner shall have the right to terminate this Agreement immediately upon written notice to the Contractor, if the Contractor:

a) is adjudged as bankrupt, becomes insolvent, admits it cannot pay its debts or assigns its assets for the benefit of its creditors;

b) commits a material breach of a provision of this Agreement or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction; or

c) fails to provide a qualified superintendent, enough properly skilled workmen or subcontractors, or proper materials, or fails to make prompt payment therefor.

In the event of termination of this Agreement by the Owner because of Contractor's default or breach wherein Contractor has failed to correct or submit a plan to correct such default or breach within the period specified in Section 2.2 (Owner's Right to Correct Deficiencies), the Owner may take possession of the Site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method and means Owner may select subject to Owner’s obligation to reasonably mitigate. In such case, the Contractor shall not be entitled to receive any further payment that may be due as provided by this Agreement, until the Work is finished.

If the unpaid balance of this Agreement Sum shall exceed the expense of finishing the Work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

For Owner's convenience, Owner may terminate this Agreement in whole or in part by giving the Contractor twenty-four (24) hours written notice. In such event, Owner shall make payment to the Contractor for all costs incurred prior to such termination reasonably allocable to the Work performed, under recognized accounting practices. This provision shall not be deemed to limit or otherwise affect the Owner's right to terminate this Agreement for breach or default by the Contractor.

2.4 Owner's Right to Suspend Work. The Owner may at any time suspend the Work or any part thereof, immediately and verbally for reasons of safety, or by giving reasonable

notice to the Contractor in writing. The Work shall be resumed by the Contractor within ten (10) days after the date fixed in the written notice from the Owner to the Contractor to do so. The Owner shall reimburse the Contractor for reasonable expenses directly incurred by the Contractor in connection with the Work under this Agreement as a result of such suspension.

When the whole or any portion of the Work is suspended for any reason, the Contractor shall properly cover, secure, and protect or cause to be so protected, such Work as may be liable to sustain injury from any cause.

2.5 Owner's Right To Inspect Work. Except as may be otherwise provided herein, all Work furnished by the Contractor and all places where construction is carried on will be subject to inspection, examination and testing by the Owner at all times during the construction. The Owner has the right to reject defective Work including defective material and workmanship furnished by the Contractor, and require its correction subject to Contractor's warranty obligations set forth in Section 4.10. Rejected Work shall be corrected to conform to this Agreement without charge therefor. The Contractor shall promptly segregate and remove all rejected material from the Site.

The Contractor shall furnish promptly without additional charge, all reasonable facilities, labor and materials necessary for the safe and convenient inspection that may be required by the Owner. All inspection by the Owner will be performed in such manner as will not unnecessarily delay the Work.

Should it be considered necessary or advisable by the Owner at any time before Substantial Completion of the entire Work to make an examination of the Work already completed, by removing or tearing out same, the Contractor shall on request furnish all necessary facilities, labor, and materials to perform such examination. If the Work subject to such examination is found to be defective or non-conforming in any material respect, due to the fault of the Contractor or its Subcontractors, such uncovering or destruction and reconstruction shall be at the expense of the Contractor. If, however, such Work exposed and examined is found to be satisfactory, the Owner will pay the Contractor the cost of such uncovering or destruction and reconstruction.

2.6 Owner's Audit Rights. Owner reserves the right and Contractor shall allow Owner to audit, or cause to have audited, any and all items related to aspects of this Agreement to assure Contractor's compliance therewith. These items shall include, but not be limited to, property, books, records, and computerized data files. This provision shall remain in effect for two (2) years following final payment for the Work described in this Agreement. This provision does not apply to the calculations used to determine firm lump sum prices for Work performed under this Agreement except to the extent that knowledge of the amount of taxable portions of Contractor's invoicing is necessary.

ARTICLE 3 - CONTRACTOR

The Contractor is the person or organization identified as such in this Agreement. The term "Contractor" means the Contractor or an authorized representative of Contractor.

3.1 Review of Agreement. The Contractor shall carefully study and compare the provisions of this Agreement and shall at once report to the Owner any error, inconsistency or omission Contractor may discover. The Contractor shall not be liable to the Owner for any damage resulting from any such errors, inconsistencies or omissions which are first reported to Owner. The Contractor shall do no work that is not in accordance with the Drawings or Specifications, as such may be modified or amended in accordance with the terms of this Agreement.

3.2 Supervision. All Work shall be done under the direct supervision of the Contractor. The Contractor shall be responsible for construction means, methods, techniques, procedures, and safety, and for coordinating all portions of the Work under this Agreement.

3.3 Superintendent. When required by Owner, the Contractor shall employ a qualified superintendent and any necessary assistants, who are acceptable to the Owner, to be in attendance at the Site during the progress of the Work. The superintendent shall have full authority to act on behalf of the Contractor and all communications given to the superintendent shall be considered as given to the Contractor.

Important communications shall be confirmed in writing. Other communications will be so confirmed upon written request, on a case-by-case basis, by the Owner. It shall be the responsibility of the superintendent to coordinate the Work of all the contractors. The superintendent shall be present on the Site at all times required to perform adequate supervision and coordination.

3.4 Subcontracts. The Contractor shall submit a list of those Work items which it plans to subcontract and the names of Subcontractors proposed for the Work. Subcontractors may not be changed except at the request or with the approval of the Owner. The Owner shall promptly notify the Contractor in writing if, after due investigation, Owner has reasonable objection to any Contractor on such list and does not accept him. Failure of the Owner to make objection promptly shall constitute acceptance of such Subcontractor.

If the Owner refuses to accept any Contractor on the list submitted by the Contractor, the Contractor shall submit an acceptable substitute and the Agreement Sum shall be increased or decreased by the difference in cost occasioned by such substitute and an appropriate change order shall be issued; however, no increase in the Agreement Sum shall be allowed for any substitution unless the Contractor has acted promptly and responsively in submitting for acceptance any list or list of names as required.

The Contractor is responsible to the Owner for the acts and deficiencies of its Subcontractors, and any of their employees, to the same extent Contractor is responsible for the acts and deficiencies of Contractor's own employees. The Contractor shall obtain agreement from the Subcontractors that they will comply with the requirements of this Agreement.

Nothing contained in this Agreement shall create any contractual relationship between any Subcontractor and the Owner.

3.5 Contractor's Right To Terminate the Agreement. The Contractor may terminate this Agreement upon thirty (30) days' written notice to the Owner for any of the following reasons:

a) if an order of any court or other public authority having jurisdiction, or any act of government caused the work to be stopped or suspended for a period of three months through no act or fault of the Contractor or Contractor's employees; or

b) if the Owner should fail to pay the Contractor any undisputed sum within thirty days from the due date.

3.6 Emergencies. The Contractor shall perform any work and shall furnish and install any materials and equipment necessary during an emergency affecting the safety of persons and property. In all cases, Contractor shall notify the Owner of the emergency as soon as practicable, but shall not wait for instructions before proceeding to properly protect both life and property. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 9 for changes in the Work.

3.7 Removal of Equipment. In case of termination of this Agreement for any cause whatsoever, the Contractor, if notified to do so by the Owner, shall promptly remove any part or all of Contractor's equipment and supplies from the property of the Owner, failing which the Owner shall have the right to remove such equipment and supplies at the expense of the Contractor.

3.8 Cooperation. The Contractor shall cooperate with the Owner and any other contractors as directed by the Owner, who will establish the rights of the various interests involved. The Contractor shall properly connect and coordinate its Work with work done by others.

3.9 Use of Premises. The Contractor shall confine its apparatus, the storage of materials and the operations of its workmen to limits indicated by law, ordinances, permits and directions of the Owner and shall not unreasonably encumber the premises with its materials.

3.10 Layout of Work. It shall be the responsibility of the Contractor to lay out all structures and facilities and establish all grades for the same.

3.11 Information Required of Contractor. The Contractor shall promptly furnish weights, bills of material and such other data as are reasonably required by Owner. When required by Owner, the Contractor shall furnish instructions for the installation, operation, care and maintenance of, and lists of recommended spare parts, for the material or equipment. Unless otherwise specified, four copies of such data shall be furnished.

3.12 Independent Contractor. Contractor shall at all times be an independent contractor and be responsible for all acts or omissions of its own employees and Subcontractors. No act or instruction of Owner shall be deemed to be the exercise of supervision or control of performance hereunder.

ARTICLE 4 – SPECIFICATIONS AND QUALITY

4.1 Adequacy. Owner shall be responsible for the adequacy of the design and for the sufficiency of the Drawings and Specifications.

4.2 Discrepancies. Any discrepancies, inconsistencies, or ambiguities found between the Drawings and Specifications and the site conditions shall be immediately reported to the Owner's field engineering supervisor, who shall promptly correct such inconsistencies or ambiguities in the Drawings or Specifications in writing. Any Work done after such discovery or after the Contractor should have reasonably made such discovery, unless authorized in writing by Owner, will be done at the Contractor's risk.

4.2 Additional Instructions. Owner may issue additional instructions during the progress of the Work by means of Drawings or other media necessary to illustrate changes in the Work.

4.3 Copies Furnished to Contractor and Ownership. Unless otherwise provided, the Contractor will be furnished, free of charge, all required copies of Drawings and Specifications necessary for the execution of the Work. All Drawings, Specifications and copies thereof furnished by the Owner are and shall remain the Owner's property. They are not to be used on any other project and sets are to be returned to Owner on request at the completion of the Work. The Contractor shall keep one copy of all Drawings and Specifications regarding the Work in good order, available to the engineer and to engineer's representative.

4.4 By executing this Agreement, the Contractor represents that it has visited the Site, familiarized itself with the local conditions under which the Work is to be performed, and correlated its observations with all the requirements of this Agreement. The Owner assumes no responsibility whatsoever for ascertaining for the Contractor any facts which the Contractor could have ascertained for itself through such investigation; provided

however, the Contractor shall be entitled to rely on the accuracy of all Owner-provided data and information.

4.5 Materials and Labor. Unless otherwise specifically noted, the Contractor shall provide and pay for all materials, labor, equipment, tools, water, heat, utilities, transportation and other facilities necessary for the proper execution and completion of the Work. The Contractor is responsible for providing workers, who must have sufficient knowledge, skill, and experience to perform properly the work assigned to them. The Contractor shall at all times be responsible for the conduct and discipline of its employees and/or any Contractor or persons employed by Subcontractors.

Owner reserves the right to require the removal of any personnel of the Contractor who in Owner's opinion may be incompetent, careless, not qualified to perform the Work assigned, or who may have engaged in improper conduct.

4.6 Substitution. Certain products have been referred to by name and catalog number in this Agreement. No substitutes shall be made without prior written approval of the Owner.

4.7 Samples. All samples called for in this Agreement shall be furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the Work will be judged.

4.8 Shop Drawings. The Contractor shall provide shop drawings, setting schedules and other such drawings as may be necessary for the prosecution of the Work in the shop and in the field as required by the Specifications. Deviations from the Specifications shall be called to the attention of the Owner at the time of first submission of the Drawings. The Owner's approval of any Drawings shall not release the Contractor from responsibility for such deviations.

By approving and submitting shop Drawings, the Contractor thereby represents that Contractor has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that it has checked and coordinated each shop Drawing with the requirements of the Work.

4.9 Cutting and Patching. The Contractor shall do all cutting, fitting or patching of its Work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors shown upon the Drawings and Specifications for the completed structure or any other provisions of this Agreement.

Any cost caused by defective or ill-timed work shall be borne by the party responsible therefore. The Contractor shall not endanger any work by cutting, excavating or otherwise altering the Work and shall not cut or alter the work of any other contractor save with the consent of the Owner.

4.10 Warranty & Quality. Contractor warrants that the Work shall conform to the Specifications and be free from defect in design, material and workmanship and shall be fit for the purpose for which such Work is specified in this Agreement. Furthermore, Contractor warrants that all material and equipment supplied under this Agreement shall be new, free from defects and of the kind and quality required by the Specifications.

4.11 Contractor's warranty in Section 4.10. shall start:
a) At the In-Service Date; or
b) Sixty (60) days following Substantial Completion, whichever occurs first, and end after the period indicated in Appendix C (Contract Datasheet).

4.12 If requested by Owner, Contractor shall furnish evidence as to the type and quality of Work supplied.

4.13 Contractor warrants that craft, technical, supervisory and professional personnel that are provided are highly qualified to perform the Work assigned and that the Work will be performed in accordance with this Agreement and any applicable law.

4.14 Following a written notice by Owner sent before the expiry of any warranties and guarantees under this Agreement, the Contractor shall be responsible for:

a) the removal and replacement or modification of all Work which, in the opinion of Owner, is defective;
b) the restoration of all Work, and the work of others, which is disturbed or damaged in the course of removal and replacement or modification of the defective Work; and
c) all risks associated with:
    i) the removal, including disposal and storage, of the defective Work; and
    ii) the replacement or modification of the unsatisfactory Work, whether performed by the Contractor or by or on behalf of Owner.

The warranty period for any corrected Work shall be extended for a period not to exceed six (6) months beyond the original warranty period.

4.15 Contractor shall have no obligation hereunder with respect to any Work which (i) has been improperly repaired or altered without Contractor's approval; (ii) has been subjected to misuse, negligence or accident by someone other than Contractor or its Subcontractors; or (iii) has been used in a manner contrary to Contractor's instructions without Contractor's approval.

4.16 Tests. The Contractor shall ascertain by tests or otherwise as agreed to by Owner and Contractor that the Work is in full accordance with this Agreement. Where practicable, all tests shall be made at the place of manufacture. The Contractor shall provide all facilities, apparatus and labor reasonably required for tests and shall bear all of its own

expense thereof, except salaries and expenses of representatives of the Owner. The Contractor shall give the Owner at least seven (7) business days' advance written notice before shipment. Up to forty-eight (48) hours after receipt of such notice the Owner may require performance of tests to be witnessed by its representatives and/or require the Contractor to furnish three (3) certified copies of all tests for approval, prior to shipment. There shall be no additional charges for such witness tests or certified copies except as set forth in the Contractor's proposal. However, the Owner will bear the expense of tests conducted on its own premises, except salaries and expenses of representatives of the Contractor.

4.17 Packing and Marking. All material and equipment to be furnished by the Contractor shall be packed, crated or otherwise suitably protected to withstand shipment undamaged to the destination. Each package, crate or part shall be marked plainly with the name of the consignee, shipping destination, the Owner's order number, and such other markings as are required. Complete packing lists, one copy with each package and two (2) copies by mail to the Owner at time of shipment, shall be supplied showing contents and identity of each package.

4.19 Work Stoppage. Contractor's personnel shall not honor any union picket lines or strikes nor take part in any work slow down or stoppage nor refuse to report for work, unless such action is protected by any state or federal labor relations law. Notwithstanding the preceding sentence, Contractor shall retain the right to remove its employees from any situation it reasonably determines may pose an unreasonable health or safety risk. Except as set forth above, it shall be the obligation of the Contractor to supply a qualified work force. Owner may terminate this Agreement if Contractor fails to provide a qualified work force within 24 hours of Owner's notification to Contractor that a qualified work force has not been supplied.

ARTICLE 5 – INSURANCE

5.1 Insurance. Supplier shall maintain insurance in accordance with the requirements as set forth in Appendix J. Supplier must maintain applicable insurance. An insurance certificate must be mailed to Customer prior to starting Services.

ARTICLE 6 - LEGAL RESPONSIBILITY AND SAFETY

6.1 Indemnification. Contractor will indemnify, defend at its expense and hold harmless the Owner and its Affiliates, directors, officers, employees, and agents (the "Indemnitee") from and against any and all claims, demands, suits, losses, costs, fees, damages or expenses it may suffer, or for which it may be held liable, whether including, without limitation, reasonable expenses and attorneys fees incurred in the connection therewith, by reason of (A) any patent, trademark, or copyright infringement claim, or any design, device, process or procedure used, installed or provided by the Contractor or its agents or subcontractors under this Agreement; (B) any work-related accident or injury affecting

an employee, agent or subcontractor of the Contractor, arising in connection with Contractor's negligent acts or omissions performed under this Agreement; (C) any claim by an agency or instrumentality of the federal, state or any local government, or by an employee, agent or subcontractor of the Contractor alleging that (i) the Indemnitee is required to maintain worker's compensation or unemployment or any other type of insurance upon any employee, agent or subcontractor of the Contractor; (ii) the Indemnitee is liable for tax payments or withholding with respect to any employee, agent or subcontractor of the Contractor; (iii) any employee, agent or subcontractor of the Contractor is entitled to receive employee benefits from the Indemnitee, including, without limitation, vacation, deferred compensation, medical, pension, 401(k) or any other benefit available to the Indemnitee's employees; and (iv) the Indemnitee is liable to any party, for any reason, due to the negligent performance of Services or omissions by an employee, agent or subcontractor of the Contractor; (D) bodily injury, including death, to any person or persons due to the negligent, reckless or willful actions or omissions of the Contractor or its agents or subcontractors; (E) damage to or destruction of any property, including loss of use thereof, due to the negligent, reckless or willful actions or omissions of the Contractor, or its agents or subcontractors. Individual employees, agents and subcontractors of the Contractor who are performing services for the Indemnitee under this Agreement shall be considered to be employees, agents or subcontractors of the Contractor for all purposes under this Agreement, notwithstanding any judicial or administrative determination that such employees, agents or subcontractors of the other party should be regarded as employees under applicable law. All actions of the employees, agents and subcontractors of the Contractor under this Agreement shall be deemed to be actions of the Contractor under these indemnities and this Agreement. In furtherance of the foregoing indemnification and not by way of limitation thereof, the Contractor hereby waives any defense or immunity it might otherwise have under applicable worker's compensation laws or any other statute or judicial decision (including, for Work or services to be conducted in Maine, without limitation, Diamond International Corp. v Sullivan & Merritt, Inc. 493 A2d. 1043 (Me 1985)) disallowing or limiting such indemnification, and the Contractor consents to a cause of action for indemnity.

6.2 Patents and Royalties. If any design, device, material or process covered by letters patent or copyright is used by the Contractor in Contractor's Work, Contractor shall provide for such use by legal agreement with the owner of the patent or a duly authorized licensee of such owner. The Contractor shall pay all royalties and license fees. The Contractor shall defend, indemnify and hold harmless the Owner from and against all liability, claims, and losses for infringement of any patent rights, except that the Owner shall be responsible for all such loss when a particular design, process or product of a particular manufacturer or manufacturers is specified by the Owner in the Specification, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, Contractor shall be responsible for such loss unless it promptly gives such information to the Owner. Contractor shall have no obligation hereunder and

this provision shall not apply when any action is settled or otherwise terminated without the prior written consent of Contractor.

6.3 Permits. With the exception of Owner permits identified in Appendix C (Contract Datasheet), all permits, governmental fees and licenses necessary for the proper execution and completion of the Work shall be secured and paid for by the Contractor, unless otherwise specified in the agreement. In the event of a delay in the issuance of any Owner permit identified in Appendix C (Contract Datasheet), for causes not attributable to either of the parties, then it is agreed that, if necessary, a day for day delay in the schedule of performance shall be allowed as caused by such delayed permit issuance, together with an adjustment in the Agreement Sum due to such delay.

6.4 Compliance with Laws. The Contractor shall give all notices and comply with all federal, state and local laws, ordinances, rules, regulations and orders bearing on the performance of the Work. If the Contractor discovers that the Agreement (together with its appendices and related purchase order(s)) are at variance therewith in any respect, the Contractor shall promptly notify the Owner in writing, and any necessary changes shall be made by appropriate modification. If any regulation, law, rule, regulation, ordinance, by-law etc., and any derivatives including but not limited to permits, licenses or codes, coming into force after date of Contractor's bid should cause an increase of the Contractor's cost, then, with Owner's prior written consent (which consent shall not be unreasonably withheld) the Agreement Sum shall be adjusted by an amount equivalent to said increase.

6.5 Written Notice. Written notice shall be considered as duly served when delivered in person or sent by registered mail to the individual, member of the firm or officer of the corporation for whom it was intended, or to the last known business address.

6.6 Safety. See Appendix N (Contractors Safety Requirements) for Owner's Contractors Safety Requirements. Contractor is to follow these requirements at all times while performing work for Owner.

ARTICLE 7 - TIME

7.1 Notice To Proceed. Following execution of this Agreement by the Owner and the Contractor, written notice to proceed with the Work shall be given by the Owner to the Contractor. The date to commence Work is the date established in the notice to proceed. If there is no notice to proceed, it shall be the date of this Agreement or such other date as may be specified by the Owner.

7.2 Schedule of Completion. Contractor shall perform the Work so that all of the milestone events are completed on or before the dates specified in Appendix A (Specifications and Schedule) for each milestone event.

7.3 Site Access Date. Contractor shall not enter or commence any portion of the Work on the Site until Owner notifies Contractor that all necessary clearances for the Work on Site have been obtained, which clearances should be granted on or before the Site Access Date specified in Appendix C (Contract Datasheet). Owner shall promptly advise Contractor of any change in Site Access Date. Any material postponement of the Site Access Date will be deemed proper cause for equitable adjustment.

7.4 Substantial Completion. After Substantial Completion has been achieved, a Certificate of Substantial Completion shall be issued by the Owner. The Certificate does not relieve the Contractor of its obligation to complete all the Work including punch-list items as required to achieve Final Completion. It entitles the Owner to occupy the Work or designated portions thereof for the use for which it is specified. Title and risk of loss shall pass to Owner when Owner issues a Certificate of Substantial Completion or the Work is Energized, whichever comes first.

7.5 Progress and Completion. It is expressly understood by the Contractor and Owner that time is important in the performance of this Agreement.

The Contractor shall begin the Work on the date of commencement set forth in the written notice to proceed. The Contractor shall carry the Work forward expeditiously with adequate forces and shall complete it in accordance with the Schedule.

7.6 Delay Damages. If the Contractor neglects, fails, or refuses to complete the Work within the time specified for Substantial Completion in this Agreement, then the Contractor does hereby agree to pay to the Owner, as liquidated damages ("Delay Liquidated Damages") and not as a penalty, the sum of one half of one percent (0.5%) of the Agreement Sum per day for each calendar day beyond the Substantial Completion Date in this Agreement until Substantial Completion is achieved.

The said amount is fixed and agreed on by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the true value of the damages which the Owner will sustain by failure of the Contractor to complete the Work on time, such as loss of revenue, service charges, interest charges, delays caused to other construction activities of Owner by failure to perform this Contract, and other damages, some of which are indefinite and not susceptible of easy proof. The Delay Liquidated Damages amount is agreed to be a reasonable estimate of the amount of damages which the Owner will sustain and said amount shall be deducted from any monies due or that may become due to the Contractor. If monies owed to Contractor under this Agreement are insufficient to cover said Delay Liquidated Damages, then the Contractor shall pay the amount of the difference.

7.7 Unforeseen Conditions. In the event unforeseen conditions require an increase in the Owner's cost obligation of fifteen percent (15%) or more of the Agreement Sum, this Agreement will be modified or amended to reflect said increase. In the event it is

determined that any change from the description of Work contained in this Agreement is required, written approval must be secured from the Owner prior to the beginning of such work.

Reimbursement for increased work and/or substantial change in the description of Work shall be limited to costs covered by written modification, change order, or extra work order approved by the Owner and subject to Appendix G (Change Order Pricing) and Appendix H (Change Order Request Form).

ARTICLE 8 - PAYMENTS

8.1 Agreement Sum. The Agreement Sum is stated in Appendix B (Agreement Sum and Payment Schedule) and is the total amount payable by the Owner to the Contractor for the performance of the Work under this Agreement. The Agreement Sum is fixed. Any work additional to the Work shall be done on a fixed price basis or on a time and materials basis as agreed to by the Owner and Contractor prior to the commencement of such additional work.

Before submitting the first invoice, the Contractor shall submit a complete breakdown of the Agreement Sum showing the value assigned to each part of the Work including an allowance for profit and overhead. Upon Owner's approval of the breakdown of the Agreement Sum, it shall be used only as a basis for the Contractor's invoice.

For lump-sum agreements the Contractor is to provide invoicing showing material costs and the total cost of the project or applicable portion thereof.

8.2 Payments. On or before the tenth day of each month, or as otherwise agreed by the parties in writing, the Contractor shall submit to the Owner an itemized invoice showing the percentage and value of the Work completed during the previous month, including materials received and stored on the job Site. Invoices shall be submitted utilizing American Institute of Architects (AIA) forms 702 and 703, as set forth in Appendix F (Form of Invoice) to this Agreement. Each invoice shall be accompanied by the Contractor's waiver and release in the form of Appendix K-1 or Appendix K-2 for final invoice.

Sixty (60) days after acceptance of the invoice, the Owner shall make payment to the Contractor of ninety percent (90%) of the undisputed amount. Payment may be withheld and may be paid directly to third parties in accordance with Section 8.3 if Contractor has failed to comply with its lien obligations under Section 8.5 herein.

Final payment shall be made Sixty (60) days after final acceptance of the Work but in no event later than seventy five (75) days from the In-Service Date unless Owner determines that Contractor has failed to achieve Final Completion during such time period.
The Contractor warrants that title to all Work covered by an invoice, whether incorporated in the Project or not, will pass to the Owner upon the receipt of such

payment by the Contractor, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 8 as "liens"; and that subject to Owner's continued obligation to make payments owed, no Work covered by an invoice will have been acquired by the Contractor, or by any other person performing the Work at the Site or furnishing materials and equipment for the Work, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor, or its Subcontractors or suppliers.

8.3 Payments Withheld. The Owner may withhold, or, on account of subsequently discovered evidence, nullify the whole or part of any invoice to such extent as may be necessary to protect itself from loss on account of:

a) defective Work not remedied;
b) third party claims filed or reasonable evidence indicating probable filing of such claims which Contractor has failed to remove within a reasonable period of time after receiving notice of such;
c) failure of the Contractor to make payments due to Subcontractors, its suppliers or employees;
d) reasonable indication that the Work will not be completed within the Agreement Time;
e) prosecution of Work that does not comply with this Agreement;
f) failure of the Contractor to submit estimates of partial payments, or lack of accurate supporting data;
g) invoicing which is incorrect; or
h) breach of any material term or condition of this Agreement.

When the above grounds are removed, or the Contractor provides a bond satisfactory to the Owner which will protect the Owner in the amount withheld, payment shall be made for such amounts withheld.

8.4 Payment Disclaimer. In no event shall payment or partial payment by Owner for any material or service rendered by Contractor be construed as Owner's acceptance of that material or service. Such payment by Owner to Contractor in no way releases Contractor from any of its obligations under this Agreement.

8.5 Final Completion and Final Payment. When the Contractor determines that the Work is substantially complete in accordance with this Agreement, the Contractor shall, together with Owner, prepare a punch-list of items to be completed or corrected by Contractor. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with this Agreement. When Contractor achieves Final Completion, upon receipt of written notice that the Work is ready for , final inspection and acceptance, and upon receipt of final invoice, the Owner will promptly make such inspection and, when Owner finds the Work conforming to this Agreement

and this Agreement fully performed, Owner will make final payment in accordance with time periods set forth in Section 8.2.

The final payment (including the ten percent (10%) retainage) shall not become due until the Contractor submits to the Owner (i) an Affidavit that all Contractor's payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or its property might in any way be responsible, have been paid or otherwise satisfied, and (ii) consent of surety, if any, to final payment, and data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of this Agreement, to the extent and in such form as indicated in Section 8.2 and Appendix forms K-1 or K-2, as applicable. If any subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify him against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees provided that Contractor has failed to remove any such lien within a reasonable time after being notified of its filing.

If after Substantial Completion of the Work and occurrence of the In-Service Date, Final Completion thereof is materially delayed through no fault of the Contractor, the Owner shall, without terminating this Agreement, make payment of the balance due for that portion of the Work fully completed.

The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

1) outstanding liens;

2) faulty, defective, or nonconforming Work;

3) failure of the Work to comply with the requirements of this Agreement, or

4) terms of any warranties or guarantees required by this Agreement.

The acceptance of final payment shall constitute a waiver of all payment claims by the Contractor except those previously made in writing and still unsettled.

8.6 Financial Security for Performance. As financial security for Contractor's faithful performance of its obligations hereunder, Contractor shall furnish to Owner and keep in force during the term of this Agreement performance and payment bonds guaranteeing that the Contractor will perform its obligations under this Agreement and will pay for all labor and materials furnished for the Work, as well as make any payments required under this Agreement. Such bonds: (i) shall be issued in a form reasonably acceptable to Owner by a surety company licensed to transact business in the State of New York and named

on the current list of surety companies acceptable on federal bonds; (ii) shall be submitted to the Owner for approval as to form; (iii) shall name the Owner as obligee; and (d) shall be in an amount equal to at least one hundred percent (100%) of the Agreement Sum (as the same may be adjusted from time to time pursuant to this Agreement). The Contractor shall deliver the executed, approved bonds to the Owner prior to the commencement of the Work.

If at any time a surety company on any bonds is declared bankrupt, files a voluntary petition for bankruptcy, loses its right to transact business in New York, or is removed from the list of surety companies accepted on federal bonds, the Contractor or Subcontractor shall immediately notify the Owner, and within five (5) days thereafter, substitute an acceptable bond (or bonds) in such form as may be reasonably acceptable to Owner. If a surety company is, in the reasonable opinion of Owner, insolvent, the Contractor or Subcontractor shall within five (5) days after notice from Owner to do so, substitute an acceptable bond (or bonds) in such form as may be reasonably acceptable to Owner. Such replacement surety company and bond shall meet the requirements set forth in this Section 8.6. No further payments from the Owner shall be deemed due and owing nor shall they be made until the replacement surety company has furnished an acceptable bond to the Owner.

ARTICLE 9 - CHANGES IN THE WORK

9.1 Change Orders. The Owner reserves the right to order changes in the Work through additions, deletions or other revisions. All such changes in the Work shall be authorized by change order, and shall be executed under the applicable conditions of this Agreement. The Agreement Sum and Agreement Time affected by the change shall be adjusted at the time the change order is executed.

A change order is a written order to the Contractor signed by the Owner, issued after the execution of this Agreement, authorizing a change in the Work and/or an adjustment in the Agreement Sum or Agreement Time. A change order may also be signed by the Contractor if the Contractor agrees to the adjustment in the Agreement Sum or the Agreement Time. The Agreement Sum and the Agreement Time may be changed only by a change order that is signed by both the Owner and the Contractor.

The cost or credit to the Owner resulting from a change in the Work shall be determined in one or more of the following ways:

a) By mutual acceptance of a lump sum properly itemized;

b) By unit prices stated in this Agreement or subsequently agreed upon; or

c) By cost and a mutually acceptable fixed or percentage fee.

If unit prices are stated in Appendix G (Change Order Pricing) or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed change

order that application of the agreed unit prices to the quantities of work proposed will create a hardship on the Owner or the Contractor, the applicable unit prices shall be equitably adjusted to prevent such hardship. However, the Owner shall have the right to adjust the quantities provided in this Agreement by as much as 20% without a corresponding change in the unit price for the item(s) involved.

9.2 Differing Site Conditions. Should concealed conditions encountered in the performance of the Work below the surface of the ground be at variance with the conditions indicated by this Agreement or should unknown physical conditions below the surface of the ground of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement be encountered, the Agreement Sum shall be equitably adjusted by change order upon claim by either party made within twenty (20) days after the first observance of the conditions.

9.3 Claims for Additional Costs. If the Contractor claims that additional costs are involved because of (i) any written interpretation of this Agreement issued by the Owner or (ii) any order by the Owner to stop the Work where the Contractor was not at fault, or (iii) any other event, the Contractor shall submit such claim by giving the Owner written notice thereof within seven (7) days after the occurrence of the event or of the time Contractor first becomes aware of the event giving rise to such claim. Such notice shall be in the format displayed in Appendix H (Change Order Request Form) and shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property. No such claim for additional compensation shall be valid unless so made. Any change in the Agreement Sum resulting from such claim must be authorized by Owner in a change order.

ARTICLE 10 - MISCELLANEOUS PROVISIONS

10.1 Governing Law. This Agreement shall be governed by and construed according to the laws of the State of New York.

10.2 Non-Assignment. The Contractor shall not assign this Agreement in whole or in part nor any right hereunder without the prior written consent of Owner. The assignment by the Contractor of this Agreement or any interest therein, or of any money due or to become due by reason of the terms hereof without the prior written consent of Owner shall be void.

10.3 Cleaning Up. The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by its operations. At the completion of the Work the Contractor shall remove from the Owner's property, and from all public and private property, all temporary structures, rubbish and waste materials, tools, construction equipment, machinery, and surplus materials, leaving the Site smooth, clean and true to line and grade.

10.4 Interest. Any moneys not paid when due to either party under this Agreement shall bear interest at the legal rate in force in the State of New York.

10.5 Arbitration. All claims, disputes and other matters in question arising out of, or relating to, this Agreement or the breach thereof, except for claims which have been waived by the making or acceptance of final payment as provided herein, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in force unless the parties mutually agree otherwise. Any arbitration proceedings shall take place in the State of New York. This agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

The Contractor shall not cause a delay of the Work because of the pendency of arbitration proceedings, but Contractor shall only continue working until the arbitrators shall have an opportunity to determine whether or not the Work shall continue during the pendency of the arbitration proceedings.

The demand for arbitration shall be filed in writing with the adverse party, and with the American Arbitration Association and shall be served by registered mail to the last known address of each. The demand shall be made within a reasonable time after the dispute has arisen. In no case, however, shall the demand be made later than the time of final payment, except as may be otherwise expressly stipulated in this Agreement.

In no case shall punitive damages be awarded to either party in any arbitration resulting from performance under this Agreement. Once the arbitral award is determined and, if applicable, apportioned, the prevailing party shall be entitled to receive reimbursement from the non-prevailing party of any amounts paid including attorney's fees and costs incurred hereunder in connection with the arbitration proceeding.

The award of the arbitrators shall be in writing and acknowledged like a deed to be recorded and a duplicate shall be delivered personally or by registered mail forthwith upon its rendition to each of the parties to the controversy and to the Owner. Judgment may be rendered upon the award by the federal court or the highest state court having jurisdiction to render same.

10.6 Separate Agreements. The Owner may award other agreements in connection with other portions of the Project. The Contractor shall cooperate with other contractors with regard to storage of materials and equipment and the execution of their work. It shall be the Contractor's responsibility to inspect all work by other contractors affecting its Work and to report to the Owner any irregularities which will not permit it to complete its Work in a satisfactory manner. The Contractor shall not be responsible for defects of which Contractor could not have known, which develop in the work of others after the Work is completed.

Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such separate contractor by agreement or arbitration, if Contractor will so settle. If such separate contractor sues the Owner or initiates an arbitration proceeding on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor who shall defend such proceedings according to Contractor's indemnification obligations.

10.7 Taxes.

1. All payments of sales and use tax on all purchases of tangible personal property for resale to the Owner pursuant to this Agreement shall be made by the Contractor.

2. The Contractor, with respect to its own employees agrees to assume full responsibility for the payment of any federal or state payroll taxes, or contributions, for unemployment insurance, old age pensions, annuities, and the like, in conformity with existing social security laws, and to indemnify the Owner against any liability therefor.

10.8 Delivery of Material and Equipment. When it is the responsibility of the Contractor under this Agreement to unload material and equipment at the Work Site, such unloading shall be done expeditiously. If, in the opinion of the Owner, failure to so unload will interfere with the progress of the Work, the Owner may unload such material and equipment upon approval of the Contractor, at the Contractor's expense and the Contractor shall reimburse the Owner for the actual cost thereof plus overhead.

All loss or damage to the material or equipment to be furnished by the Contractor, shall be remedied by the Contractor up to the point of passage of risk of loss to Owner.

10.9 Wages and Hours. Wage rates established at the beginning of the Work will not be changed without the approval of the Owner. The Work will be performed on a 40-hour week basis insofar as possible and no overtime will be worked without prior approval of the Owner. This Section shall not be applicable in the event that this Agreement provides for a lump-sum or unit price agreement for the Work.

10.10 Work Records. It is understood and agreed that job accounting, job costs keeping and the scheduling and purchasing of materials to be made a part of the Work or incidental thereto will be carried on in accordance with the Owner's instructions. The Owner may have a field auditor representing it in the work office on the work Site for the purpose of facilitating the foregoing and the Contractor will give him such assistance and cooperation as the Owner shall require. All payrolls entering directly into the cost of the Work shall be carried in the name of the Contractor. This Section shall not be applicable to lump-sum or unit price portions of the Work.

10.11 Limitation of Liability. To the fullest extent permitted by law, Company shall not be liable for any special, indirect or consequential damages resulting in any way from the performance of the services hereunder.

10.12 Interference with Operations. Interference with normal operation of the Owner's plant or equipment, and that of all contractors or subcontractors on the work Site, shall be avoided wherever possible. The Contractor shall not operate any of the Owner's plant or equipment or control devices, or those of any other contractor or subcontractor on the work Site except at the direction of and under the direct supervision of the Owner.

10.13 Setoff. Owner may set off against amounts payable to Contractor under this Agreement any claim or charge it may have against Contractor.

10.14 Equal Opportunity. Contractor shall comply, to the extent applicable, with Executive Order 11246, the Vietnam Era Veterans Readjustment Assistance Act of 1974, the Rehabilitation Act of 1973, as amended, and any regulations, and reporting requirements implemented thereunder. The equal opportunity and affirmative action clauses contained in Title 41, Chapter 60, Sections 1.4, 250.4, and 741.3 of the Regulations of the U.S. Department of Labor, Office of Federal Contract Compliance, and any section or sections superseding or amending the same, are hereby incorporated by reference and made a part hereof as though fully set forth herein.

10.15 Entire Agreement. This Agreement constitutes the entire agreement between the parties for the Work to be performed hereunder, and supersedes any prior communications, whether written or oral, between the parties as to such services.

This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, and such counterparts together shall constitute one and the same instrument.

10.16 Waiver. No waiver, alteration, consent, amendment or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of the party to be bound.

10.17 Rights, Privileges, Remedies. All rights, privileges and remedies afforded each of the parties hereto by this Agreement shall be deemed cumulative and the exercise of any one or more of such rights or remedies shall not be deemed a waiver of any other right, privilege or remedy provided for herein or available at law or in equity.

10.18 Failure to Complain. Unless otherwise provided in this Agreement, the failure of any party hereto to complain of any act or omission on the part of the other party hereto, no matter how long the same may continue, shall not be deemed a waiver by said party of any of its rights hereunder. No waiver by any party hereto at any time, express or implied, of any default or of any breach or modification of any provision of this Agreement shall be

deemed a waiver of default, breach or modification of any other provision of this Agreement or a consent to any subsequent default, breach or modification.

10.19 Severability; Survival. In the event any provision hereof shall be declared invalid, that provision shall be deemed severable from the remaining provisions of this Agreement, which shall remain in full force and effect. All sections or provisions of this Agreement with terms containing obligations or duties which by their nature are to be or may be performed beyond any termination hereof, shall survive the termination of this Agreement without regard to the reason for termination, including, without limitation, provisions relating to indemnification, liability, confidentiality, warranty, etc.

10.20 Third Party Benefits. Except as may be specifically provided for herein, no provision of this Agreement is intended or is to be construed to be for the benefit of any third party.

10.21 Force Majeure; Impracticability; Excuse. Contractor shall not be charged with any liability for failure to perform when such failure is due to any cause beyond the control and without the fault or negligence of Contractor, except that adverse weather shall not be deemed a cause beyond the control of Contractor for purposes of this Agreement unless the adverse weather is unusually severe; and provided that the Contractor shall have used its reasonable best efforts, and rendered to Owner prompt notice in writing when it appears that such cause will result in non-performance under this Agreement. If any such non-performance shall threaten to impair Owner's ability to operate, Owner shall have the right at its option and without being under any liability to Contractor to cancel by notice in writing to Contractor the portion or portions of the Work so affected and to take such compensatory action as may be necessary. Correspondingly, except for the obligation to make payments owed for Work performed, Owner shall be excused for failure of performance herein due to any cause beyond its control and without its fault or negligence.

10.22 Employee Solicitation. During the term of this Agreement and for a period of one (1) year thereafter, except with the prior written consent of the Company, Supplier shall not offer employment to any employee of the Company or Company’s current or future Affiliates with whom Supplier has had contact in connection with the negotiation, execution, or performance of this Agreement, and Supplier shall not induce or attempt to induce, directly or through an agent or third party, any such employee to leave the employ of the Company or its Affiliates. As used herein, the term “Affiliate” shall mean any person or entity controlling, controlled by, or under common control with the Company through majority stock or other ownership interest, direct or indirect. Nothing in this clause shall limit Supplier from employing any person who contacts Supplier on his or her own initiative and without any solicitation by Supplier specifically directed to such employee.

10.23 Ethics. Supplier shall comply with the AVANGRID Suppliers' Code of Ethics ("Suppliers' Code of Ethics") in connection with its performance under this Agreement. The Suppliers' Code of Ethics can be found at the AVANGRID website (www.avangrid.com).

10.24 Performance Monitoring. Company will evaluate Contractors performance by utilizing Contractor corrective action reports and Contractor performance evaluation reports. The Contractor must provide upon request the OSHA incident rate and Experience modification rate for Company's review. The Company's project manager will evaluate the Contractor's performance upon the conclusion of the Work by completing the specified report. The Company will continuously monitor the Contractor's performance. Performance by a Contractor that is less than desirable may potentially eliminate this Contractor from bidding on future projects and/or lump sum projects.

10.25 Continuous Improvement. Continuous improvement is the foundation of this Agreement. Contractor warrants that it will pass on to Company in the form of price reductions in material costs and the like. Contractor likewise will use its best efforts to improve continuously its performance in all areas. In particular, Contractor will evaluate opportunities for cost/price reductions on items and services ordered and to be ordered and communicate them promptly to Company. Contractor has specifically identified target cost reductions of 2% beyond the prices shown in Appendix B for the initial Term, and agrees to work diligently with Company personnel toward attainment of this objective. Contractor is expected to advance its economies of production, service, service delivery, material handling and technical prowess at least as fast as other competitors in its industry, and to offer the price and performance benefits of those improvements to Company, as soon as they become available."

10.26 No Dispute. Contractor covenants that it is not aware of any pending billing dispute or other contractual dispute (pursuant to current contracts or contracts no longer in effect) or any pending or threatened litigation between Contractor and/or any of Contractor's affiliates and Company and/or and of Company 's affiliates.

10.27 Contractor Security Requirements. Contractor is to comply with Company's Contractor Security Requirements in its performance of its Work for Company under this agreement.

Company Information:

(1) The term "Company Information" means all information, in any form: (i) furnished or made available directly or indirectly to Contractor by Company or its Affiliates, or otherwise obtained by Contractor from Company or its Affiliates, or (ii) obtained from Company or Company's Affiliates in connection with the performance of the Services.

(2) Company Information shall be and remain the property of Company or its Affiliate(s), as appropriate. Contractor shall not possess or assert any lien or other right

against or to Company Information. No Company Information, or any part thereof, shall be sold, assigned, leased, or otherwise disposed of or to third parties by the Contractor or commercially exploited by or on behalf of Contractor, its employees, or agents.

(3) Upon Company's request, the termination or expiration of this Agreement for any reason (including termination for cause) or, with respect to any particular Company Information, on such earlier date that the same shall be no longer required by Contractor in order to render the Services, Contractor shall promptly return to Company such Company Information (including copies thereof) in a form reasonably requested by Company or, if Company so elects, shall destroy such Company Information.

(4) Contractor shall not use Company Information for any purpose other than to render the Services.

(5) Contractor shall establish and maintain safeguards against the destruction, loss, alteration, or unauthorized use of Company Information which are equivalent to those “best practices” employed within the Contractor’s industry.

(6) Contractor shall be familiar with and comply with the requirements of the NERC CIP- 004 for projects at NYSEG and RGE bulk electric substations (>230Kv). The specific CIP Standard follows:

CIP-004 Excerpt:

R3. Personnel Risk Assessment --The Contractor shall have a documented personnel risk assessment program, in accordance with federal, state, provincial, and local laws, and subject to existing collective bargaining unit agreements, for personnel having authorized cyber or authorized unescorted physical access. A personnel risk assessment shall be conducted pursuant to that program prior to such personnel being granted such access except in specified circumstances such as an emergency. The personnel risk assessment program shall at a minimum include:

i. R3.1. The Contractor shall ensure that each assessment conducted include, at least, identity verification (e.g., Social Security Number verification in the U.S.) and seven-year criminal check. The Contractor may conduct more detailed reviews, as permitted by law and subject to existing collective bargaining unit agreements, depending upon the criticality of the position.

ii. R3.2. The Contractor shall update each personnel risk assessment at least every seven years after the initial personnel risk assessment or for cause.

iii. R3.3. The Contractor shall document the results of personnel risk assessments of its personnel having authorized cyber or authorized unescorted physical access to critical cyber assets, and that personnel risk assessments of contractor and service vendor personnel with such access are conducted pursuant to Standard CIP-004.

10.28 Publicity. In no event shall Owner's or its Affiliates' names and/or logo or the name and/or logo of it's parent company be used (whether such use be written or verbal), duplicated, or reproduced by any means whatsoever without the prior written permission of the Owner.

All inquiries by any governmental, business, or other entity, including media, regarding any Work performed or to be performed by Contractor for Owner shall be directed by Contractor to Owner for response.

10.29 Utilization of Small Business Concerns. Supplier and subcontractors of all tiers must comply with section 52.219-8 of the Federal Acquisition Regulation. This policy requires that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business, Alaskan Native Corporation, and Indian tribe concerns shall have the maximum practicable opportunity to participate in the performance of Services.

10.30 Small Business Subcontracting Plan. Some or all of the Goods and Services provided hereunder may be used in a contract with the federal government and, therefore, may be subject to the requirements of FAR section 52.219-9. If applicable, each Supplier (except small business concerns) whose contract is expected to exceed $650,000 ($1,500,000 for construction) and has subcontracting possibilities is required to submit an acceptable subcontracting plan to the Customer. The plan shall include spending goals with businesses that are defined by the U.S. Small Business Administration as small, women-owned small, veteran-owned small, service-disabled veteran-owned small, HUBZone, small disadvantaged (SDB), Alaskan Native Corporations, and Indian tribes. If the Supplier fails to submit a plan within the time limit prescribed by the Customer, Customer may terminate this Agreement.

The Supplier assures that the clause entitled "Small Business Subcontracting Plan" will be included in all subcontracts, that offer further subcontracting opportunities, and all subcontractors (except small business concerns) who receive subcontracts in excess of $650,000 ($1,500,000 for construction) will be required to adopt a plan similar to this plan.

ARTICLE 11 – ACCEPTANCE

This Agreement is accepted by the authorized representatives of the Owner and Contractor:

AVANGRID Service Company

DocuSigned by:
Robert Fitzgerald
4FC6C84F790A41A...
Signature

Robert Fitzgerald
Print

VP - Controler AGR Networks
Title

12/20/2019
Date

[redacted]

AVANGRID Service Company

DocuSigned by:
6DD6023F347F418...
Signature

Anthony Marone
Print

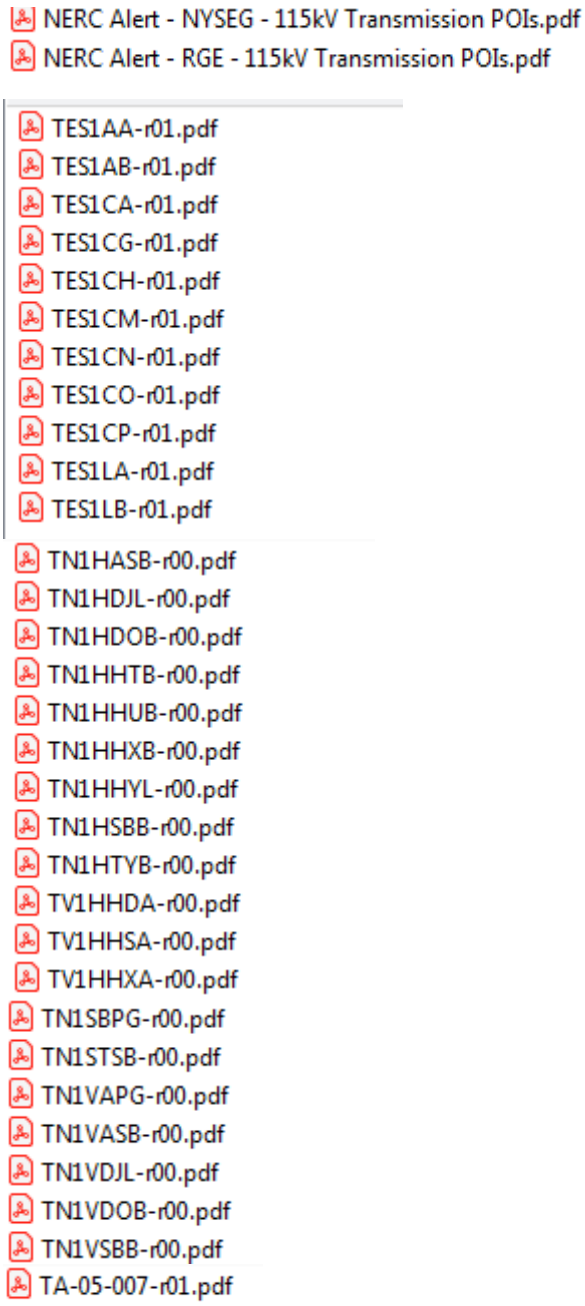
President & CEO
Title

12/23/2019
Date

APPENDIX A

Specifications and Schedule

Specifications per the following documents sent out during RFP tender process and all clarification rounds.



TM2.23.TD-02-001 Standard Setting Depth.pdf
TM2.23.TD-03-001 Foundation and Backfill Class 1 and Smaller.pdf
TM2.23.TD-03-002 Foundation and Backfill Class H1 and Larger and SP.pdf
TM2.23.TD-03-003 Backfill Materials.pdf
TM2.23.TD-04-001 Single Pole Setting Depth Side Slope.pdf
TM2.23.TD-04-002 H-Frame Setting Depth Side Slope.pdf

TF-01-004-r00.pdf
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TK-05-001-r00.pdf
TK-07-001-r01.pdf
TK-08-001-r00.pdf
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TK-08-004-r01.pdf

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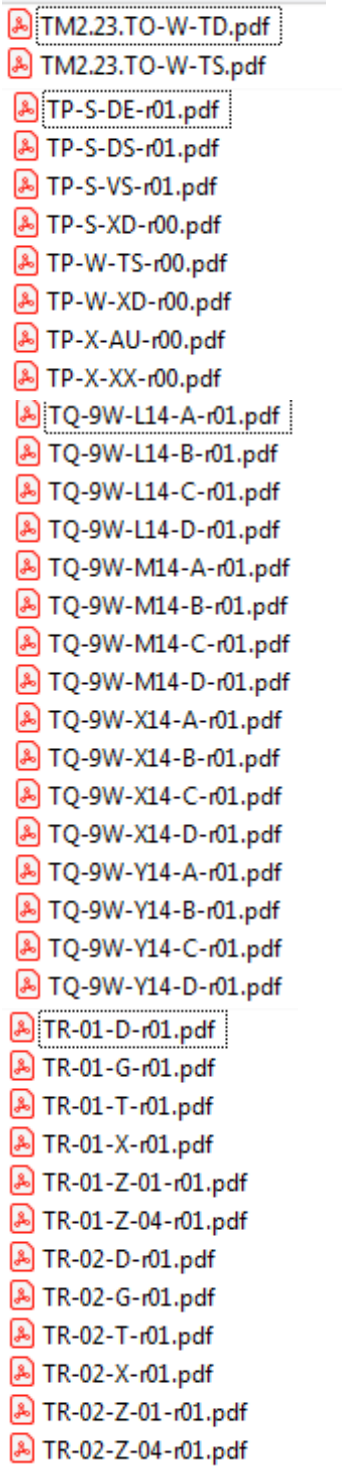
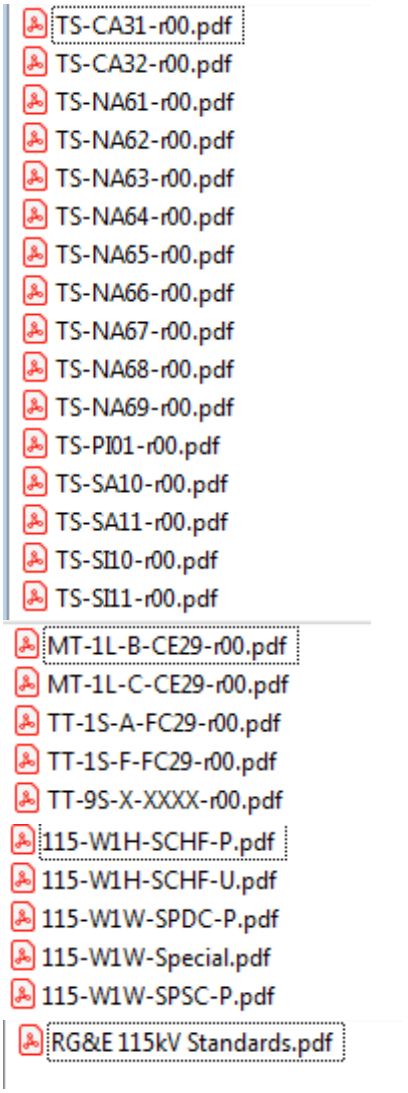
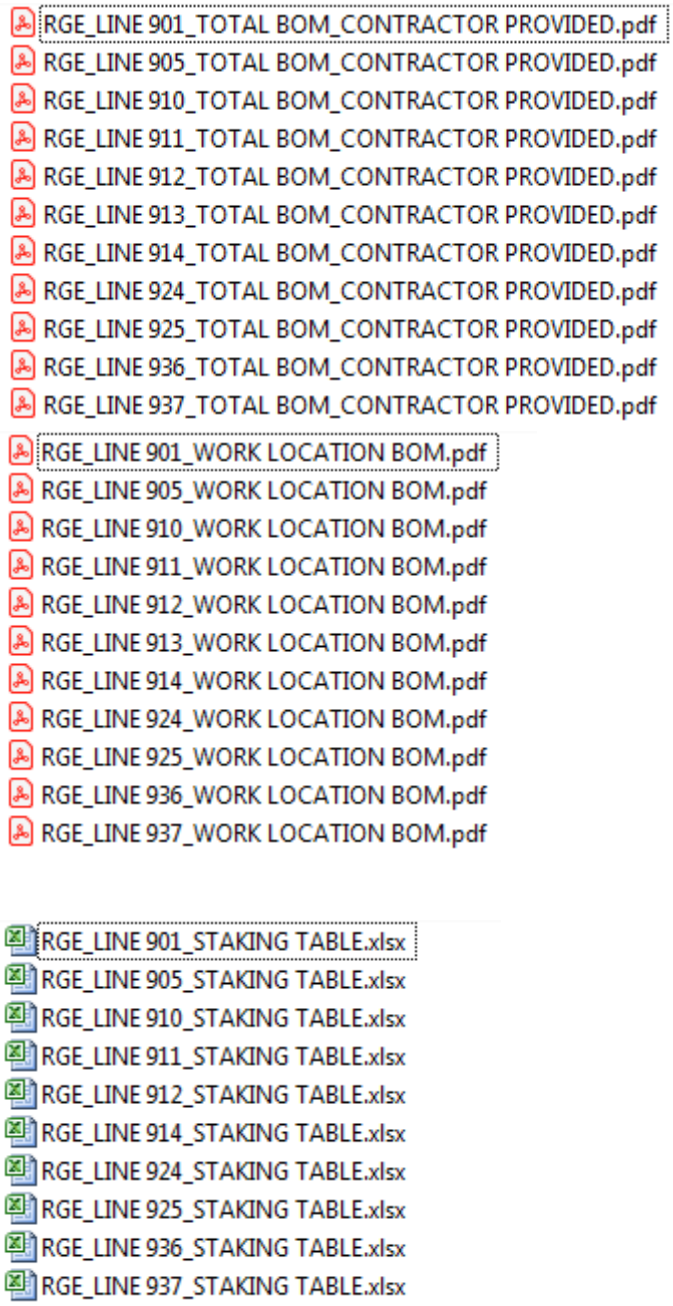
TL-06-001-r00.pdf
TL-07-001-r00.pdf

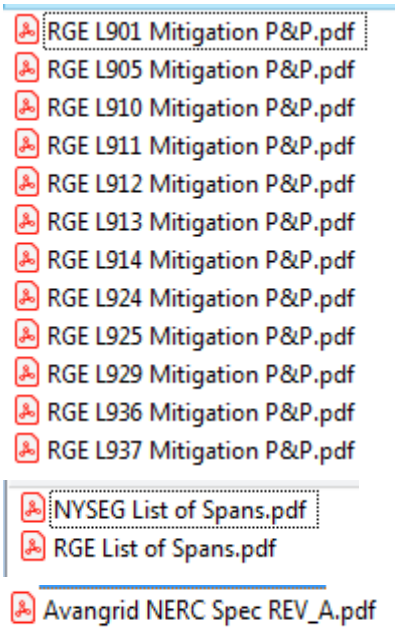


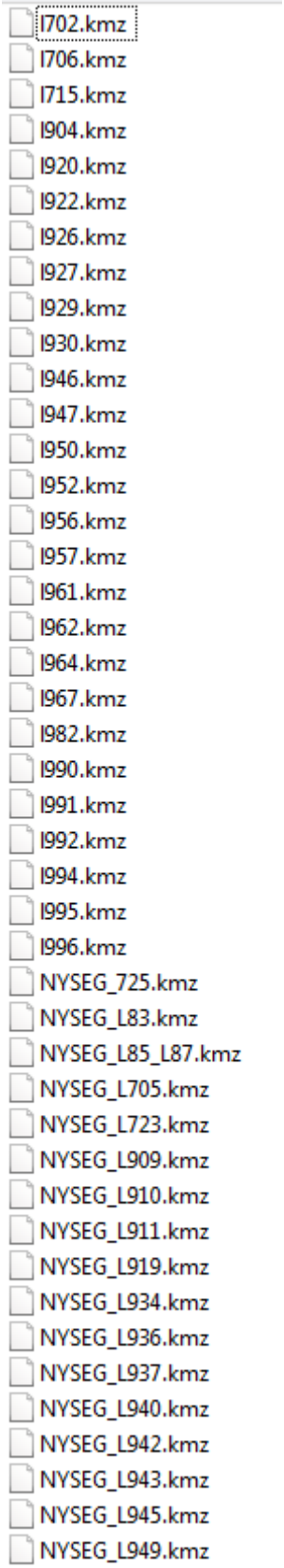


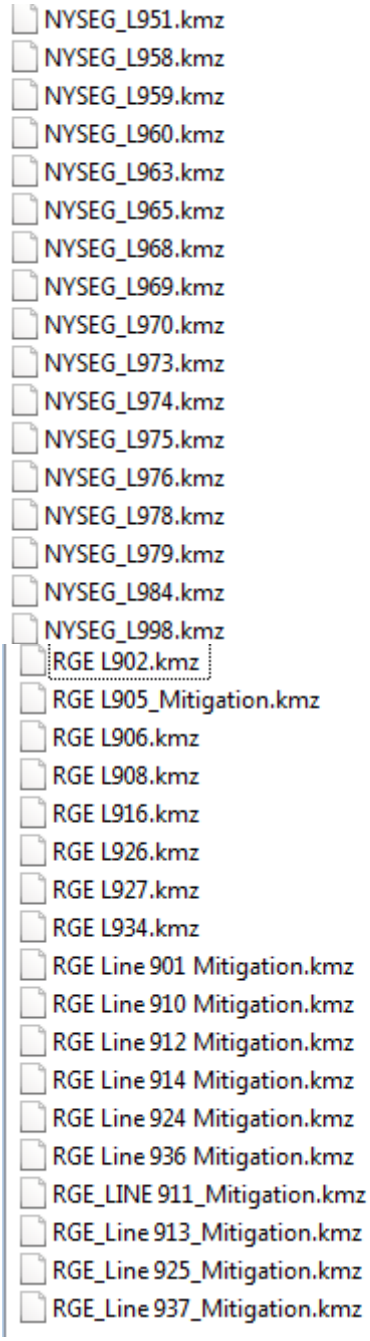
- ANSH-SOP.021 Contractor Safety Guide 2017 rev 1.pdf
- EFORM-CMP.001A PoleTransfer Agreement.pdf
- EFORM-CMP.001B Consumer Information Sheet.pdf
- Engineering Change Notice (ECN) Form.doc
- ESOP-CMP.003 Permitting Procedures.pdf
- ESOP-CMP.004 Spill Management and Prevention.pdf
- ESOP-CMP.005 Programs Rev 3-12-2015.pdf
- ESOP-IUSA.018 ED Construction Contractor Env Procedure.pdf
- ESOP-IUSA.021 Spill Management and Response for Contractors rev 0.pdf
- ESOP-NY.029 Container Requirements for Hazardous and Non-Hazardous Waste Rev 1.pdf
- Exceptions Form Template.xlsx
- Field Request for Engineering Change (FREC) Form.doc
- NERC 3 CMP Permitting Matrix 3-15-19.pdf
- NERC 3 CMP Permitting Summary 3-15-19.docx
- NERC 3 NYSEG Permitting Summary RFP 20190401.docx
- NERC 3 RGE Permitting Summary RFP 20190401.docx
- PENTA SDS.pdf
- Release for Energization Form.doc
- SFORM-IUSA.010 Contract Safety Hazards Checklist.pdf
- SOP.E-CD.E.05.05 Design Change Management.docx
- TM2.22.08 Porcelian Insulators Fittings Hardware.pdf

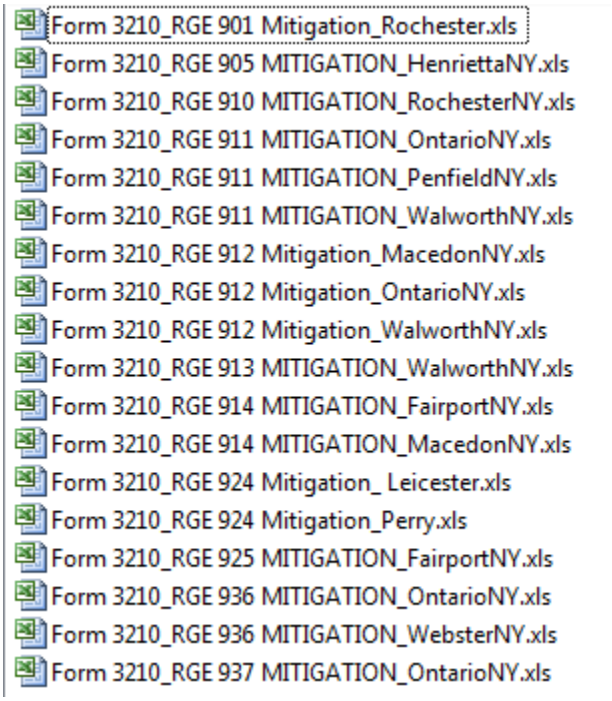
- RGE_LINE 901_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 905_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 910_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 911_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 912_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 913_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 914_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 924_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 925_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 936_TOTAL BOM_AVANGRID PROVIDED.pdf
- RGE_LINE 937_TOTAL BOM_AVANGRID PROVIDED.pdf

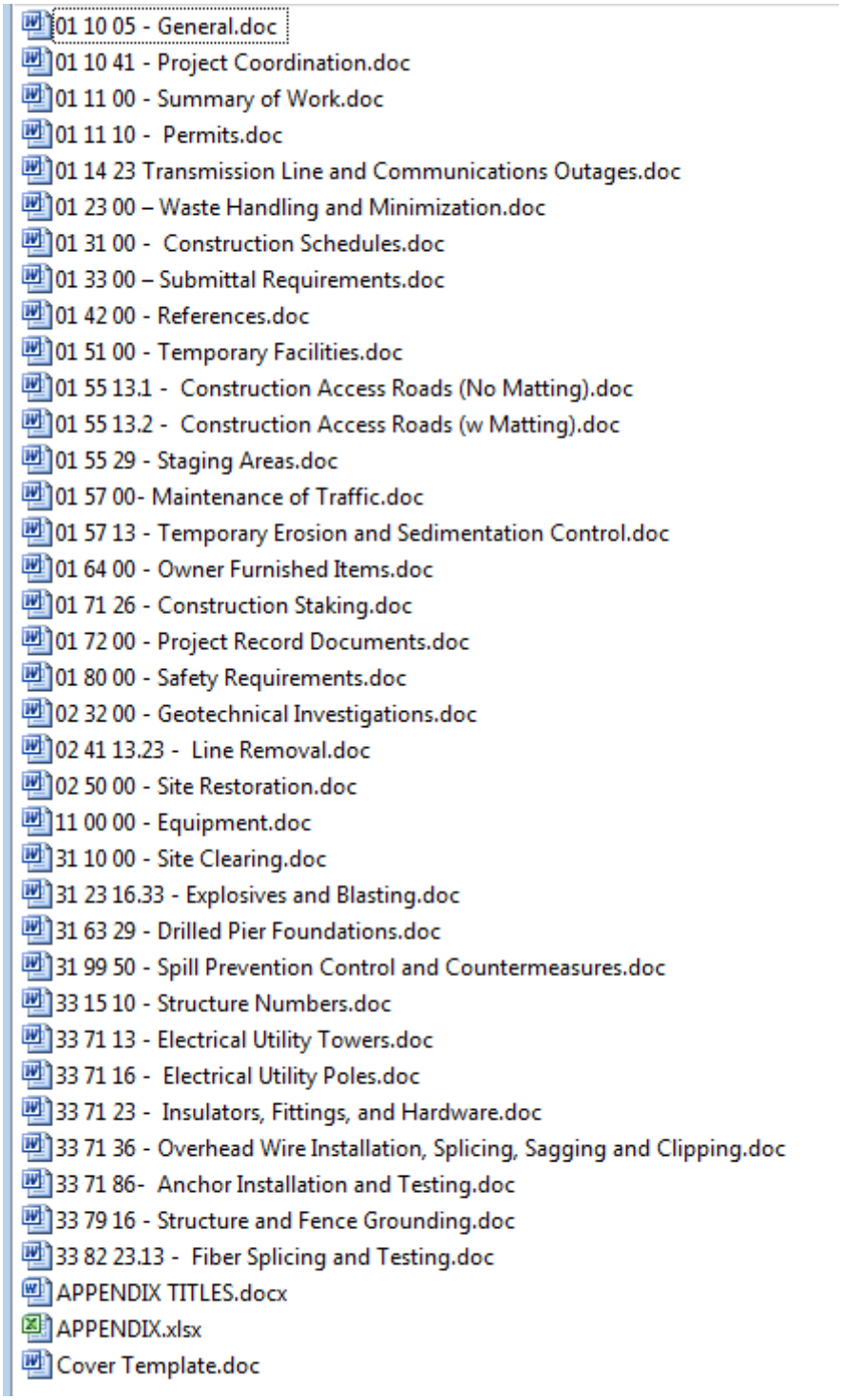








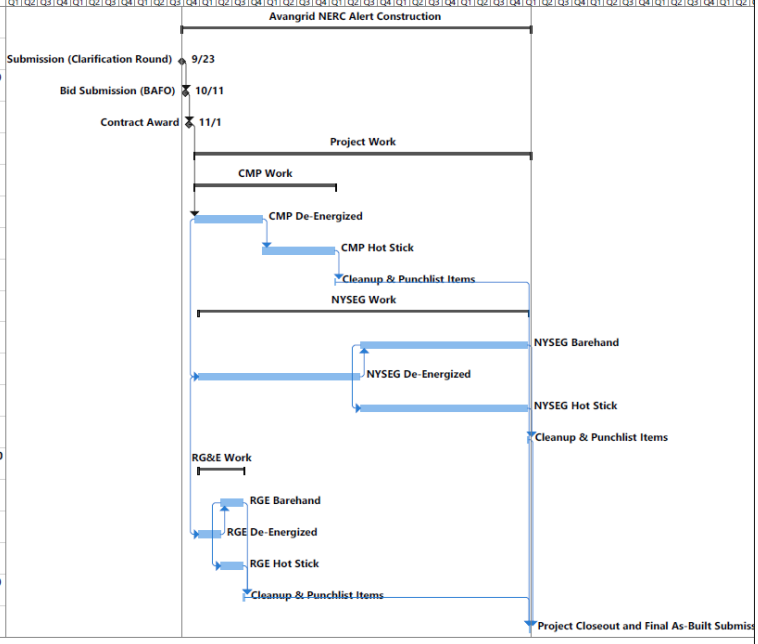




Estimated durations/schedule

subject to change with written confirmation from both Customer and Vendor

ID	Task Mode	Task Name	Duration	Start	Finish
1		**Avangrid NERC Alert Construction**	**1380 days**	**Mon 9/23/19**	**Fri 2/14/25**
2		Bid Submission (Clarification Round)	0 days	Mon 9/23/19	Mon 9/23/19
3		Bid Submission (BAFO)	0 days	Fri 10/11/19	Fri 10/11/19
4		Contract Award	0 days	Fri 11/1/19	Fri 11/1/19
5		**Project Work**	**1330 days**	**Wed 12/4/19**	**Fri 2/14/25**
6		**CMP Work**	**550 days**	**Wed 12/4/19**	**Tue 2/8/22**
7		CMP De-Energized	53 wks	Wed 12/4/19	Mon 12/21/20
8		CMP Hot Stick	56 wks	Tue 12/22/20	Tue 2/1/22
9		Cleanup & Punchlist Items	5 days	Wed 2/2/22	Tue 2/8/22
10		**NYSEG Work**	**1305 days**	**Thu 12/26/19**	**Fri 1/31/25**
11		NYSEG Barehand	134 wks	Mon 6/27/22	Fri 1/24/25
12		NYSEG De-Energized	126 wks	Thu 12/26/19	Fri 6/24/22
13		NYSEG Hot Stick	134 wks	Mon 6/27/22	Fri 1/24/25
14		Cleanup & Punchlist Items	5 days	Mon 1/27/25	Fri 1/31/25
15		**RG&E Work**	**180 days**	**Thu 12/26/19**	**Thu 9/10/20**
16		RGE Barehand	18 wks	Tue 4/28/20	Wed 9/2/20
17		RGE De-Energized	17 wks	Thu 12/26/19	Mon 4/27/20
18		RGE Hot Stick	18 wks	Tue 4/28/20	Wed 9/2/20
19		Cleanup & Punchlist Items	5 days	Thu 9/3/20	Thu 9/10/20
20		Project Closeout and Final As-Built Submissions	10 days	Mon 2/3/25	Fri 2/14/25



Project: Avangrid NERC Alert Pr
Date: Sun 9/22/19

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Progress | Manual Progress

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APPENDIX B

Agreement Sum and Payment Schedule

CLARIFICATIONS AND EXCEPTIONS
NERC Facility Rating Priority III
AVANGRID PROJECT MANAGER
1. Northline Utilities has not included the Matting/Access/Environmental units, as this is not our core business. We are able to provide these services through the use of Subcontractors if requested. Under this current submission, we are assuming that Avangrid will award the matting and access portion of this work under a separate agreement.
2. This work is assumed to be in project sequences, not as single point of work locations under the unit pricing provided.
3. Pole transport is expected to be 70' and below poles which do not need permitting for transport. Northline has not included permitting of any kind in our proposal pricing.
4. Mobilization shall be applicable when travel is greater than 50 miles from the previous structure work location (show up change)
5. Structure replacement units do not include plumbing of insulators on adjacent structures. If plumbing of insulators on adjacent structures is required, it can be completed under the unit prices.
6. Northline reserves the right to negotiate any and all contract terms and conditions not received at time of bid.
7. The pricing in this proposal does not include any provisions for bonding. Should Avangrid require payment and performance bonds, Northline will pass through the direct cost. As it is not common practice for Avangrid to require bonding on every project, we are prepared to comply with any requests to do so, however we do not want to inflate our pricing with bond costs if it is not required.
8. This proposal does not include any provision for PE stamped as-builts. The industry standard redlined drawings will be provided and we are prepared to cooperate with any additional requirements in the best interest of the project's success.

General Transmission Notes	
Item 1	**General Transmission Instructions**
	Pay CUs are a way to describe standard construction work accomplished for AVANGRID. They are to be used for routine Project and Program Work.
	Each activity must be completed in compliance with AVANGRID and national (IEEE/ANSI/ACI) standards as well as local, state, city, and federal laws and guidelines.

	Storm, Standby, Overtime and Premium time will be compensated by the applicable rates and/or Pay CU's and no payment will be rendered for activities not approved by the Company.
	Invoicing against purchase orders will occur on a monthly basis; only completed Pay CUs will be authorized for payment.
	The Pay CU "Labor Price per Unit" on the "TL PCUs" tab is to include the cost of all items under Items 2 and 5 below. A separate category of Pay CU for materials is provided, which shall capture the price of all materials to be supplied by the Contractor to build the Work. Please see Item 3 for more details.
	TM2.23.01 is AVANGRID's standard transmission construction RFP. This document shall be used in conjunction with the Pay CUs to allow the Contractor to understand the required scope of work.
	The Contractor's bid and work schedule shall be based on working up to 7 days a week during daylight hours. All premium pay shall be incorporated in the bid units.
	AVANGRID is not intending to pay stand-by time for weather related delays such as rain, snow or fog. The Contractor shall build all risk associated for these types of delays into the unit costs.
Item 2	**Each Transmission Pay CU shall be Priced to Include:**
	Administration, Supervision, and Management
	As-Built Documentation
	Delays (including weather)
	Environmental Compliance*
	Estimating
	Fuel
	General Traffic & Pedestrian Protection
	Labor & equipment required to complete each task
	Local or County Road Permit when required
	Miscellaneous consumable materials**
	Overhead
	Profit
	Safety Compliance
	Setting up working grounds
	Spoils Removal unless spoils are contaminated
	Travel***
	Work Area Protection
	QA/QC Costs- All work completed is expected to be delivered in a 100% correct state. The Contractors internal quality procedures should be priced within the Pay CUs. This might include things like point-to-point wiring checks, self-inspection, etc.
	As-built drawing markups for two sets of field drawings (any changes/errors noted in the field will be properly marked in red/green format on the prints)
	Auxiliary support equipment/devices are expected to delivered to the company in an operational status. While the final commissioning checks will be the responsibility of others, the company expects items like: HVAC, unit heaters, fire alarm system, receptacles/lighting, etc. will be delivered to the commissioning firm in a confirmed/operational state and initial IED programming completed to do so.
	Cleaning, Polishing, Painting, and other cosmetic tasks to deliver a visually complete product shall be within the scope of work.
*	Matting for right of ways will be provided by the company or added to the quote request if, and when, required by an environmental permit. Incidental matting (fiberglass or equivalent) for backyard/rear property access will be the responsibility of the Contractor and is included in the activity price.

**	Consumable materials shall be supplied by the Contractor and the price for consumables shall be included in the Pay CU pricing attached.
***	Show-Up Site is to be secured when travel is outside a 50-mile radius of the original or previous work location.
Item 3	**In general the following equipment will be supplied by AVANGRID for Transmission Projects (actual project requirements may vary):**
	Braces
	Crossarms
	Insulators
	Poles
	Structures
	Wire
	On various projects, the Contractor may be asked to provide various materials not in the list above. This may include items such as clamps, grounding, fasteners, and other miscellaneous hardware. These items shall be identified in the Specifications to be supplied by the Contractor. The cost of these items shall be included under the "Material Price per Unit" column of tab "TL PCUs."
Item 4	**General Transmission Material Details Supplied by Contractor**
	Highway - Work associated with functional locations accessible by typical wheeled equipment after consideration of incidental matting.
	Wheeled Transmission Equipment - Includes bucket trucks, digger derricks, pick-up trucks, pole trailers, and puller / tensioners (or equivalent equipment) used in the performance of electric line work. Larger equipment necessary to perform work on taller structures greater than 55-feet is considered specialized equipment.
	Off-Road - Work associated with functional locations (i.e. backyards, right-away, rear property or other locations) not accessible with wheeled transmission equipment. Off-Road work can be performed with typical off-road equipment or by climbing methods.
	Off-Road Transmission Equipment - Includes backyard machines and mini track equipment (or their equivalent) used in the performance of electric line distribution work. Larger track equipment necessary to access difficult right of ways or taller structures greater than 55-feet is considered specialized equipment.
	Transmission Cold – Is activity performed de-energized; ground(s) established.
	Transmission Hot – Is activity performed energized and includes removal of the original structure as part of the installation of the new structure.
	Specialized Equipment - Equipment not typically used in the performance of electric line transmission work either on the Highway or Off-Road. Specialized Equipment pricing is captured in the Equipment Tab.
	Standard Project - Recurring capital work of the Business that specifies the usual way to build common facilities based on existing AVANGRID Standards. Standard Projects are used as the reference for both building Network Infrastructures and defining the specific activities to be performed.
	Program Work - Routine work driven by inspection or assets management programs. Program Work often includes pole or material replacement work within a defined area.
Item 5	**Transmission Consumables**
	In general, the material supply column has been provided to help the Contractor understand what major materials the Owner will supply. In addition, a non-binding list of what is generally expected to be consumables to be provided by the Contractor has been provided below and must be included in the Pay CU price. Again, the general idea is that if a consumable is needed to do a job and it is not mentioned in this spreadsheet the bidder shall assume its price is to be included in the Pay CU (i.e. it is intent of the Owner that the Contractor deliver complete and functional units of production):
	Tape (all types)

	Drill bits and taps/dies
	Porta band blades
	Wire/cable identification tags
	Rags
	Extension cords
	All tooling/equipment
	Rain Equipment
	Drinking water (none available)
	Penetrox
	Tie Wraps
	Caulking
	Duct Seal/Foam Sealant
	SAFETY ITEMS:
	safety glasses
	hart hats
	gloves (work and cut resistant)
	hi-visibility vests
	ear plugs
	first aid kit
	safety harness
	FR coveralls/clothing
	safety grounds (Contractor to supply their own)
	Batteries for equipment
	Wire nuts (as needed)
	Miscellaneous mounting hardware, nuts, bolts ect.
	Cross-Arm Extensions; running/stringing blocks and pulling sisal cord for Reconductoring Projects
	Brushes/applicators
	Sanitary facilities
	Contractor to provide final detailed list of their transmission consumables as part of their bid.
Item 6	**Standby and Storm Support Pay CU's**
	Pay CUs allow AVANGRID to capture Contractor costs when contract crews are requested to Standby during inclement weather in order to be available for possible storm restoration efforts. If a storm event does occur and contract crews are assigned storm duties, the Storm Labor and Equipment Rates would then become applicable and invoiced accordingly.

TRANSMISSION LABOR RATES TO BE APPLIED TO LABOR & EQUIPMENT BIDS						
		STRAIGHT TIME HOURLY		OVERTIME LABOR PRICE		STORM LABOR PRICE
Pay Item Description	**UNIT**	**Hourly Labor Price**		**Hourly Labor Price**		**Hourly Labor Price**
FIELD/SUPERINTENDENT - 1249	Man-Hour					

GENERAL FOREMAN - 1249	Man-Hour	[redacted]
NON-WORKING FOREMAN - 1249	Man-Hour	
WORKING FOREMAN - 1249	Man-Hour	
JOURNEYMAN LINEMAN - 1249	Man-Hour	
7TH STEP APPRENTICE - 1249	Man-Hour	
6TH STEP APPRENTICE - 1249	Man-Hour	
5TH STEP APPRENTICE - 1249	Man-Hour	
4TH STEP APPRENTICE - 1249	Man-Hour	
3RD STEP APPRENTICE - 1249	Man-Hour	
2ND STEP APPRENTICE - 1249	Man-Hour	
1ST STEP APPRENTICE - 1249	Man-Hour	
DIGGING MACH OPERATOR - 1249	Man-Hour	
CHIEF MECHANIC - 1249	Man-Hour	
MECHANIC FIRST CLASS - 1249	Man-Hour	
MECHANIC HELPER - 1249	Man-Hour	
GROUNDMAN TRDR - TT - 1249	Man-Hour	
GROUNDMAN TRDR - 1249	Man-Hour	
GROUNDMAN - 1249	Man-Hour	
FLAGMAN - 1249	Man-Hour	
FIELD/SUPERINTENDENT - 104N	Man-Hour	
GENERAL FOREMAN - 104N	Man-Hour	
FOREMAN - 104N	Man-Hour	
HEAD LINEMAN - 104N	Man-Hour	
JOURNEYMAN LINEMAN/SPLICER - 104N	Man-Hour	
7TH STEP APPRENTICE - 104N	Man-Hour	

6TH STEP APPRENTICE - 104N	Man-Hour	[redacted]
5TH STEP APPRENTICE - 104N	Man-Hour	
4TH STEP APPRENTICE - 104N	Man-Hour	
3RD STEP APPRENTICE - 104N	Man-Hour	
2ND STEP APPRENTICE - 104N	Man-Hour	
1ST STEP APPRENTICE - 104N	Man-Hour	
EQUIPMENT OPERATOR (A) - 104N	Man-Hour	
EQUIPMEMT OPERATOR (B) - 104N	Man-Hour	
CABLEMAN - 104N	Man-Hour	
DRIVER GROUNDMAN CDL - 104N	Man-Hour	
INEXPERIENCE DRIVER GROUNDMAN - 104N	Man-Hour	
CABLE TECHNICIAN - 104N	Man-Hour	
GROUNDMAN - 104N	Man-Hour	
INEXPERIENCED GROUNDMAN - 104N	Man-Hour	
FIELD/SUPERINTENDENT - 42	Man-Hour	
GENERAL FOREMAN - 42	Man-Hour	
FOREMAN - 42	Man-Hour	
LEAD LINEMAN - 42	Man-Hour	
CABLE SPLICER - 42	Man-Hour	
DYNAMITE MAN - 42	Man-Hour	
JOURNEYMAN LINEMAN - 42	Man-Hour	
7TH STEP APPRENTICE - 42	Man-Hour	
6TH STEP APPRENTICE - 42	Man-Hour	
5TH STEP APPRENTICE - 42	Man-Hour	
4TH STEP APPRENTICE - 42	Man-Hour	

3RD STEP APPRENTICE - 42	Man-Hour	[redacted]
2ND STEP APPRENTICE - 42	Man-Hour	
1ST STEP APPRENTICE - 42	Man-Hour	
HEAVY EQUIPMENT OPERATOR - 42	Man-Hour	
MAT. MAN, TT DRIVER - 42	Man-Hour	
EQUIP. OPERATOR/F.MECH (A) - 42	Man-Hour	
DRIVER GROUNDMAN CDL - 42	Man-Hour	
FIELD MECHANIC (B) - 42	Man-Hour	
FIELD MECHANIC (C) - 42	Man-Hour	
GROUNDMAN EXPERIENCED - 42	Man-Hour	
1st YEAR GROUNDMAN - 42	Man-Hour	
FLAGMAN - 42	Man-Hour	

PAY ITEM DESCRIPTION	
10 ton crane (rubber tired)	[redacted]
30 ton crane (rubber tired)	
50 ton crane (rubber tired)	
60 ton wire press	
ATV 4WD	
ATV 6 by	
Backhoe-4ws ext.1/2	
Backhoe-Truck 3/4 yd	
Bucket Truck - 39' Bucket Rubber Tired	
Bucket truck - 55' Bucket Rubber Tired	
Bucket truck - 70' Bucket Rubber Tired	
Cable Plow (small)	
Compressor 185 CFM	
Crew Cab Truck 3/4 ton 4x4	
D4H Bulldozer or equivalent	
D6 equivalent bulldozer	
D8 equivalent bulldozer	
Digger derrick rubber tired 45 ft	
Digger truck with ledge bore attached On Rd 20 Dia Hole max	
Directional Drill	
Excavator-Track/Crawl 26000 lb	

Generator-4-5k watts	[redacted]
Hoe Ram (No Machine)	
Material lift bucket truck (55Ft Rubber tired)	
Pump-3"centr.w/hoses	
Road Plates	
Rodding machine 300 ft hand	
Snowmobile	
Track bucket 125 foot handler	
Track bucket 85 foot handler	
Track bucket, 55' foot handler	
Track digger 45 ft	
Truck-10yd dump w/ no driver	
Truck-6yd dump w/ no driver	
Truck-Cable. Reel/Winch	
Truck-Pick Up F150 1500 4x4 crew	
Truck-Stake Body 4x4 crew	
Welding Truck	
Wire puller (hydra dyne) single reel 4 k	
Wire trailer single reel	
Track bucket 85 to 100' foot MH handler	
Track Digger 60'	
Track Crane 26 ton	
Flex Dump 4 yard	
Trailer- 20ton	
Material lift bucket truck (105 ft Rubber tired)	
Truck Line or Main 60 ft 6x6 Rubber tired	
Trailer- 7 ton for skid steers and ATV	
skid steer with bucket and forks	
Mechanic truck4x4 with tools	
Wire puller 2 K single drum	
Wire puller 6K single drum	
Wire puller 2 K four drum	
Wire puller 4K four drum	
wire trailer three position	
Tensioner 52 single conductor	
Lull Fork lift 8000 LBS	
Intenuator Crash Truck for Work Area Protection	
Hot stick trailer 69 to 230 KV	
60 LB Pavement breaker with 185 CFM compressor	
Road Tractor	
Trailer-55Ton	

NYSEG Barehand PayCU's

PayCU	CATEGORY	PayCU ACTIVITY	PayCU ITEM DESCRIPTION	UNIT	Labor Price per Unit

TOHAN001	TAnchorandGuy	Install Single Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 84" rod extension.	
TOHAN002	TAnchorandGuy	Remove Helical Anchor	Unscrew or excavate and cut off rod below ground line if necessary. Includes single, double, triple or quad helical anchor. Backfill and tamp if excavated.	
TOHAN005	TAnchorandGuy	Install Expanding Rock Anchor	Dig to subsurface rock; drill rock; install anchor and rod; test, backfill and tamp.	
TOHAN006	TAnchorandGuy	Remove Expanding Rock Anchor	Excavate around anchor rod. Loosen and remove or cut off rod below ground line. Backfill and tamp.	
	TAnchorandGuy	Install Guy Strain Insulator	Insert guy strain insulator and continue installation.	
	TAnchorandGuy	Install Down Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Down Guy Hot	Complete removal of guy strand, fitting and attachments when required.	
TOHGU003	TAnchorandGuy	Transfer Down Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Aerial Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Aerial Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Double Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 59" rod extension.	
TOHW001	TConductor	Setup Transmission Wire Pull Cold	Includes all activities required to prepare to run wire: positioning Puller/Tensioners; pulling in Cable Rope.	
TOHW002	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire for spans up to 500-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	

TOHW003	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire between 500 and 750-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	[redacted]
	TConductor	Transfer Transmission Wire 115 kV Hot - BAREHAND	Move existing conductor to new location on pole or to new pole at old location. Temporary jumpers if needed are included. The labor for this work is identified as one conductor transferred and tied for each conductor or neutral involved. Wire and include phase conductors, OPGW and OHSW.	
TOHW014	TConductor	Replace 115kv post Insulator Cold	Un-clamp conductor from insulator. Remove insulator from pole or bracket as required. Replace insulator on arm, pole or bracket and align with conductor; clamp conductor to insulator. Unit is to be used when Framing is not included.	
	TConductor	Replace Suspension Clamp Conductor, Single Conductor - Hot - BAREHAND	Rig and un-clamp conductor from insulator. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Suspension Clamp Conductor, Single Conductor, Double Angle - Hot - BAREHAND	Rig and un-clamp conductors from insulator. Remove and replace both suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamps with associated hardware, attach to insulator and remove rigging. Price per double bundle clamp assembly. Energized line.	
	TConductor	Replace Deadend Mechanical Clamp Conductor, Single Conductor - Hot - BAREHAND	Rig and un-clamp conductor from insulator. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new deadend mechanical clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Suspension Clamp OHSW, Single Conductor - Hot - BAREHAND	Rig and un-clamp OHSW from attachment hardware. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Suspension Clamp OHSW, Single Conduct or, Double Angle - Hot - BAREHAND	Rig and un-clamp OHSW from attachment hardware. Remove and replace suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	

	TConductor	Replace Suspension Clamp OPGW, Single Conductor - Hot - BAREHAND	Rig and un-clamp OPGW from attachment hardware. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	[redacted]
	TConductor	Replace Suspension Clamp OPGW, Single Conductor, Double Angle - Hot - BAREHAND	Rig and un-clamp OPGW from attachment hardware. Remove and replace suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Deadend Mechanical Clamp OHSW, Single Wire - Hot - BAREHAND	Rig and un-clamp OHSW from attachment hardware. Remove and replace deadend clamp, along with any associated hardware (clevis, etc). Install new deadend mechanical clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Formed Deadend Clamp OPGW, Single Wire - Hot - BAREHAND	Rig and un-clamp OPGW from attachment hardware. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new formed deadend clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TFraming	Replace cross arm assembly on 115kv H-Frame Structure Hot - BAREHAND	Remove existing wood arms and knee and vee braces. Loosen bolts, disconnect, lower/support wires, remove framing, disassemble and lower to ground. Assemble steel cross arm assembly including arm and all bracing. Measure and drill poles as necessary, put in position and bolt to poles. Include insulators, wire clamps and armor rod. Clip in wires and connect to down ground.	
TOHFR030	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Deadend - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Single Circuit 115kv/230kV/345kV Three Poles and H-Frame - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Loosen bolts, remove and disassemble.	

	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Suspension Davit Arm Construction Replacement Structure Hot - BAREHAND	Construct/Frame pole top w/arm(s). Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Braced Post Construction Replacement Structure Hot - BAREHAND	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Wood Pole - Static Wire - Angle - Suspension New Construction Hot - BAREHAND	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Pole Single Circuit 115/230kV Framing angle Dead End (vertical configuration) Replacement Structure Hot - BAREHAND	Construct/Frame pole top w/insulator attachments and pole bands. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR098	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Angle Structure - Braced Post 0° To 10° Construction Replacement Structure Hot - BAREHAND	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR096	TFraming115kV	Install Single Pole Single Circuit 115kv Framing 20° To 45° angle suspension (vertical configuration) Replacement Structure Hot - BAREHAND	Construct/Frame pole top w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR099	TFraming115kV	Install Single Pole Single Circuit 115kV Framing 25° To 60° angle dead end (vertical configuration) Replacement Structure Hot - BAREHAND	Construct/Frame pole top w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for	

			roundwood or laminated wood pole structure.	[redacted]
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; <= 75-FT Replacement Structure Hot - BAREHAND	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; > 75-FT - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/arm(s) and 2 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent dead end construction; <= 75-FT - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install 3 pole Single Circuit 115kv Framing - angle suspension construction - Swinging Brackets 3° to 20° - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - large running angle suspension construction, 20° to 45° - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - Angle Dead End Construction, 60° and less. - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR202	TFraming115kV	Install Three Pole Wood Single Circuit 115kV Transposition Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Angle Structure 10° to 20° Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Three Pole Wood Single Circuit 115kV Dead End Structure Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; > 75-FT - Replacement Structure HOT - BAREHAND	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; <= 75-FT - Replacement Structure HOT - BAREHAND	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; <= 75-FT New Construction HOT - BAREHAND	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

	TFraming115kV	Install (1) X-Brace 115kv - HOT	Assemble and install new X-Brace and all associated hardware on existing structure. Measure and drill pole as necessary, put in position and bolt to poles. Assume structure can have roundwood or laminated wood poles.	[redacted]
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Tangent - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Tangent - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Replace Hot Tangent String Insulators - BAREHAND	Rig and un-clamp conductor from insulator string. Remove and replace tangent string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
	TFraming115kV	Replace Hot Dead-End String of Insulators - BAREHAND	Rig and un-clamp conductor from insulator string. Remove and replace deadend string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
TOHPO002	TPole	Install <=70' Pole Hot, Highway	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Digger/Derrick can be set up roadside within right-of-way. Assume pole can either be roundwood or laminated wood.	
TOHPO004	TPole	Install >70' & <=90' Pole Hot, Highway	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Digger/Derrick can be set up roadside within right-of-way. Assume pole can either be roundwood or laminated wood.	

TOHPO008	TPole	Install <=70' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	[redacted]
TOHPO010	TPole	Install >70' & <=90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO012	TPole	Install >90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO014	TPole	Remove Pole, Hot Highway	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO016	TPole	Remove Pole, Hot Off Road	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO018	TPole	Install Rock Hole	Ledge or rock that requires rock drill to complete. To be used with Install Poles	
TOHPO019	TPole	Abandon Pole Hole	Hole abandon because of rock or other utilities. Backfill and tamp hole and dispose of excess excavate if necessary	
TOHPO020	TPole	Install Select Backfill	Installation of select backfill where required in place of native backfill. To be used with Install Poles	
TOHPO021	TPole	Hand Dig Pole	Hand Dig - Mechanical digger cannot be used or Dig Safe clearance is not obtained	
	TPole	Install Crushed Stone Backfill	Installation of crushed stone backfill where required in place of native backfill. To be used with Install Poles	
	TPole	Install Rock Backfill	Installation of rock backfill where required in place of native backfill. To be used with Install Poles	
BPUT008	TUtilities	Traffic Control Zone for Job Site	Setting up job site road side protection including advance warning, transition and termination areas; signage and cone layout as required by location or highway permit. Must conform to U.S. DOT Manual on Uniform Traffic Control Devices (MUTCD).	
BPUT009	TUtilities	1 Flagger	Not used for incidental flagging associated with equipment/material unloading or equipment entering or leaving highway.	

BPUT016	TUtilities	Maintain Right-Of-Way Access Point	Mowing, snow plowing, debris removal (dumped garbage, tires, down tree limbs, excessive underbrush growth, etc.)	[redacted]
BPUT017	TUtilities	Woodland Facility	Material Inventory and rotation (poles, bracing, cross-arms, insulators, wire, and associated hardware inventory)	
BPUT018	TUtilities	Woodland Facility	Yard maintenance (mowing, snow plowing, and debris removal)	
BPUT019	TUtilities	Woodland Facility	Fence and access gate maintenance, building cleanliness and supplies, OSHA safety measures (Lighting, exit signs, smoke and CO alarms)	
	TUtilities	Conduct fiber optic end to end test.	Conduct end to end test of installed OPGW or ADSS fiber optic cable between two end points of the completed fiber optic path for adherence to Owner requirements. Includes testing once all splicing work had bene done.	
TOHMO002	Mobilization	Mobilization to work site / Line - LARGE PROJECT - Greater than $100k	Price to includes but not limited to: - Mobilization of manpower, tools, storage containers and equipment. - Overhead costs for the duration of the project	
TOHMO003	Mobilization	Demobilization from work site / Line	Price to include but not limited to: - Demobilization of Manpower, Tools, Storage Containers and Equipment. - Disassembly, removal and restoration of temporary installations (Office Trailers, Parking Areas, etc:) - Light restoration of land use back to original conditions.	

NYSEG De-Energized PayCU's

PayCU	CATEGORY	PayCU ACTIVITY	PayCU ITEM DESCRIPTION	UNIT	Labor Price per Unit
TOHAN001	TAnchorandGuy	Install Single Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 84" rod extension.		[redacted]
TOHAN002	TAnchorandGuy	Remove Helical Anchor	Unscrew or excavate and cut off rod below ground line if necessary. Includes single, double, triple or quad helical anchor. Backfill and tamp if excavated.		
TOHAN005	TAnchorandGuy	Install Expanding Rock Anchor	Dig to subsurface rock; drill rock; install anchor and rod; test, backfill and tamp.		
TOHAN006	TAnchorandGuy	Remove Expanding Rock Anchor	Excavate around anchor rod. Loosen and remove or cut off rod below ground line. Backfill and tamp.		
	TAnchorandGuy	Install Guy Strain Insulator	Insert guy strain insulator and continue installation.		
TOHGU001	TAnchorandGuy	Install Down Guy Cold	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.		

TOHGU002	TAnchorandGuy	Remove Down Guy Cold	Complete removal of guy strand, fitting and attachments when required.	[redacted]
TOHGU003	TAnchorandGuy	Transfer Down Guy Cold	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Aerial Guy Cold	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Aerial Guy Cold	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Double Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 59" rod extension.	
TOHW001	TConductor	Setup Transmission Wire Pull Cold	Includes all activities required to prepare to run wire: positioning Puller/Tensioners; pulling in Cable Rope.	
TOHW002	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire for spans up to 500-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	
TOHW003	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire between 500 and 750-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	
TOHW010	TConductor	Transfer Transmission Wire 115 kV Cold	Move existing conductor to new location on pole or to new pole at old location. Temporary jumpers if needed are included. The labor for this work is identified as one conductor transferred and tied for each conductor or neutral involved. Wire and include phase conductors, OPGW and OHSW.	
TOHW014	TConductor	Replace 115kv post Insulator Cold	Un-clamp conductor from insulator. Remove insulator from pole or bracket as required. Replace insulator on arm, pole or bracket and align with conductor; clamp conductor to insulator. Unit is to be used when Framing is not included.	
	TConductor	Replace Suspension Clamp Conductor, Single Conductor - Cold	Rig and un-clamp conductor from insulator. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. De-energized line.	

	TConductor	Replace Suspension Clamp Conductor, Single Conductor, Double Angle - Cold	Rig and un-clamp conductors from insulator. Remove and replace both suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamps with associated hardware, attach to insulator and remove rigging. Price per double bundle clamp assembly. De-energized line.	
	TConductor	Replace Deadend Mechanical Clamp Conductor, Single Conductor - Cold	Rig and un-clamp conductor from insulator. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new deadend mechanical clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Suspension Clamp OHSW, Single Wire - Cold	Rig and un-clamp OHSW from attachment hardware. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Suspension Clamp OHSW, Single Wire, Double Angle - Cold	Rig and un-clamp OHSW from attachment hardware. Remove and replace suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Suspension Clamp OPGW, Single Wire - Cold	Rig and un-clamp OPGW from attachment hardware. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Suspension Clamp OPGW, Single Wire, Double Angle - Cold	Rig and un-clamp OPGW from attachment hardware. Remove and replace suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Deadend Mechanical Clamp OHSW, Single Wire - Cold	Rig and un-clamp OHSW from attachment hardware. Remove and replace deadend clamp, along with any associated hardware (clevis, etc). Install new deadend mechanical clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Formed Deadend Clamp OPGW, Single Wire - Cold	Rig and un-clamp OPGW from attachment hardware. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new formed deadend clamp with associated hardware, attach to attachment hardware and remove rigging.	

			Price per clamp assembly. De-energized line.	[redacted]		
	TFraming	Replace cross arm assembly on 115kv H-Frame Structure Cold	Remove existing wood arms and knee and vee braces. Loosen bolts, disconnect, lower/support wires, remove framing, disassemble and lower to ground. Assemble steel cross arm assembly including arm and all bracing. Measure and drill poles as necessary, put in position and bolt to poles. Include insulators, wire clamps and armor rod. Clip in wires and connect to down ground.			
TOHFR014	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Suspension Davit Arm Construction New Construction Cold	Construct/Frame pole top w/arm(s). Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.			
	TFraming115kV	Install Single Wood Pole - Static Wire - Angle - Suspension New Construction Cold	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in static wire(s). Install for roundwood or laminated wood pole structure.			
TOHFR015	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Braced Post Construction New Construction Cold	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.			
TOHFR020	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; <= 75-FT New Construction Cold	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.			
TOHFR021	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; > 75-FT - New Construction Cold	Construct/Frame structure w/arm(s) and 2 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.			

TOHFR022	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent dead end construction; <= 75-FT New Construction Cold	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR023	TFraming115kV	Install 3 pole Single Circuit 115kv Framing - angle suspension construction - Swinging Brackets 30 to 200 New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR029	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Tangent - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
TOHFR030	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
TOHFR043	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Angle Structure - Braced Post 0° To 10° Construction New Construction Cold	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR050	TFraming115kV	Install 3 pole Framing Single Circuit 115kv - large running angle suspension construction 20° to 45° New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR051	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - Angle Dead End Construction, 60° and less. New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR069	TFraming115kV	Remove Single Circuit 115kv/230kV/345kV Three Poles and H-Frame - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Loosen bolts, remove and disassemble.	[redacted]
TOHFR096	TFraming115kV	Install Single Pole Single Circuit 115kv Framing 20° To 45° angle suspension (vertical configuration) Replacement Structure Cold	Construct/Frame pole top w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR097	TFraming115kV	Install Single Pole Single Circuit 115/230kV Framing angle Dead End (vertical configuration) Replacement Structure Cold	Construct/Frame pole top w/insulator attachments and pole bands. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR099	TFraming115kV	Install Single Pole Single Circuit 115kV Framing 25° To 60° angle dead end (vertical configuration) Replacement Structure Cold	Construct/Frame pole top w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR200	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Angle Structure 10° to 20° New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR201	TFraming115kV	Install Three Pole Wood Single Circuit 115kV Dead End Structure New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR202	TFraming115kV	Install Three Pole Wood Single Circuit 115kV Transposition Structure New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR225	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; > 75-FT - Replacement Structure COLD	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR227	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; <= 75-FT - Replacement Structure COLD	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; <= 75-FT New Construction COLD	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install (1) X-Brace 115kv - COLD	Assemble and install new X-Brace and all associated hardware on existing structure. Measure and drill pole as necessary, put in position and bolt to poles. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Tangent - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Replace Tangent String Insulators - Cold	Rig and un-clamp conductor from insulator string. Remove and replace tangent string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	

	TFraming115kV	Replace Dead-End String of Insulators - Cold	Rig and un-clamp conductor from insulator string. Remove and replace deadend string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	[redacted]
TOHPO001	TPole	Install <=70' Pole Cold, Highway	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Digger/Derrick can be set up roadside within right-of-way. Assume pole can either be roundwood or laminated wood.	
TOHPO003	TPole	Install >70' & <=90' Pole Cold, Highway	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Digger/Derrick can be set up roadside within right-of-way. Assume pole can either be roundwood or laminated wood.	
TOHPO007	TPole	Install <=70' Pole Cold, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO009	TPole	Install >70' & <=90' Pole Cold, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO011	TPole	Install >90' Pole Cold, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO013	TPole	Remove Pole, Cold Highway	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO015	TPole	Remove Pole, Cold Off Road	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO018	TPole	Install Rock Hole	Ledge or rock that requires rock drill to complete. To be used with Install Poles	

TOHPO019	TPole	Abandon Pole Hole	Hole abandon because of rock or other utilities. Backfill and tamp hole and dispose of excess excavate if necessary	[redacted]
TOHPO020	TPole	Install Select Backfill	Installation of select backfill where required in place of native backfill. To be used with Install Poles	
TOHPO021	TPole	Hand Dig Pole	Hand Dig - Mechanical digger cannot be used or Dig Safe clearance is not obtained	
	TPole	Install Crushed Stone Backfill	Installation of crushed stone backfill where required in place of native backfill. To be used with Install Poles	
	TPole	Install Rock Backfill	Installation of rock backfill where required in place of native backfill. To be used with Install Poles	
BPUT008	TUtilities	Traffic Control Zone for Job Site	Setting up job site road side protection including advance warning, transition and termination areas; signage and cone layout as required by location or highway permit. Must conform to U.S. DOT Manual on Uniform Traffic Control Devices (MUTCD).	
BPUT009	TUtilities	1 Flagger	Not used for incidental flagging associated with equipment/material unloading or equipment entering or leaving highway.	
BPUT016	TUtilities	Maintain Right-Of-Way Access Point	Mowing, snow plowing, debris removal (dumped garbage, tires, down tree limbs, excessive underbrush growth, etc.)	
BPUT017	TUtilities	Woodland Facility	Material Inventory and rotation (poles, bracing, cross-arms, insulators, wire, and associated hardware inventory)	
BPUT018	TUtilities	Woodland Facility	Yard maintenance (mowing, snow plowing, and debris removal)	
BPUT019	TUtilities	Woodland Facility	Fence and access gate maintenance, building cleanliness and supplies, OSHA safety measures (Lighting, exit signs, smoke and CO alarms)	
	TUtilities	Conduct fiber optic end to end test.	Conduct end to end test of installed OPGW or ADSS fiber optic cable between two end points of the completed fiber optic path for adherence to Owner requirements. Includes testing once all splicing work had bene done.	
TOHMO002	Mobilization	Mobilization to work site / Line - LARGE PROJECT - Greater than $100k	Price to includes but not limited to: - Mobilization of manpower, tools, storage containers and equipment. - Overhead costs for the duration of the project	
TOHMO003	Mobilization	Demobilization from work site / Line	Price to include but not limited to: - Demobilization of Manpower, Tools, Storage Containers and Equipment. - Disassembly, removal and restoration of temporary installations (Office Trailers, Parking Areas, etc:) - Light restoration of land use back to original conditions.	

NYSEG Hot stick PayCU's

PayCU	CATEGORY	PayCU ACTIVITY	PayCU ITEM DESCRIPTION	UNIT	Labor Price per Unit

TOHAN001	TAnchorandGuy	Install Single Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 84" rod extension.	[redacted]
TOHAN002	TAnchorandGuy	Remove Helical Anchor	Unscrew or excavate and cut off rod below ground line if necessary. Includes single, double, triple or quad helical anchor. Backfill and tamp if excavated.	
TOHAN005	TAnchorandGuy	Install Expanding Rock Anchor	Dig to subsurface rock; drill rock; install anchor and rod; test, backfill and tamp.	
TOHAN006	TAnchorandGuy	Remove Expanding Rock Anchor	Excavate around anchor rod. Loosen and remove or cut off rod below ground line. Backfill and tamp.	
	TAnchorandGuy	Install Guy Strain Insulator	Insert guy strain insulator and continue installation.	
	TAnchorandGuy	Install Down Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Down Guy Hot	Complete removal of guy strand, fitting and attachments when required.	
TOHGU003	TAnchorandGuy	Transfer Down Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Aerial Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Aerial Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Double Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 59" rod extension.	
TOHW001	TConductor	Setup Transmission Wire Pull Cold	Includes all activities required to prepare to run wire: positioning Puller/Tensioners; pulling in Cable Rope.	
TOHW002	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire for spans up to 500-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	

TOHW003	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire between 500 and 750-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	[redacted]
TOHW010	TConductor	Transfer Transmission Wire 115 kV Hot	Move existing conductor to new location on pole or to new pole at old location. Temporary jumpers if needed are included. The labor for this work is identified as one conductor transferred and tied for each conductor or neutral involved. Wire and include phase conductors, OPGW and OHSW.	
TOHW014	TConductor	Replace 115kv post Insulator Cold	Un-clamp conductor from insulator. Remove insulator from pole or bracket as required. Replace insulator on arm, pole or bracket and align with conductor; clamp conductor to insulator. Unit is to be used when Framing is not included.	
	TConductor	Replace Suspension Clamp Conductor, Single Conductor - Hot	Rig and un-clamp conductor from insulator. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Suspension Clamp Conductor, Single Conductor, Double Angle - Hot	Rig and un-clamp conductors from insulator. Remove and replace both suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamps with associated hardware, attach to insulator and remove rigging. Price per double bundle clamp assembly. Energized line.	
	TConductor	Replace Deadend Mechanical Clamp Conductor, Single Conductor - Hot	Rig and un-clamp conductor from insulator. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new deadend mechanical clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Suspension Clamp OHSW, Single Conductor - Hot	Rig and un-clamp OHSW from attachment hardware. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Suspension Clamp OHSW, Single Conductor, Double Angle - Hot	Rig and un-clamp OHSW from attachment hardware. Remove and replace suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	

	TConductor	Replace Suspension Clamp OPGW, Single Conductor - Hot	Rig and un-clamp OPGW from attachment hardware. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	[redacted]
	TConductor	Replace Suspension Clamp OPGW, Single Conductor, Double Angle - Hot	Rig and un-clamp OPGW from attachment hardware. Remove and replace suspension clamps, along with any associated hardware (yoke plate, clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Deadend Mechanical Clamp OHSW, Single Wire - Hot	Rig and un-clamp OHSW from attachment hardware. Remove and replace deadend clamp, along with any associated hardware (clevis, etc). Install new deadend mechanical clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TConductor	Replace Formed Deadend Clamp OPGW, Single Wire - Hot	Rig and un-clamp OPGW from attachment hardware. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new formed deadend clamp with associated hardware, attach to attachment hardware and remove rigging. Price per clamp assembly. Energized line.	
	TFraming	Replace cross arm assembly on 115kv H-Frame Structure Hot	Remove existing wood arms and knee and vee braces. Loosen bolts, disconnect, lower/support wires, remove framing, disassemble and lower to ground. Assemble steel cross arm assembly including arm and all bracing. Measure and drill poles as necessary, put in position and bolt to poles. Include insulators, wire clamps and armor rod. Clip in wires and connect to down ground.	
TOHFR030	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Deadend - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
TOHFR069	TFraming115kV	Remove Single Circuit 115kv/230kV/345kV Three Poles and H-Frame - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Loosen bolts, remove and disassemble.	
TOHFR094	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Suspension Davit Arm Construction Replacement Structure Hot	Construct/Frame pole top w/arm(s). Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR095	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Braced Post Construction Replacement Structure Hot	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
	TFraming115kV	Install Single Wood Pole - Static Wire - Angle - Suspension New Construction Hot	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR097	TFraming115kV	Install Single Pole Single Circuit 115/230kV Framing angle Dead End (vertical configuration) Replacement Structure Hot	Construct/Frame pole top w/insulator attachments and pole bands. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR098	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Angle Structure - Braced Post 0° To 10° Construction Replacement Structure Hot	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Pole Single Circuit 115kv Framing 20° To 45° angle suspension (vertical configuration) Replacement Structure Hot	Construct/Frame pole top w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR099	TFraming115kV	Install Single Pole Single Circuit 115kV Framing 25° To 60° angle dead end (vertical configuration) Replacement Structure Hot	Construct/Frame pole top w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR100	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; <= 75-FT Replacement Structure Hot	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR101	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; > 75-FT - Replacement Structure Hot	Construct/Frame structure w/arm(s) and 2 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR102	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent dead end construction; <= 75-FT - Replacement Structure Hot	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR104	TFraming115kV	Install 3 pole Single Circuit 115kv Framing - angle suspension construction - Swinging Brackets 30 to 200 - Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR105	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - large running angle suspension construction, 200 to 450 - Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR106	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - Angle Dead End Construction, 600 and less. - Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR202	TFraming115kV	Install Three Pole Wood Single Circuit 115kV Transposition Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR203	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Angle Structure 10° to 20° Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR204	TFraming115kV	Install Three Pole Wood Single Circuit 115kV Dead End Structure Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include static hardware, insulators, conductor clamps and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR224	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; > 75-FT - Replacement Structure HOT	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR226	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; <= 75-FT - Replacement Structure HOT	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; <= 75-FT New Construction HOT	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install (1) X-Brace 115kv - HOT	Assemble and install new X-Brace and all associated hardware on existing structure. Measure and drill pole as necessary, put in position and bolt to poles. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Angle - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Deadend - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Deadend - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Tangent - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	

	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Tangent - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Replace Hot Tangent String Insulators	Rig and un-clamp conductor from insulator string. Remove and replace tangent string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
	TFraming115kV	Replace Hot Dead-End String of Insulators	Rig and un-clamp conductor from insulator string. Remove and replace deadend string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
TOHPO002	TPole	Install <=70' Pole Hot, Highway	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Digger/Derrick can be set up roadside within right-of-way. Assume pole can either be roundwood or laminated wood.	
TOHPO004	TPole	Install >70' & <=90' Pole Hot, Highway	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Digger/Derrick can be set up roadside within right-of-way. Assume pole can either be roundwood or laminated wood.	
TOHPO008	TPole	Install <=70' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO010	TPole	Install >70' & <=90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO012	TPole	Install >90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	

TOHPO014	TPole	Remove Pole, Hot Highway	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	[redacted]
TOHPO016	TPole	Remove Pole, Hot Off Road	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO018	TPole	Install Rock Hole	Ledge or rock that requires rock drill to complete. To be used with Install Poles	
TOHPO019	TPole	Abandon Pole Hole	Hole abandon because of rock or other utilities. Backfill and tamp hole and dispose of excess excavate if necessary	
TOHPO020	TPole	Install Select Backfill	Installation of select backfill where required in place of native backfill. To be used with Install Poles	
TOHPO021	TPole	Hand Dig Pole	Hand Dig - Mechanical digger cannot be used or Dig Safe clearance is not obtained	
	TPole	Install Crushed Stone Backfill	Installation of crushed stone backfill where required in place of native backfill. To be used with Install Poles	
	TPole	Install Rock Backfill	Installation of rock backfill where required in place of native backfill. To be used with Install Poles	
BPUT008	TUtilities	Traffic Control Zone for Job Site	Setting up job site road side protection including advance warning, transition and termination areas; signage and cone layout as required by location or highway permit. Must conform to U.S. DOT Manual on Uniform Traffic Control Devices (MUTCD).	
BPUT009	TUtilities	1 Flagger	Not used for incidental flagging associated with equipment/material unloading or equipment entering or leaving highway.	
BPUT016	TUtilities	Maintain Right-Of-Way Access Point	Mowing, snow plowing, debris removal (dumped garbage, tires, down tree limbs, excessive underbrush growth, etc.)	
BPUT017	TUtilities	Woodland Facility	Material Inventory and rotation (poles, bracing, cross-arms, insulators, wire, and associated hardware inventory)	
BPUT018	TUtilities	Woodland Facility	Yard maintenance (mowing, snow plowing, and debris removal)	
BPUT019	TUtilities	Woodland Facility	Fence and access gate maintenance, building cleanliness and supplies, OSHA safety measures (Lighting, exit signs, smoke and CO alarms)	
	TUtilities	Conduct fiber optic end to end test.	Conduct end to end test of installed OPGW or ADSS fiber optic cable between two end points of the completed fiber optic path for adherence to Owner requirements. Includes testing once all splicing work had bene done.	
TOHMO002	Mobilization	Mobilization to work site / Line - LARGE PROJECT - Greater than $100k	Price to includes but not limited to: - Mobilization of manpower, tools, storage containers and equipment. - Overhead costs for the duration of the project	

TOHMO003	Mobilization	Demobilization from work site / Line	Price to include but not limited to: - Demobilization of Manpower, Tools, Storage Containers and Equipment. - Disassembly, removal and restoration of temporary installations (Office Trailers, Parking Areas, etc:) - Light restoration of land use back to original conditions.	[redacted]

RGE Barehand PayCU's

PayCU	CATEGORY	PayCU ACTIVITY	PayCU ITEM DESCRIPTION	UNIT	Labor Price per Unit
TOHAN001	TAnchorandGuy	Install Single Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 84" rod extension.	[redacted]	
TOHAN002	TAnchorandGuy	Remove Helical Anchor	Unscrew or excavate and cut off rod below ground line if necessary. Includes single, double, triple or quad helical anchor. Backfill and tamp if excavated.		
TOHAN005	TAnchorandGuy	Install Expanding Rock Anchor	Dig to subsurface rock; drill rock; install anchor and rod; test, backfill and tamp.		
TOHAN006	TAnchorandGuy	Remove Expanding Rock Anchor	Excavate around anchor rod. Loosen and remove or cut off rod below ground line. Backfill and tamp.		
	TAnchorandGuy	Install Guy Strain Insulator	Insert guy strain insulator and continue installation.		
TOHAN007	TAnchorandGuy	Install Rod Extension	Insert extension section and continue installation.		
	TAnchorandGuy	Install Down Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.		
	TAnchorandGuy	Remove Down Guy Hot	Complete removal of guy strand, fitting and attachments when required.		
TOHGU003	TAnchorandGuy	Transfer Down Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.		
	TAnchorandGuy	Install Aerial Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.		
	TAnchorandGuy	Remove Aerial Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.		
	TAnchorandGuy	Install Double Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 59" rod extension.		

TOHW002	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire for spans up to 500-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	[redacted]
	TConductor	Transfer Transmission Wire 115 kV Hot - BAREHAND	Move existing conductor to new location on pole or to new pole at old location. Temporary jumpers if needed are included. The labor for this work is identified as one conductor transferred and tied for each conductor or neutral involved. Wire and include phase conductors, OPGW and OHSW.	
	TConductor	Replace Deadend Mechanical Clamp Conductor, Single Conductor - Cold	Rig and un-clamp conductor from insulator. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new deadend mechanical clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Suspension Clamp Conductor, Single Conductor - Hot - BAREHAND	Rig and un-clamp conductor from insulator. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. Energized line.	
	TFraming115kV	Remove Single Circuit 115kv/230kV/345kV Three Poles and H-Frame - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Loosen bolts, remove and disassemble.	
	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Suspension Davit Arm Construction Replacement Structure Hot - BAREHAND	Construct/Frame pole top w/arm(s). Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Braced Post Construction Replacement Structure Hot - BAREHAND	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Wood Pole - Static Wire - Angle - Suspension New Construction Hot - BAREHAND	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in static wire(s). Install for roundwood or laminated wood pole structure.	

	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; <= 75-FT Replacement Structure Hot - BAREHAND	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; > 75-FT - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/arm(s) and 2 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install 3 pole Single Circuit 115kv Framing - angle suspension construction - Swinging Brackets 30 to 200 - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - Angle Dead End Construction, 600 and greater - Replacement Structure Hot - BAREHAND	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; > 75-FT - Replacement Structure HOT - BAREHAND	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; <= 75-FT - Replacement Structure HOT - BAREHAND	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install (1) X-Brace 115kv - HOT	Assemble and install new X-Brace and all associated hardware on existing structure. Measure and drill pole as necessary, put in position and bolt to poles. Assume structure can have roundwood or laminated wood poles.	

	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	[redacted]
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Tangent - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Tangent - Hot - BAREHAND	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Replace Hot Tangent Post Insulators - BAREHAND	Rig and un-clamp conductor from insulator. Remove and replace tangent post insulators on an energized transmission line, on either a pole or crossarm. Clamp conductor and remove rigging. Price per post insulator.	
	TFraming115kV	Replace Hot Tangent String Insulators - BAREHAND	Rig and un-clamp conductor from insulator string. Remove and replace tangent string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
	TFraming115kV	Replace Hot Dead-End String of Insulators - BAREHAND	Rig and un-clamp conductor from insulator string. Remove and replace deadend string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
TOHPO008	TPole	Install <=70' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO010	TPole	Install >70' & <=90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	

TOHPO012	TPole	Install >90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	[redacted]
TOHPO016	TPole	Remove Pole, Hot Off Road	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO018	TPole	Install Rock Hole	Ledge or rock that requires rock drill to complete. To be used with Install Poles	
TOHPO020	TPole	Install Select Backfill	Installation of select backfill where required in place of native backfill. To be used with Install Poles	
TOHPO021	TPole	Hand Dig Pole	Hand Dig - Mechanical digger cannot be used or Dig Safe clearance is not obtained	
	TPole	Install Crushed Stone Backfill	Installation of crushed stone backfill where required in place of native backfill. To be used with Install Poles	
	TPole	Install Rock Backfill	Installation of rock backfill where required in place of native backfill. To be used with Install Poles	
BPUT008	TUtilities	Traffic Control Zone for Job Site	Setting up job site road side protection including advance warning, transition and termination areas; signage and cone layout as required by location or highway permit. Must conform to U.S. DOT Manual on Uniform Traffic Control Devices (MUTCD).	
BPUT009	TUtilities	1 Flagger	Not used for incidental flagging associated with equipment/material unloading or equipment entering or leaving highway.	
BPUT016	TUtilities	Maintain Right-Of-Way Access Point	Mowing, snow plowing, debris removal (dumped garbage, tires, down tree limbs, excessive underbrush growth, etc.)	
BPUT017	TUtilities	Woodland Facility	Material Inventory and rotation (poles, bracing, cross-arms, insulators, wire, and associated hardware inventory)	
BPUT018	TUtilities	Woodland Facility	Yard maintenance (mowing, snow plowing, and debris removal)	
BPUT019	TUtilities	Woodland Facility	Fence and access gate maintenance, building cleanliness and supplies, OSHA safety measures (Lighting, exit signs, smoke and CO alarms)	
TOHMO002	Mobilization	Mobilization to work site / Line - LARGE PROJECT - Greater than $100k	Price to includes but not limited to: - Mobilization of manpower, tools, storage containers and equipment. - Overhead costs for the duration of the project	
TOHMO003	Mobilization	Demobilization from work site / Substation	Price to include but not limited to: - Demobilization of Manpower, Tools, Storage Containers and Equipment. - Disassembly, removal and restoration of temporary installations (Office Trailers, Parking Areas, etc:) - Light restoration of land use back to original conditions.	

RGE De-Energized PayCU's

PayCU	CATEGORY	PayCU ACTIVITY	PayCU ITEM DESCRIPTION	UNIT	Labor Price per Unit
TOHAN001	TAnchorandGuy	Install Single Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 84" rod extension.	[redacted]	[redacted]
TOHAN002	TAnchorandGuy	Remove Helical Anchor	Unscrew or excavate and cut off rod below ground line if necessary. Includes single, double, triple or quad helical anchor. Backfill and tamp if excavated.		
TOHAN005	TAnchorandGuy	Install Expanding Rock Anchor	Dig to subsurface rock; drill rock; install anchor and rod; test, backfill and tamp.		
TOHAN006	TAnchorandGuy	Remove Expanding Rock Anchor	Excavate around anchor rod. Loosen and remove or cut off rod below ground line. Backfill and tamp.		
	TAnchorandGuy	Install Guy Strain Insulator	Insert guy strain insulator and continue installation.		
TOHAN007	TAnchorandGuy	Install Rod Extension	Insert extension section and continue installation.		
TOHGU001	TAnchorandGuy	Install Down Guy Cold	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.		
TOHGU002	TAnchorandGuy	Remove Down Guy Cold	Complete removal of guy strand, fitting and attachments when required.		
TOHGU003	TAnchorandGuy	Transfer Down Guy Cold	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.		
	TAnchorandGuy	Install Aerial Guy Cold	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.		
	TAnchorandGuy	Remove Aerial Guy Cold	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.		
	TAnchorandGuy	Install Double Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 59" rod extension.		
TOHW002	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire for spans up to 500-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.		

TOHW010	TConductor	Transfer Transmission Wire 115 kV Cold	Move existing conductor to new location on pole or to new pole at old location. Temporary jumpers if needed are included. The labor for this work is identified as one conductor transferred and tied for each conductor or neutral involved. Wire and include phase conductors, OPGW and OHSW.	[redacted]
	TConductor	Replace Suspension Clamp Conductor, Single Conductor - Cold	Rig and un-clamp conductor from insulator. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. De-energized line.	
	TConductor	Replace Deadend Mechanical Clamp Conductor, Single Conductor - Cold	Rig and un-clamp conductor from insulator. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new deadend mechanical clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. De-energized line.	
TOHFR014	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Suspension Davit Arm Construction New Construction Cold	Construct/Frame pole top w/arm(s). Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Wood Pole - Static Wire - Angle - Suspension New Construction Cold	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR015	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Braced Post Construction New Construction Cold	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR020	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; <= 75-FT New Construction Cold	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR021	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; > 75-FT - New Construction Cold	Construct/Frame structure w/arm(s) and 2 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR023	TFraming115kV	Install 3 pole Single Circuit 115kv Framing - angle suspension construction - Swinging Brackets 30 to 200 New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR029	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Tangent - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
TOHFR052	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - Angle Dead End Construction, 600 and greater New Construction Cold	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR069	TFraming115kV	Remove Single Circuit 115kv/230kV/345kV Three Poles and H-Frame - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Loosen bolts, remove and disassemble.	
TOHFR225	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; > 75-FT - Replacement Structure COLD	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR227	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; <= 75-FT - Replacement Structure COLD	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install (1) X-Brace 115kv - COLD	Assemble and install new X-Brace and all associated hardware on existing structure. Measure and drill pole as necessary, put in position and bolt to poles. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	

	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Tangent - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	[redacted]
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Replace Cold Tangent Post Insulators	Rig and un-clamp conductor from insulator. Remove and replace tangent post insulators on an energized transmission line, on either a pole or crossarm. Clamp conductor and remove rigging. Price per post insulator.	
	TFraming115kV	Replace Cold Tangent String Insulators	Rig and un-clamp conductor from insulator string. Remove and replace tangent string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
	TFraming115kV	Replace Cold Dead-End String of Insulators	Rig and un-clamp conductor from insulator string. Remove and replace deadend string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
TOHPO007	TPole	Install <=70' Pole Cold, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO009	TPole	Install >70' & <=90' Pole Cold, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO011	TPole	Install >90' Pole Cold, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	

TOHPO015	TPole	Remove Pole, Cold Off Road	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	[redacted]
TOHPO018	TPole	Install Rock Hole	Ledge or rock that requires rock drill to complete. To be used with Install Poles	
TOHPO020	TPole	Install Select Backfill	Installation of select backfill where required in place of native backfill. To be used with Install Poles	
TOHPO021	TPole	Hand Dig Pole	Hand Dig - Mechanical digger cannot be used or Dig Safe clearance is not obtained	
	TPole	Install Crushed Stone Backfill	Installation of crushed stone backfill where required in place of native backfill. To be used with Install Poles	
	TPole	Install Rock Backfill	Installation of rock backfill where required in place of native backfill. To be used with Install Poles	
BPUT008	TUtilities	Traffic Control Zone for Job Site	Setting up job site road side protection including advance warning, transition and termination areas; signage and cone layout as required by location or highway permit. Must conform to U.S. DOT Manual on Uniform Traffic Control Devices (MUTCD).	
BPUT009	TUtilities	1 Flagger	Not used for incidental flagging associated with equipment/material unloading or equipment entering or leaving highway.	
BPUT016	TUtilities	Maintain Right-Of-Way Access Point	Mowing, snow plowing, debris removal (dumped garbage, tires, down tree limbs, excessive underbrush growth, etc.)	
BPUT017	TUtilities	Woodland Facility	Material Inventory and rotation (poles, bracing, cross-arms, insulators, wire, and associated hardware inventory)	
BPUT018	TUtilities	Woodland Facility	Yard maintenance (mowing, snow plowing, and debris removal)	
BPUT019	TUtilities	Woodland Facility	Fence and access gate maintenance, building cleanliness and supplies, OSHA safety measures (Lighting, exit signs, smoke and CO alarms)	
TOHMO002	Mobilization	Mobilization to work site / Line - LARGE PROJECT - Greater than $100k	Price to includes but not limited to: - Mobilization of manpower, tools, storage containers and equipment. - Overhead costs for the duration of the project	
TOHMO003	Mobilization	Demobilization from work site / Substation	Price to include but not limited to: - Demobilization of Manpower, Tools, Storage Containers and Equipment. - Disassembly, removal and restoration of temporary installations (Office Trailers, Parking Areas, etc:) - Light restoration of land use back to original conditions.	

RGE Hotstick PayCU's

PayCU	CATEGORY	PayCU ACTIVITY	PayCU ITEM DESCRIPTION	UNIT	Labor Price per Unit

TOHAN001	TAnchorandGuy	Install Single Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 84" rod extension.	
TOHAN002	TAnchorandGuy	Remove Helical Anchor	Unscrew or excavate and cut off rod below ground line if necessary. Includes single, double, triple or quad helical anchor. Backfill and tamp if excavated.	
TOHAN005	TAnchorandGuy	Install Expanding Rock Anchor	Dig to subsurface rock; drill rock; install anchor and rod; test, backfill and tamp.	
TOHAN006	TAnchorandGuy	Remove Expanding Rock Anchor	Excavate around anchor rod. Loosen and remove or cut off rod below ground line. Backfill and tamp.	
	TAnchorandGuy	Install Guy Strain Insulator	Insert guy strain insulator and continue installation.	
TOHAN007	TAnchorandGuy	Install Rod Extension	Insert extension section and continue installation.	
	TAnchorandGuy	Install Down Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Down Guy Hot	Complete removal of guy strand, fitting and attachments when required.	
TOHGU003	TAnchorandGuy	Transfer Down Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Aerial Guy Hot	Attach to pole via bracket or pole band, attach guy strain insulator if specified, make up eye in wire using performed grip and attach to pole, attach to ground extension if required. Attach pulling device to wire and anchor rod and pull to desired tension. Cut guy wire to appropriate length; install grip or other approved device and remove pulling device.	
	TAnchorandGuy	Remove Aerial Guy Hot	Applies to one end only and includes guy attachment, tensioning and grounding connection if necessary.	
	TAnchorandGuy	Install Double Helical Anchor	Assemble rod and screw anchor, attach to appropriate installation tool and rotate into ground. Test. Remove installation tool and install eye and guy wire grip. Includes one 59" rod extension.	
TOHW002	TConductor	Install New Transmission Wire Cold	Includes all activities required to run wire for spans up to 500-ft. Handle reels of conductor. Grips to pull conductor. Conductor pull; Sag as necessary. NOTE: Ground as work practices require. The labor for this work is identified as one wire install for each phase or static involved. Wire and include phase conductors, OPGW and OHSW.	
TOHW010	TConductor	Transfer Transmission Wire 115 kV Hot	Move existing conductor to new location on pole or to new pole at old location. Temporary jumpers if needed are included. The labor for this work is identified as one conductor transferred and tied for each conductor or neutral involved. Wire and include phase conductors, OPGW and OHSW.	

	TConductor	Replace Deadend Mechanical Clamp Conductor, Single Conductor - Cold	Rig and un-clamp conductor from insulator. Remove and replace deadend clamp, along with any associated hardware (clevis, pads, etc). Install new deadend mechanical clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. De-energized line.	[redacted]
	TConductor	Replace Suspension Clamp Conductor, Single Conductor - Hot	Rig and un-clamp conductor from insulator. Remove and replace suspension clamp, along with any associated hardware (clevis, AGS, armor rods, etc). Install new suspension clamp with associated hardware, attach to insulator and remove rigging. Price per clamp assembly. Energized line.	
TOHFR069	TFraming115kV	Remove Single Circuit 115kv/230kV/345kV Three Poles and H-Frame - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Loosen bolts, remove and disassemble.	
TOHFR094	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Suspension Davit Arm Construction Replacement Structure Hot	Construct/Frame pole top w/arm(s). Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR095	TFraming115kV	Install Single Wood Pole Single Circuit 115kV Framing Tangent Braced Post Construction Replacement Structure Hot	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install Single Wood Pole - Static Wire - Angle - Suspension New Construction Hot	Construct/Frame pole top. Measure and drill pole as necessary and bolt to pole. Include insulators, OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR100	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; <= 75-FT Replacement Structure Hot	Construct/Frame structure w/arm(s) and braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR101	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - single arm tangent suspension construction; > 75-FT - Replacement Structure Hot	Construct/Frame structure w/arm(s) and 2 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	

TOHFR104	TFraming115kV	Install 3 pole Single Circuit 115kv Framing - angle suspension construction - Swinging Brackets 30 to 200 - Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	[redacted]
TOHFR107	TFraming115kV	Install 3 pole Framing Single Circuit 115kV - Angle Dead End Construction, 600 and greater - Replacement Structure Hot	Construct/Frame structure w/insulator attachments, pole bands and swinging angle brackets. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR224	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent dead end construction; > 75-FT - Replacement Structure HOT	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
TOHFR226	TFraming115kV	Install H-Frame Single Circuit 115kv Framing - (2) cross arm tangent suspension construction; <= 75-FT - Replacement Structure HOT	Construct/Frame structure w/2 cross arms and 4 braces. Measure and drill pole as necessary and bolt to pole. Include insulators, conductor/OHSW/OPGW clamps, vibration dampers, grounding, attachment hardware, brackets, pole tags, aerial tags and armor rod. Clip in conductors and static wire(s). Install for roundwood or laminated wood pole structure.	
	TFraming115kV	Install (1) X-Brace 115kv - HOT	Assemble and install new X-Brace and all associated hardware on existing structure. Measure and drill pole as necessary, put in position and bolt to poles. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Angle - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Angle structure. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Remove Three Pole, Single Circuit 115kV Framing - Deadend - Cold	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Deadend structure. Assume structure can have roundwood or laminated wood poles.	

	TFraming115kV	Remove Single Pole, Single Circuit 115/230kV Framing - Tangent - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	[redacted]
	TFraming115kV	Remove Two Pole, Single Circuit 115kV Framing - Tangent - Hot	Remove all arms, braces, brackets, pole bands, insulators and associated attachments from structure. Loosen bolts, remove and disassemble. Assume structure can have roundwood or laminated wood poles.	
	TFraming115kV	Replace Hot Tangent Post Insulators	Rig and un-clamp conductor from insulator. Remove and replace tangent post insulators on an energized transmission line, on either a pole or crossarm. Clamp conductor and remove rigging. Price per post insulator.	
	TFraming115kV	Replace Hot Tangent String Insulators	Rig and un-clamp conductor from insulator string. Remove and replace tangent string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
	TFraming115kV	Replace Hot Dead-End String of Insulators	Rig and un-clamp conductor from insulator string. Remove and replace deadend string of insulators on an energized transmission line. Clamp conductor and remove rigging. Price per insulator string.	
TOHPO008	TPole	Install <=70' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO010	TPole	Install >70' & <=90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO012	TPole	Install >90' Pole Hot, Off Road	Spot pole, mechanically dig hole or clean out a previously used hole, raise, set, line up pole; backfill, tamp hole and dispose of excess excavate; attach identification tag - Line/Pole Number. Does not include selecting pole, loading pole at yard, hauling and unloading pole at job site. Assume pole can either be roundwood or laminated wood.	
TOHPO016	TPole	Remove Pole, Hot Off Road	Remove by any means, refill and tamp hole. Does not includes the loading of the pole at the job site and the return of the pole to the pole yard or storeroom if required. Assume pole can either be roundwood or laminated wood.	
TOHPO018	TPole	Install Rock Hole	Ledge or rock that requires rock drill to complete. To be used with Install Poles	
TOHPO020	TPole	Install Select Backfill	Installation of select backfill where required in place of native backfill. To be used with Install Poles	

TOHPO021	TPole	Hand Dig Pole	Hand Dig - Mechanical digger cannot be used or Dig Safe clearance is not obtained	[redacted]
	TPole	Install Crushed Stone Backfill	Installation of crushed stone backfill where required in place of native backfill. To be used with Install Poles	
	TPole	Install Rock Backfill	Installation of rock backfill where required in place of native backfill. To be used with Install Poles	
BPUT008	TUtilities	Traffic Control Zone for Job Site	Setting up job site road side protection including advance warning, transition and termination areas; signage and cone layout as required by location or highway permit. Must conform to U.S. DOT Manual on Uniform Traffic Control Devices (MUTCD).	
BPUT009	TUtilities	1 Flagger	Not used for incidental flagging associated with equipment/material unloading or equipment entering or leaving highway.	
BPUT016	TUtilities	Maintain Right-Of-Way Access Point	Mowing, snow plowing, debris removal (dumped garbage, tires, down tree limbs, excessive underbrush growth, etc.)	
BPUT017	TUtilities	Woodland Facility	Material Inventory and rotation (poles, bracing, cross-arms, insulators, wire, and associated hardware inventory)	
BPUT018	TUtilities	Woodland Facility	Yard maintenance (mowing, snow plowing, and debris removal)	
BPUT019	TUtilities	Woodland Facility	Fence and access gate maintenance, building cleanliness and supplies, OSHA safety measures (Lighting, exit signs, smoke and CO alarms)	
TOHMO002	Mobilization	Mobilization to work site / Line - LARGE PROJECT - Greater than $100k	Price to includes but not limited to: - Mobilization of manpower, tools, storage containers and equipment. - Overhead costs for the duration of the project	
TOHMO003	Mobilization	Demobilization from work site / Substation	Price to include but not limited to: - Demobilization of Manpower, Tools, Storage Containers and Equipment. - Disassembly, removal and restoration of temporary installations (Office Trailers, Parking Areas, etc:) - Light restoration of land use back to original conditions.	

APPENDIX C

Contract Datasheet

Section	Item	Contract Data
	Contract Currency	US Dollars (USD)
	Warranty Period	Two (2) years
	Owner Permits	See Appendix I (Permits)
1.11	Site Access Date	December 2019
1.15	Substantial Completion Date	Q1 2020 for RGE and Q3 2021
1.4	Final Completion Date	Q1 2020 for RGE and Q3 2021
	Project e-mail	Young.le@avangrid.com

APPENDIX D

Contractor's Key Personnel and Subcontractors

Potential Site Works Sub-Contractors:

Civil Design:

Civil Works:

Installation: NY Drilling, Tri-State Drilling, Syracuse Utilities

Other Considerations:

APPENDIX E

Notices

Along with all other correspondence requirements included in this Construction Agreement, any notice, request, approval or other document required or permitted to be given under this Master Agreement shall be in writing and shall be deemed to have been sufficiently given when delivered in person or deposited in the U.S. Mail, postage prepaid, addressed as specified herein or to such other address or addresses as may be specified from time to time in a written notice given by such party. The parties shall acknowledge in writing the receipt of any such notice delivered in person.

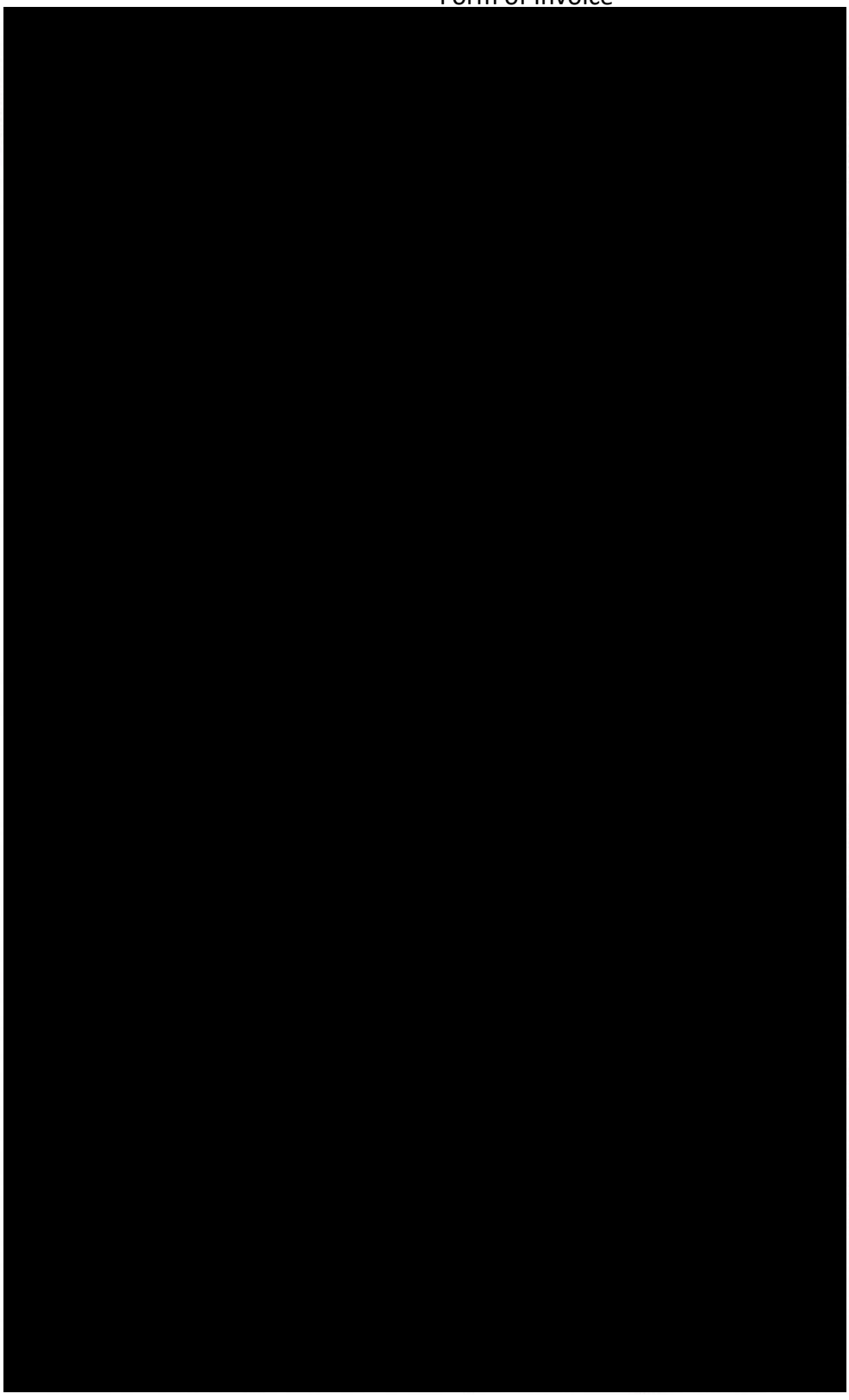
All communications to AVANGRID shall be directed to:

AVANGRID Service Company
Contract Administration
89 East Avenue
Rochester, NY 14649
Phone: 585-724-8028
Fax: 585-771-2820

All communications to Supplier shall be directed to:

APPENDIX F

Form of Invoice



APPENDIX G

Change Order Pricing

1. General

Contractor's requests for Change Orders and proposals submitted by Contractor in response to a request for a proposal from Owner or Program Manager, including components thereof that involve Subcontractors (including any and all other lower tier sub-Subcontractors) shall be priced in accordance with this Appendix G, Pricing of Changes, unless otherwise directed by Owner. Owner has the right to select which of the methods of pricing changes in this Appendix is to apply to each Change Order or prospective Change Order. The options are:

- fixed price lump sum
- fixed unit price
- time and material

2. Fixed Price Lump Sum

Proposals for work to be undertaken on a fixed price lump sum basis shall follow the requirements set out herein for changes undertaken on either unit price basis or time and material basis, or a combination of both (Contractor to select the method), except that quantities of time, work and materials, and applicable rates and prices shall be estimated or chosen by Contractor prior to execution of the work. As part of its proposal for each change, Contractor shall submit details similar to those required by Sections 3 and 4, of this Appendix, as applicable.

3. Fixed Unit Price

3.1 The following **Table of Unit Prices for Defined Scopes of Work** shall be used for determining the price of all Change Orders where the fixed unit price method is selected by Owner and the scope of the changed work is described in the Table.

The unit prices set forth in the **Table of Unit Prices for Defined Scopes of Work** include all direct and indirect costs to Contractor of furnishing and installing the item, including all associated engineering and design costs, maintenance, fuel, delivery and installation charges, premiums for shift or night work, Site and off-site time-related costs, transport costs, taxes, overhead and markups (including for Work performed by Subcontractors, any handling or other administrative charge or mark-up of Contractor), and profits. Unit prices are firm through Final Completion.

Table of Unit Prices for Defined Scopes of Work

To be Developed from RFP Proposal Form

3.2. *Labor.* If any change using unit prices, in whole or in part, involves labor not associated with work addressed in the **Table of Unit Prices for Defined Scopes of Work** in Section 3.1, the following hourly labor rates shall be used as the unit pricing of labor. Overtime and holiday rates apply only upon direction of Owner or Program Manager that the applicable work shall be undertaken at times that attract such rates. Holiday rates shall only apply to holidays for employees of the Contractor as demonstrated by submittal by Contractor of documentation acceptable to Program Manager and approved. Overtime and holiday

rates apply only to hours actually worked on the changed work. Unit prices are firm through Final Completion.

Table of Labor Rates for Changes Undertaken on Unit Price Basis Where Change Involves Labor Not Associated With Work Addressed in Unit Pricing for Defined Scopes Of Work.

To be Developed from RFP Proposal Form

Any unit prices for labor not identified on the above Table shall be established consistent with the methodology used for pricing time and materials change orders in Section 4.

3.3. *Equipment*. If any change using unit prices, in whole or in part, involves equipment not associated with work addressed in the **Table of Unit Prices for Defined Scopes of Work** in Section 3.1, the equipment rates below shall be used as the unit pricing of equipment. Unit costs for labor associated with the operation of such equipment are not included in such equipment rates, and shall be determined in accordance with the table for labor in Section 3.2 above. Rates in the Table include for fuel and maintenance, including inspections and tests and ready-for-work start-up procedures. Standby rates shall be used only if Contractor mobilizes equipment to the Site pursuant to a Change Order, such equipment is maintained in operating condition, and Program Manager directs Contractor in writing not to use such equipment. Unit prices are firm through Final Completion.

To be Developed from RFP Proposal Form

Any unit prices for equipment not identified on the above Table shall be established consistent with the methodology used for pricing time and materials change orders in Section 4 of this Appendix.

3.4. *Materials*. If any change using unit prices, in whole or in part, involves materials not associated with work addressed in the **Table of Unit Prices for Defined Scopes of Work** in Section 3.1, the Material costs shall reflect Contractor's net, verifiable, anticipated cost for the purchase of the material needed for the extra Work, including delivery charges.

4. Time and Material

Where the time and material price method is selected by Owner, Contractor shall perform such authorized extra Work for the sum of:

(i) the actual cost of direct labor (working foremen, journeymen, apprentices, helpers) that undertook the extra work;
(ii) the actual cost of labor burden associated with (i);
(iii) the actual cost of material used in performing the extra Work;
(iv) the computed cost or actual cost of rental of major equipment;
(v) actual costs of additional general liability insurance and performance bond
(vi) the Markup Percentage Fee applied to items (i), (ii), (iii) and (iv)

without any charge for administration and supervision including management, superintendents and general foremen, and the cost of or rental cost of small tools and minor equipment (defined as having a purchase price of less than $1,000).
Owner and Contractor may agree in advance in a Change Order on a maximum price for Work priced on such basis, and Owner shall not be liable for amounts in excess of that maximum.

(i) Direct Labor
Labor costs included for self-performed work shall be based on the actual cost (excluding bonuses or other discretionary compensation) per hour paid by Contractor for those workers undertaking the extra Work.

(ii) Labor Burden
Allowable labor burden shall be defined as employer's net actual cost of payroll taxes (FICA, Medicare, SUTA, FUTA), net actual cost for employer's cost of union benefits (or other usual and customary fringe benefits (excluding bonuses or other discretionary compensation) if the employees are not union employees); and net actual cost to employer for worker's compensation insurance taking into consideration adjustments for experience modifiers, premium discounts, dividends, rebates, expense constants, assigned risk pool costs and net cost reductions due to policies with deductibles for self-insured losses and assigned risk rebates. Contractor shall reduce its standard payroll tax percentages to properly reflect the effective cost reduction due to the estimated impact of the annual maximum wages subject to payroll taxes.

(iii) Materials
Material costs shall reflect Contractor's net actual, verifiable, cost for the purchase and delivery of the material needed for the extra Work and shall include for any discounts, preferential pricing and rebates available to Contractor.

(iv) Equipment
Contractor-owned or Subcontractor-owned. Allowable "bare" equipment rental rates shall be the monthly rate listed in the most current publication of The DataQuest Blue Book divided by 176 to arrive at a maximum hourly rate to be applied to the actual hours of equipment usage, to which shall be added operating costs needed to undertake the extra Work
Contractor-rented or Subcontractor-rented. Allowable costs are the appropriate, verifiable, market rental rates for rental of major equipment needed to undertake the extra Work.

(v) General Liability Insurance and Performance Bond
Time and materials computations shall account for Contractor's net increase in comprehensive general liability insurance costs and costs for performance bond furnished by Contractor to Owner as a result of the extra Work. No Markup Percentage Fee is to be applied to increases in such insurance costs or performance bond costs.

(vi) Markup Percentage Fee
For any Work performed directly by Contractor and/or any Subcontractor (regardless of tier), the maximum Markup Percentage Fee shall be a single markup percentage not-to-exceed five percent (5%) of the net direct cost (excluding taxes) of (i) direct labor; (ii) allowable labor burden costs; (iii)

the net cost of material; (iv) computed cost or actual rental cost of equipment including operating costs

and

for Work performed by lower tier contractors, the maximum, aggregate Markup Percentage Fee allowable to Contractor and/or Subcontractor(s) directly supervising the lower tier contractor's work shall not exceed three percent (3%) of the net cost (excluding taxes) of all approved Work performed by all Subcontractors combined. (For the avoidance of doubt, this is a single markup and not separate markups for Contractor and supervising Subcontractor.).

The Markup Percentage Fee compensates Contractor for all costs and expenses incurred by Contractor and Subcontractors of all tiers in undertaking the extra work other than the amounts and/or costs identified and directly accounted for in (i), (ii), (iii), and (iv) above and provides for Contractor's profit and Subcontractors' (of all tiers) profit. Such costs and expenses include but are not limited to:

- Site field overhead and time-related costs and expenses;
- Site office overhead and time-related costs and expenses;
- local or branch office overhead costs and expenses;
- home office overhead costs and expenses;
- cost and expenses including those for Change Orders of management, superintendents, general foremen, estimating, shop drawings, permits, engineering, submittals, coordinating with others, purchasing, expediting, legal, finance and accounting, management information systems, computers and software, consultants not identified as subcontractors, administrative functions;
- record keeping and verification methods for time and materials;
- insurances except as specifically permitted;
- transport costs for management, superintendents, general foremen or others;
- warranty expenses and costs;
- cost of payment and performance bonds furnished by subcontractors to Contractor;
- the cost for the use of small tools (tools and equipment (power or non-power) with an individual purchase cost of less than $1,000)

Record keeping forms and verification methods for time and materials Work shall be subject to approval of the Program Manager.

If requested by Program Manager, Contractor shall provide, and shall cause each Subcontractor at any tier to provide, evidence of its labor costs and a breakdown of its labor burden costs or estimates.

5. Equipment

The aggregate equipment charges for any single piece of Contractor-owned or Subcontractor-owned equipment used in all Work under Change Orders priced on fixed unit price or time and material basis shall be limited to the fair market value of the piece of equipment when the first Change Order is priced using fixed unit price or time and material involving usage of that piece of equipment.

APPENDIX H

Change Order Request Form
(Sample)

APPENDIX I

Permits

1. General

Contractor is responsible for verifying that all Permits, whether provided by Contractor or Owner, have been issued and are in force prior to initiation of any Work covered by such Permits and that Contractor and all its employees are familiar with the requirements and restrictions of all permits, regardless of whether or not such information is specifically called out by the Owner.

2. Contractor Permits

Contractor shall secure and maintain, at Contractor's sole cost and expense (including costs of preparation, any filing fees and/or charges, and any bonds or other performance assurance), all Permits (other than Owner Permits) for the Work, including, but not limited to, permits required for over-the-road delivery of materials as applicable.

Responsibilities of any other permits that arise shall be mutually agreed upon by the project team in accordance with responsibilities of the Work.

3. Owner Permits

Owner shall secure and maintain, at Owner’s sole cost and expense (including costs of preparation, any filing fees and/or charges, and any bonds or other performance assurance), Permits listed in 3.1.

3. 1 Listing of Permits

APPENDIX J

Insurance Requirements

Before commencing Services, the Supplier shall procure and maintain at its own expense for a period of two years beyond completion of the Services, the insurance types, limits, terms, and conditions listed in Section 1 below. The amounts as specified are minimums only. The actual amounts above the minimums shall be determined by the Supplier. In addition, for any Services that are authorized to be subcontracted, the supplier shall require each subcontractor to procure and maintain all insurance as outlined in section one.

IF YOU DO NOT HAVE A CURRENT CERTIFICATE ON FILE WITH CUSTOMER prior to commencement of Services, Certificates of Insurance evidencing supplier's and/or subcontractor's possession of insurance as outlined in Section 1 shall be filed with Customer for its review.

Certificates of Insurance should be mailed to the Procurement Department at the following address:

AVANGRID Service Company
Procurement Department/Insurance Cert.
89 East Avenue
Rochester, NY 14649-0001

1. **Required Insurance Coverage's and Minimum Amounts**

Each insurance policy shall be placed with an insurance company licensed to write insurance in the State where the Services are to be performed and shall have an A.M. Best's Rating of not less than "B+" and a policyholder surplus of at least $25,000,000.

Each insurance policy, except Workers' Compensation and Employers' Liability, shall be endorsed to add Customer as an additional insured. All insurance where Customer is an additional insured must contain provisions which state that the policy will respond to claims or suits by Customer against the Supplier/Consultant/ Labor supplier/etc. In addition, Customer should be notified of any reduction in the aggregate policy limits.

Each policy shall be endorsed to provide a minimum of thirty (30) days prior written notice of cancellation, intent not to renew, or material change in coverage.

Each policy shall be endorsed to provide a breach of warranty clause.

In the event Supplier and/or Subcontractor has a policy(ies) written on a "claims-made" basis, such insurance shall provide for a retroactive date not later than the commencement of Services under this agreement. In addition, the Supplier and/or Subcontractor will guarantee future coverage for claims arising out of events occurring during the course of this agreement.

All of the insurance required hereunder will be primary to any or all other insurance coverage in effect for Customer.

1.1 Workers' Compensation and Employers' Liability Insurance in accordance with the statutory requirements of the State of New York. For Services that are conducted outside of New York State, the minimum limit for Employers' Liability Insurance should be $500,000 each accident, $500,000 disease-policy limit, $500,000 disease-each employee.

1.2 Automobile Liability insuring any auto, all owned autos, hired autos, and non-owned autos with a bodily injury and property damage combined single limit of $5,000,000 per occurrence.

1.3 General Liability (Comprehensive or Commercial Form), including coverage for Premises/Operations, Underground/ Explosion & Collapse Hazard, Products/Completed Operations, Contractual Liability specifically insuring the attached Indemnity Agreement, Independent Contractors, Broad Form Property Damage, and Personal Injury, in the amount of $5,000,000 per occurrence and $5,000,000 aggregate.

The amount of insurance may be satisfied by purchasing primary coverage in the minimum (or greater) amounts specified or by purchasing a separate excess Umbrella Liability policy together with lower limit primary coverage.

Each General and/or Umbrella Liability Insurance policy shall be endorsed with the following Cross Liability clause: In the event of claims being made by reason of personal and/or bodily injuries suffered by any employee or employees of one insured hereunder for which another insured hereunder is or may be liable, then this policy shall cover such insured against whom a claim is made or may be made in the same manner as if separate policies had been issued to each insured hereunder, except with respect to limits of insurance. In the event of claims being made by reason of damage to property belonging to any insured hereunder for which another insured is or may be liable, then this policy shall cover such insured against whom a claim is made or may be made in the same manner as if separate policies had been issued to each insured hereunder, except with respect to the limits of insurance.

None of the requirements contained herein as to types, limits and approval of insurance coverage to be maintained by Supplier or Subcontractors are intended to, nor shall they in any manner

limit or qualify the liabilities and obligations assumed by Supplier or Subcontractor under this agreement.

APPENDIX K-1

Lien and Waiver Release

TO ACCOMPANY EACH INVOICE

[LETTERHEAD OF CONTRACTOR]

DATE: [_____]

TO:

[INSERT ADDRESS]

1 New York State Electric and Gas Corporation (NYSEG) ("Company" or "Owner") and [_____] ("Contractor") have entered into an Agreement, dated [_____], (the "Agreement"), pursuant to which Contractor is to provide services in connection with (the "Project").

2. Section 8.2 of the Agreement provides, among other things, that, each invoice shall be accompanied by (i) the Contractor's waiver and release, subject to payment of the invoice by the Owner, of liens and claims relating to Work for which the Invoice or any prior invoice have been submitted, and (ii) a certificate that the Site, Work, materials and equipment described in the invoice and in all previous invoices are free and clear of all liens other than any liens extinguished upon receipt of payment by Contractor of such invoice. Contractor provides this instrument in order to satisfy the requirements of the aforesaid Section 8.2 in relation to Contractor's invoice no. [to be inserted] dated [to be inserted] (the "Invoice").

NOW THEREFOR:

1. Capitalized terms used and not defined herein shall have the meaning assigned to them in the Agreement.

2. Subject to payment by Company to Contractor of the sum of [_____], which sum represents the full amount due to Contractor under the Invoice less Retainage and less Punchlist withholding, if any, Contractor irrevocably waives its right to file, releases and relinquishes any lien, claim or security interest relating to Work for which the Invoice is submitted or any prior invoice has been submitted; provided, however, that no such waiver shall apply to unresolved claims submitted in writing to Company prior to the date of this Waiver and Release. Contractor hereby authorizes Company to file an amendment for any financing statement on file with respect to Company, the Work, the

Project or the Site if (a) Contractor is the secured party of record with respect to such financing statement and (b) the amendment releases from the collateral under such financing statement any collateral released by this instrument from any lien, security interest or claim in favor of Contractor, or with respect to which Contractor waived its right to file any lien, security interest or claim.

3. Contractor certifies that:

3.1 All amounts that were due and payable in connection with the Work or the Project under invoices issued prior to the Invoice have been paid by Company save in relation to Retainage and Punchlist Withholding, if any, which Contractor acknowledges that Company is withholding in accordance with Sections 3.9 and Section 4.4 of the Agreement and (b) [_____] under Invoices Nos. [_____], which are subject to dispute with Company.

3.2 Contractor has not directly or indirectly created any Contractor Lien relating to the Work, the Project, the Site or any part thereof or interest therein;

3.3 Contractor has promptly paid and discharged any Contractor Liens which, it suffered to be created by any Subcontractor, employee, laborer, mechanic, materialman or other supplier of goods or services relating to the Work, the Project, the Site or any part thereof or interest therein, except to the extent Lien Security has been provided by Contractor in connection therewith; and

3.4 Title to all Work is free and clear of any and all liens, claims, charges, security interests, encumbrances and rights of Persons other than Company arising as a result of any actions or failure to act of Contractor, its Subcontractors, or their employees or representatives, except to the extent Lien Security has been provided by Contractor in connection therewith.

3.5 THIS WAIVER OF LIENS AND CLAIMS SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK (WITHOUT GIVING EFFECT TO THE PRINCIPLES THEREOF RELATING TO CONFLICTS OF LAW).

IN WITNESS WHEREOF, Contractor has duly executed this instrument on the day and year first written above.

[Contractor's Name]

By:_____
Name:_____
Title:_____

State of _____
County of _____

The foregoing instrument was acknowledged before me this (date) by (name of officer or agent, title of officer or agent) of (name of corporation acknowledging) a (state or place of incorporation) corporation, on behalf of the corporation.

(Signature of person taking acknowledgment)

(Title or rank)

(Serial number, if any)

APPENDIX K-2

FINAL FORM OF WAIVER AND RELEASE

[LETTERHEAD OF CONTRACTOR]

DATE: [_____]

TO: [INSERT ADDRESS]

WHEREAS:
1 New York State Electric and Gas Corporation (NYSEG) ("Company" or “Owner”) and [_____] ("Contractor") have entered into an Agreement, dated as of [_____], (the "Agreement"), pursuant to which Contractor is/ was to provide construction services in connection with [Project Name & Number] Project (as more fully described in the Agreement, the "Project").

2. Article [number] of the Agreement provides, among other things, that, the Retainage shall not be paid to Contractor until Contractor submits an affidavit that all payrolls, bills for materials and equipment and other indebtedness connected with the Work have been paid or otherwise satisfied, and provides releases and waivers of liens arising out of the Agreement from itself and all Subcontractors with subcontract value in excess of $10,000.

NOW THEREFORE:
1. Capitalized terms used and not defined herein shall have the meaning assigned to them in the Agreement.

2. Contractor hereby irrevocably waives its right to file, releases, and relinquishes any lien, security interest, or claim for payment (whether in tort, for breach of contract, pursuant to Law, in equity or otherwise) relating to Company, the Work, or the Project. Contractor hereby authorizes Company to file a termination statement for any financing statement on file with respect to Company, the Work, or the Project if Contractor is the secured party of record with respect to such financing statement.

3. Subject to Company's payment of the Retainage in the amount of $_____, Contractor certifies that:

3.1 All amounts that were due and payable by Company in connection with the Work and the Project have been paid.

3.2 Contractor has not directly or indirectly created, incurred, assumed or suffered to be created by it or any Subcontractor, employee, laborer, mechanic, materialman, or other supplier of goods or services any Contractor Lien relating to the Work, the Project, or any part thereof or interest therein, except to the extent Lien Security has been provided by Contractor in connection therewith;

3.3 Contractor has promptly paid and discharged any Contractor Liens which, notwithstanding Section 3.2 hereof, it has directly or indirectly created or suffered to be created by it or any

Subcontractor, employee, laborer, mechanic, materialman, or other supplier of goods or services relating to the Work, the Project, or any part thereof or interest therein, except to the extent Lien Security has been provided by Contractor in connection therewith; and

3.4 Title to all Work is free and clear of any and all liens, claims, charges, security interests, encumbrances and rights of persons for payment other than Company arising as a result of any actions or failure to act of Contractor, its Subcontractors, or their employees or representatives, except to the extent Lien Security has been provided by Contractor in connection therewith.

3.5 THIS WAIVER OF LIENS AND CLAIMS SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (WITHOUT GIVING EFFECT TO THE PRINCIPLES THEREOF RELATING TO CONFLICTS OF LAW).

4. all Subcontractors and Persons that have provided labor, services, materials, supplies, Contractor's Equipment, Equipment, systems or machinery used in the performance of the Work have been paid all amounts which are due and owing them, with the exception of those amounts which are being disputed by Contractor in good faith, and Contractor has no knowledge of the existence of any other claim, actual or threatened by any Subcontractor or such Person, against Owner, Owner's property or all or any portion of the Equipment, Project, the Site or the existing facilities, other than claims for which Contractor has provided Lien Security.

IN WITNESS WHEREOF, the undersigned has duly executed this instrument on the day and year first written above

[Contractor's Name]
By:_____
Name:_____
Title:_____

State of _____
County of _____

The foregoing instrument was acknowledged before me this (date) by (name of officer or agent, title of officer or agent) of (name of corporation acknowledging) a (state or place of incorporation) corporation, on behalf of the corporation.

(Signature of person taking acknowledgment)

(Title or rank)

(Serial number, if any)

APPENDIX L

Certificate of Substantial Completion

Date: _____

To: [Insert Address]

Ref: Certificate of Substantial Completion – [Project Name & Number] Project ("Agreement") by and between New York State Electric and Gas Corporation (NYSEG) ("Company" or "Owner") and _____.

Contractor, by and through the undersigned officer, duly authorized to represent Contractor and execute and deliver this certificate ("Certificate") to Owner, provides this Certificate to Owner under the Agreement. Capitalized terms used herein not otherwise defined shall have the meaning given such terms under the Agreement. Contractor hereby certifies to Owner as of the date hereof that the following are true and correct:

(1) Substantial Completion of the Project was achieved on [date];

(2) the Project is substantially complete in accordance with the Scope of Work, the Project Documents, and all required Governmental Authorizations and Permits, and is capable of commercial operation and safe operation for its intended purpose;

(3) all Work required to be furnished by Contractor for the Project is substantially complete and all Equipment has been delivered to the Site and properly incorporated into the Project, except for Punchlist Items;

(4) the Performance Tests and any other requirements necessary to demonstrate that the Project meets the Project Documents have been successfully completed and a certificate of the results, together with a copy of the reports of such test results have been provided to Owner;

(5) the Punchlist Items, the schedule for competing the same and the estimated cost for completing the Punchlist, have been agreed to by Owner and Contractor;

(8) all Subcontractors and Persons that have provided labor, services, materials, supplies, equipment, systems or machinery used in the performance of the Work have been paid all amounts which are due and owing them for the Project, with the exception of those amounts which are being disputed by Contractor in good faith, and Contractor has no knowledge of the existence of any other claim, actual or threatened by any Subcontractor or such Person, against Owner, Owner's property or all or any portion of the Project, the Site or the existing facilities, other than claims for which Contractor has provided Lien Security; and

(9) the Project is capable of operation at expected operating levels in strict compliance with the terms of all operating Permits.

Executed on the day set forth in the first paragraph of this Certificate.

_____

By:_____

Name:_____

Title:_____

CERTIFICATE ACCEPTED:

New York State Electric and Gas Corporation (NYSEG)

By:_____

_____

Print Name

_____

Title

APPENDIX M

Certificate of Final Completion

Date: _____

To: [Insert Address]

Ref: Certificate of Final Completion – [Project Name & Number] Project ("Agreement") by and between New York State Electric and Gas Corporation (NYSEG)] ("Company" or "Owner") and _____ ("Contractor")

Contractor, by and through the undersigned officer, duly authorized to represent Contractor and execute and deliver this certificate ("Certificate") to Owner, provides this Certificate to Owner under the Agreement. Capitalized terms used herein not otherwise defined shall have the meaning given such terms under the Agreement. Contractor hereby certifies to Owner as of the date hereof that the following are true and correct:

(1) Substantial Completion of the Project was achieved on [date], and all Punchlist Items were completed on [date];

(2) Contractor' has performed site clean-up and restoration;

(3) Contractor has provided and caused the Subcontractors to provide to Owner all affidavits, statements, waivers, releases and posted any security required under Appendix K-2 (Final Form of Waiver and Release);

(4) Contractor has submitted to Owner and Owner has approved the final "as-built" drawings.

(5) Contractor has obtained all Governmental Authorizations which are the responsibility of Contractor under the Agreement and has provided copies of the same to Owner; and

(6) all Subcontractors and Persons that have provided labor, services, materials, supplies, Contractor's Equipment, Equipment, systems or machinery used in the performance of the Work have been paid all amounts which are due and owing them, with the exception of those amounts which are being disputed by Contractor in good faith, and Contractor has no knowledge of the existence of any other claim, actual or threatened by any Subcontractor or such Person, against Owner, Owner's property or all or any portion of the Equipment, Project, the Site or the existing facilities, other than claims for which Contractor has provided Lien Security.

Executed on the day set forth above.

_____

By:_____
Name:_____
Title:_____

CERTIFICATE ACCEPTED:

NEW YORK STATE ELECTRIC AND GAS CORPORATION

By:_____

_____
Print Name

_____
Title

APPENDIX N

Contractor Safety Requirements

Please see separate document

"SSOP-IUSA.020 Contractor Safety Requirements.pdf"

SSOP-IUSA.020
Contractor Safety Re

APPENDIX O

Contractor Background Policy

Please see separate document

"Contractor Background Check Rule - Avangrid Networks.pdf"

Contractor
Background Check Ru

List of Offers Received

[redacted]